Leonardo Massai

THE KYOTO PROTOCOL IN THE EU

European Community and Member States under International and European Law

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Dr. Leonardo Massai
Via di Galceti 111
59100 Prato
Italy
e-mail: Leonardo.massai@gmail.com

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To my family

Preface

In a period when the international community is fully committed to seek an appropriate solution to respond to the threat of climate change, the role and example provided by the international climate regime composed of the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol is still relevant in the field of international environmental law and within the existing multilateral environmental agreements. It is my view that the rules, procedures, instruments and particularities of the international climate regime are and will remain innovative and pioneer in many aspects, whatever will be the structure and details of the post-2012 agreement.

The participation of the European Community (EC) and the Member States in the international climate change regimes is a complex and unique issue. In the case of the Kyoto Protocol, this is rendered more complicated by two considerations: the fact that for the purposes of Article 4 of the Protocol, the membership of the EC and Member States is frozen at a particular point in time; and the enlargement of the European Union of 1 May 2004 and 1 January 2007. It is only by addressing the architecture of the Kyoto Protocol and the various types of obligations established both under international and European law that one is able to identify the responsibility of the European Community and the Member States in the event of non-compliance with those obligations.

This dissertation is dedicated to all those who gave their time, support and insights during the research and writing process. Much credit lies with my family. I am especially indebted to Professor Michael Bothe for his precious advice and support, countless inspiring discussions, invaluable feedback and firm encouragement. Furthermore, I would like to express my gratitude to Professor Eckard Rehbinder for his endorsement and feedback. Special thanks also go to the T.M.C. Asser Institute for the support. Finally, the last remark is for Alessandra Becattini who brilliantly interpreted the re-sized version of Europe based on the level of greenhouse gas emissions provided by Worldmapper.

The Hague, July 2010 Leonardo Massai

Contents

List of Abbreviations

A

AAU	Assigned Amount Units
AGBM	Ad Hoc Group on the Berlin Mandate
AIE	Accredited Independent Entities
AIJ	Activities Implemented Jointly
AOSIS	Alliance of Small Island States
AP	Accession Partnerships

B

BAPA	Buenos Aires Plan of Action
BSA	Burden Sharing Agreement
BVerfG	Bundesverfassungsgericht (German Constitutional Court)

C

CAP	Common Agricultural Policy
CCAP	Centre for Clean Air and Policy
CCPM	Common and Coordinated Policies and Measures
CCPMs	Coordinated and Common Policies and Measures
CDM	Clean Development Mechanism
CEEC	Central and Eastern European Countries
CER	Certified Emission Reduction
CG11	Central Group 11
CHP	Combined Heat and Power
CITL	Community Independent Transaction Log
CO_2	Carbon Dioxide
COP	Conference of the Parties of the UNFCCC
COP/MOP	Conference of the Parties serving as Meeting of the Parties

CPR	Commitment Period Reserve
CRF	Common Reporting Format

D

DESA	Department of Economic and Social Affairs
DFP	Designated Focal Point
DNA	Designated National Authority
DOE	Designated Operational Entity

E

EAEC	European Atomic Energy Community
EATD	European Allowance Trading Directive (2003/87/EC)
EB	Executive Board
EBRD	European Bank for Reconstruction and Development
EC	European Community
ECCP	European Climate Change Programme
ECHR	European Court of Human Rights
ECJ	European Court of Justice
ECR	European Court Report
ECSC	European Coal and Steel Community
EEA	European Environment Agency
EEC	European Economic Community
EIB	European Investment Bank
EIT	Economies in Transition
EJIL	European Journal of International Law
EPA	Environmental Protection Agency
ERT	Expert Review Team
ERU	Emission Reduction Unit
ET	Emissions Trading
EU10	EU candidate countries before the enlargement of 1 May 2004 excluding Malta and Cyprus
EU15	EU Member States before the enlargement of 1 May 2004
EU12	EU candidate countries before the enlargement of 1 May 2004
EU25	EU Member States after the enlargement of 1 May 2004
EU27	EU Member States after the enlargement of 1 January 2007
EUA	European Union Allowance
EURATOM	European Atomic Energy Community
EUROSTAT	Statistical Office of the European Communities
EU ETS	European Emissions Trading System

F

FAO Food and Agriculture Organisation

G

GATT General Agreement on Tariff and Trade
GDP Gross Domestic Product
GEF Global Environment Facility
GHG Greenhouse Gases
GIS Green Investment Scheme

I

ICEP Integrated Climate and Energy Package
IEA International Energy Agency
IET International Emissions Trading
ILC International Law Commission
INC Intergovernmental Negotiating Committee
IPCC Intergovernmental Panel on Climate Change
IPPC Integrated Pollution Prevention and Control
ITL International Transaction Log

J

JI Joint Implementation
JRC Joint Research Centre
JISC JI Supervisory Committee
JUSSCANNZ Coalition of non-EU Annex I Parties, guided by Japan, the United States of America, Switzerland, Canada, Australia, Norway and New Zealand

K

KP Kyoto Protocol

L

lCER Long-term Certified Emission Reduction
LDC Least Developed Countries
LULUCF Land Use, Land-Use Change and Forestry

M

MEA Multilateral Environmental Agreement
MoU Memorandum of Understanding
MRV Monitoring, Reporting and Verification

N

NAP National Allocation Plan
NGO Non-governmental Organisation
NIR National Inventory Report
NOAA National Oceanic and Atmospheric Administration
NPAA National Plan for the Adoption of the Acquis

O

OECD Organisation for Economic Cooperation and Development
OJ Official Journal of the European Union

P

PAM Policies and Measures
POPs Persistent Organic Pollutants

Q

QELRC Quantified Emission Limitation and Reduction Commitment

R

RDP Report on Demonstrable Progress
REC Regional Environment Centre
REIO Regional Economic Integration Organisation
RMU Removal Unit

S

SAR Second Assessment Report of the IPCC
SBI Subsidiary Body for Implementation
SBSTA Subsidiary Body for Scientific and Technological Advice
SCCF Special Climate Change Fund

T

TAR	Third Assessment Report of the IPCC
tCER	Temporary Certified Emission Reduction
TEC	Treaty of European Community
TEU	Treaty on European Union
TFEU	Treaty on the Functioning of the EU

U

UN	United Nations
UNCBD	United Nations Convention on Biological Diversity
UNCCD	United Nations Convention to Combat Desertification
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNITAR	United Nations Institute for Training and Research

W

WCP	World Climate Programme
WMO	World Meteorological Organisation
WRI	World Resources Institute
WTO	World Trade Organisation

Chapter 1
Introduction

Climate change is often associated with the word 'global': climate change is a global phenomenon, climate change is a global threat. According to the majority of scientists, climate change is mainly caused by global warming, i.e., the increase of atmospheric concentrations of greenhouse gas emissions (GHG) mainly due to anthropogenic activities. Climate change is definitively one of the most serious environmental challenges of the Twenty-first century. This is confirmed not only by increasing scientific evidence, but also by the huge attention from the media as well as politicians, stakeholders and citizens. There are two main reasons for the increasing general interest in the issue of global warming. First, the frequency of adverse effects in the ecosystem due to the warming of the earth is constantly increasing. The report on worldwide greenhouse gas concentrations released by the National Oceanic and Atmospheric Administration (NOAA) in 2005 announced an increase in the level of these gases by 1.25% in 2005 compared to the previous year, and by 21.5% compared with 1990 levels; the findings of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) clearly stated that the 'warming of the climate system is unequivocal […] global GHG emissions due to human activities have grown since pre-industrial times, with an increase of 70% between 1970 and 2004 […] most of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic GHG concentrations.' Second, the Kyoto Protocol, the major instrument adopted by the international community to respond to the phenomenon of climate change, entered into force on 16 February 2005, establishing GHG reduction commitments for all industrialised countries which have accepted it. Furthermore, the Kyoto Protocol set the stage for climate-friendly objectives, policies and strategies to be defined with a view to the post-2012 phase.

The leading role assumed by the European Community (EC) in the international climate regime in terms of adopted and planned policies and measures, as well as ambitious greenhouse gas emissions reduction targets, is mainly due to the constant and decisive efforts of the European Commission, especially since 2001,

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the year in which the US decided to leave the process of ratification of the Kyoto Protocol. Quite unexpectedly, in 2001 in Marrakech—the location of the yearly international talks on the development of rules aimed at the implementation of the Kyoto Protocol, the 7th Conference of the Parties of the United Nations Framework Convention on Climate Change (UNFCCC)—the Commission presented a fundamental legislative package including three proposals: (1) the details of the future ratification of and commitment to the Kyoto Protocol by the EC and the Member States, COM(2001)579[1]; (2) the foundations of the European Climate Change Programme (ECCP) aimed at the development of European policies and measures to combat climate change in line with the international obligations, COM(2001)580[2]; and (3) the proposal for the establishment of a Europe-wide system for the exchange of greenhouse gas emission allowances commonly defined as EU Emissions Trading System (EU ETS), COM(2001)580.[3] Since then, the EC has even reinforced its strong interest in the establishment of a solid and concrete response from the international community to climate change. This is confirmed by the international negotiations and talks on the future of the Kyoto Protocol following the first commitment period of 2008–2012, namely on the definition of, among others, new binding greenhouse gas emission reduction commitments for industrialised and non-industrialised countries in the post-2012 phase. The leading role of the EC in the international negotiations on the post-2012 phase is confirmed by many European documents and official positions, among which the Presidency Conclusions of the 2007 European Spring Council (8–9 March 2007). The latter identifies important binding targets and measures aimed at ensuring that the global average temperature will not exceed pre-industrial levels by more than 2°C by 2100. The Integrated Climate and Energy Package (ICEP) adopted by the EU heads of state and government in March 2007 included the following targets.

- Reduction of greenhouse gas emissions by 30% for developed countries by 2020 in respect of 1990 levels, provided that an international agreement is adopted on this issue.
- Reduction of greenhouse gas emissions by 20% for EU27 by 2020 compared with 1990 levels regardless of the decisions adopted at the international level.
- Increase of the share of renewable energy in the energy consumption by 20% by 2020.

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[1] Proposal of the Commission for a Council Decision concerning the approval, on behalf of the European Community, of the Kyoto Protocol to the United Nations Framework Convention on Climate Change and the joint fulfilment of commitments thereunder, COM(2001)579, Brussels, 23 October 2001.

[2] Communication from the Commission on the implementation of the first phase of the European Climate Change Programme, COM(2001)580, Brussels, 23 October 2001.

[3] Proposal of the Commission for a Directive of the European Parliament and of the Council establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC, COM(2001)581, Brussels, 23 October 2001.

- Reduction of energy consumption through energy efficiency improvements by 20% by 2020.
- Increase of the share of biofuels in EU transport fuel consumption by 10% by 2020.

The Kyoto Protocol established different obligations for developed and developing countries (Annex I and non-Annex I parties) on the basis of the principle of common but differentiated responsibilities: the industrialised part of the world must take the lead in solving the problem of global warming. On the other hand, developing countries are also urged to contribute to solving this global environmental problem but with a lower degree of responsibility. The EC and the Member States are included in the list of Annex I Parties to the UNFCCC, with the exception of Malta and Cyprus, and have all ratified both the UNFCCC and the Kyoto Protocol. On the basis of Article 4 of the Kyoto Protocol, the EC and the 15 EU states member at the moment of the negotiations and ratification of the Kyoto Protocol agreed on the joint target for the reduction of their level of greenhouse gas emissions of 8% by 2008–2012 compared with 1990 levels. This commitment is valid for the 15 countries who were a member of the EU in 1998 when the Kyoto Protocol was negotiated, and thus excludes the 12 new Member States which joined the EU in 2004 and 2007. The focus of this study is on the different legal issues related to the participation in and implementation of the Kyoto Protocol by the EC and the Member States, taking into account the role, status and responsibility of the Member States before and after the two latest enlargements of the Community: 1 May 2004 and 1 January 2007. In this context, particular attention is paid to the main obligations of Annex I parties under the Kyoto Protocol, namely the monitoring, reporting and verification obligations, the eligibility criteria and the limitation and reduction commitments. Amongst others, this book attempts to shed some light on the jungle of abbreviations and short forms frequently utilised in Community and international law describing the international climate regime. In this respect, a perfect example is provided by the following different terms which are used in this book to identify the European Union and the Member States.

- EU10: EU candidate countries before the enlargement of 1 May 2004 excluding Malta and Cyprus.
- EU15: EU Member States before the enlargement of 1 May 2004.
- EU12: EU candidate countries before the enlargement of 1 May 2004.
- EU25: EU Member States after the enlargement of 1 May 2004.
- EU27: EU Member States after the enlargement of 1 January 2007.

The aim of this book is therefore quite ambitious: it is an attempt to clarify the main legal issues in international and European law related to the participation in and implementation of the Kyoto Protocol by the EC and the Member States. Key questions addressed are: to what extent are the (new and old) Member States bound by their membership of the EU in respect of all the obligations deriving from the Kyoto Protocol? What is the role of EC legislation in this regard? What

are the consequences under international and European law for the EC as a whole in the event of non-compliance by the Member States with the international obligations created by the Kyoto Protocol? And do the EU15 and EU12 share the same level of responsibility in respect of the compliance by the Community with the obligations of the Kyoto Protocol?

In other words, this book is intended to address various legal questions whose evidence and importance are the direct result of the following considerations: (1) the decision of the EU15 to be jointly committed to the reduction of greenhouse gas emissions under the Kyoto Protocol; (2) the text of Article 4 of the Kyoto Protocol which does not recognise any alteration in the composition of the EU prior to 31 December 2012; (3) the enlargement of the EU to27 Member States (2004 and 2007); (4) the division of responsibility between the EC and the Member States in the implementation of the Kyoto Protocol; and (5) the consequences for the EC and the Member States in the event of a failure to comply with the Kyoto Protocol obligations.

The nature and composition of the EU as well as the strong commitment of the Community and the Member States to the fight against climate change are studied in full detail in this book. The case of the EU and climate change and the participation of the Community and the Member States in the international climate regime can be used to understand the dynamics of the EU's external relations in other relevant areas of Community interest (e.g., international trade). To this end, the final goal of this book is not only to provide a thorough assessment of the obligations and responsibility issues arising from the Kyoto Protocol and facing the EU, but also to shed some light on the complexity of the current EU constitutional structure and, where necessary, on the need for reforms.

In the transposition and implementation of EU law and policy in the field of climate change the EC's structural problem emerges, namely the fact that the EC is a regional economic international organisation, a community composed of 27 countries with substantial political, historical and economic differences. The Member States do not always correctly implement decisions, directives and regulations adopted at the Community level in their national systems, and the problem of the quality of the implementation of EC legislation is still very present. Furthermore, in the field of environmental protection, harmonisation has been more difficult to achieve after the fifth and sixth enlargement of the EU (2004 and 2007). This is due to the fact that before the accession, the level of environmental standards and legislation in place in the new Member States was, in many cases, not in line with the EU levels.

Regarding global warming, the structural differences among the Member States are shown, for instance, by the yearly reports published by the European Environment Agency (EEA) on the release and trends in greenhouse gas emissions in the atmosphere at both Community and national level. The EEA reports have confirmed the significant discrepancies among the Member States in their efforts to mitigate climate change. Two of the latest reports of the EEA available at the time of writing were released in 2008 and provide an estimation of the greenhouse gas emission levels in the EC and the Member States in relation to the reduction

obligations of the Kyoto Protocol. The first is the annual European Community greenhouse gas inventory 1990–2006 and inventory report 2008, prepared in accordance with the monitoring, reporting and verification obligations created by the Kyoto Protocol for Annex I parties. The report referred to the greenhouse gas emissions in the EU in 2006 and confirmed a continuation of the slight reduction trend which started in 2005.

Sectors which contributed most to the cut of GHG emissions in 2006 were households and offices, which registered a lower consumption of gas and oil in 2006. Member States that achieved significant GHG emission reductions were France, Italy and the UK, thanks to a warmer winter and higher gas prices. Carbon dioxide emissions from electricity, heat production and transport increased in 2006. However, the trend in EU greenhouse gas emissions in the years before the beginning of the first commitment period clearly shows that the EC and the EU15 are well behind the international targets (−2.7% compared with the −8% target under the Kyoto Protocol).

However, since 2008, the EEA and the European Commission have been confident that the Kyoto Protocol reduction obligations will be overachieved (−11.3%) but only in the event that the EU Member States implement all existing and additional measures; use the flexible mechanisms of the Kyoto Protocol; and include the offsetting of greenhouse gas emissions through land use, land-use change and forestry (LULUCF) activities. Finally, the Community's compliance with the EU-wide reduction commitment will be ensured by the overachievement of individual targets by some Member States.

The latest EEA report available at the time of writing was released on 29 May 2009: the annual EC greenhouse gas inventory 1990–2007 and inventory report 2009. In accordance with the EEA findings, the following trends in greenhouse gas emissions in the EU were highlighted:

- GHG emissions EU15 2006–2007: −1.6%;
- GHG emissions EU15 1990–2007: −4.3%;
- GHG emissions EU27 2006–2007: −1.2%;
- GHG emissions EU27 1990–2007: −9.3%.

The level of greenhouse gas emission concentrations in the new EU Member States is historically lower than in the EU15, which is due to the fact that the Kyoto Protocol has allowed those countries a big margin of economic development and less stringent reductions targets. Whether the new Member States will catch up with the EU15 as regards the reduction obligations of the Kyoto Protocol is an open question. However, the data on the level of greenhouse gas emissions in the EU provided by the EEA confirm the differences between the EU15 and the EU12 where it concerns the Kyoto Protocol reduction commitments.

The following two graphs (Figs. 1.1, 1.2) included in the 2009 EEA report indicate the difference in the aggregate level of emissions between the EU15 and the EU27.

However, this book does not aim to provide an estimation of whether or not the EC and the Member States will be able to meet their greenhouse gas emission reduction targets under the Kyoto Protocol, nor is this of any relevance for the

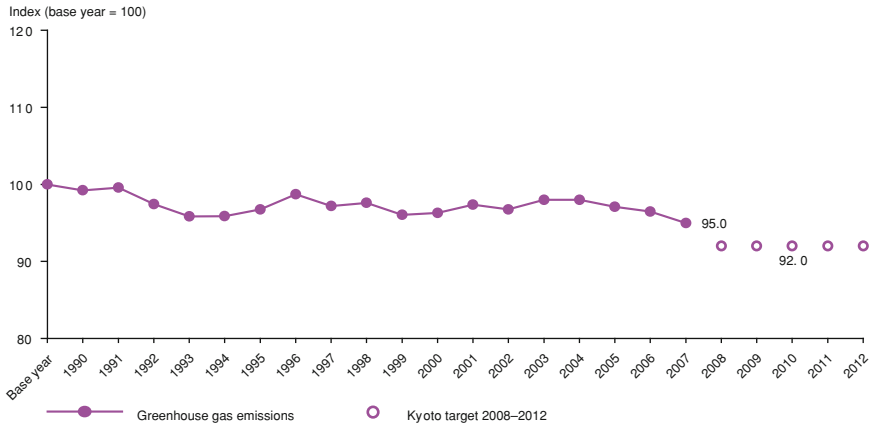

Fig. 1.1 EU15 greenhouse gas emissions and 2008–2012 projections

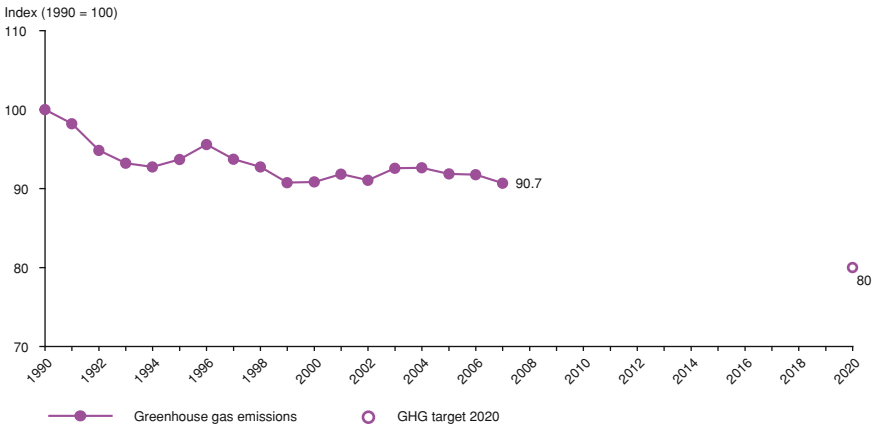

Fig. 1.2 EU27 greenhouse gas emissions in 1990–2006 compared with the Kyoto Protocol targets

legal considerations that follow. The objective of this book is to address and explain all the different legal questions arising from the participation of the EC and the Member States in one of the most complicated and innovative international treaties in the field of global environmental protection. It is therefore not crucial to identify whether or not, at the end of the first commitment period of the Kyoto Protocol, the EC and the Member States will be in compliance with the Kyoto Protocol obligations. What is more relevant for us is the study of the division of responsibility between the Member States and the Community in the event of non-compliance by the EC and the Member States with the obligations created by the international climate regime. This issue assumes particular relevance in the case of

mixed agreements, that is to say, where the Community and the Member States are party to an international treaty, which is usually the case when the matter regulated by the treaty is not falling within the exclusive competence of the EC. This book may therefore contribute to the legal theory and practice in EU and international law in relation to the participation of the EC and the Member States in a mixed agreement and consequently the issues of responsibility and liability for compliance. Moreover, considering the EU enlargement of 2004 and 2007 and the fact that to a certain extent the Kyoto Protocol does not recognise this territorial change, the study also focuses on the role of and legal implications for the new Member States as regards the obligations of the EC and the Member States under the Kyoto Protocol. In this sense, the principle of loyalty provided for in Article 10 of the EC Treaty is studied in relation to the obligations of the Community and the Member States under an international treaty. Given the scarcity of literature and legal studies on the application of the EU general principle laid down in Article 10 TEC, this book aims to enrich the science of Community law in this respect. Article 10 TEC is addressed in connection with the obligations created for the Member States and the Community by a multilateral environmental agreement (MEA). To this end, the applicability of Article 10 TEC is studied in order to determine to what extent Member States are required either to directly assist the European Community in the achievement of its objectives or to avoid any action which could jeopardise the same objectives.

The contribution and assistance that the new Member States could provide to the European Community and the EU15 in complying with the greenhouse gas emissions reduction commitments under the Kyoto Protocol are significant. This aspect can be considered from two perspectives: first, the EC and the Member States are responsible under international law in terms of compliance with the Kyoto Protocol obligations, and second, the Member States are bound by EC law to comply with the international climate regime. Accordingly, the book is divided into two parts. The first part is rather descriptive but essential to understand the complicated aspects of the participation of the EC and the Member States in the international climate regime. The second part concerns more directly the main legal questions addressed, and some legal theories are expressed.

Chapter 2 presents a general introduction to the key aspects of the last two EU enlargements, focusing on the *acquis communautaire* and the obligations for the acceding countries in the field of environmental protection and climate change. This is relevant for the development of our discussion in the sense that the new Member States joining the EU face a comprehensive set of obligations which, in the field of climate policy, need to be considered in relation to the international obligations established under the international climate regime. Chapter 3 provides an overview of the international climate regime. In particular, the legal details and main aspects of the UNFCCC and the Kyoto Protocol are examined. Particular emphasis is put on the institutional structure and the decision-making process created by the international climate regime, as well as on the differentiated set of commitments for developing and developed countries. Finally, Chap. 3 refers to the three most innovative parts of the Kyoto Protocol in the field of international

environmental law: the market-based approach, which takes the form of flexible mechanisms as instruments to facilitate part of the required reduction of greenhouse gas emissions; the recognition of forestry-related activities (land use, land-use change and forestry, LULUCF) as a pool to absorb carbon dioxide equivalent emissions and the possibility for Annex I parties to take account of these activities in the reduction obligations; and the establishment of an ad hoc non-compliance procedure. Chapter 4 focuses on the participation of the EC and the Member States in the UNFCCC and the Kyoto Protocol and the nature of the joint commitment under Article 4 of the Protocol. This chapter is fundamental for understanding the different status and position of the EC, EU15 and EU12 in the Kyoto Protocol. To this end, the details of the participation of the EC and the Member States in the UNFCCC and the Kyoto Protocol are addressed, focusing in particular on the different status of Malta and Cyprus, as well as on the legal issues arising from the inclusion of the EC and the Member States in the list of Annex I parties. Moreover, the EU's internal distribution (EU Burden Sharing Agreement, BSA) of the greenhouse gas emission reduction obligations is discussed, with a particular focus on the division between the EU15 and the EU12. Furthermore, the past and future trends in the levels of greenhouse gas emissions in the EU15 and the EU12 are considered, in particular in relation to the surplus of greenhouse gas emission reductions available in the new Member States. In respect of the main legal questions addressed in Chap. 4, the issue of the determination of competences of the EC and the Member States under the Kyoto Protocol is considered, as well as the division of responsibilities in the event of non-compliance by the EC and the Member States with the Kyoto Protocol obligations. Finally, the details of the blocking clause included in Article 4 of the Kyoto Protocol and the implications for the EC following the latest two enlargements are discussed. The first part of this book ends with Chap. 5 on the flexible instruments established at both international and European level to offer Annex I parties, and therefore the EC and the Member States, the possibility to comply with some of the international obligations under the Kyoto Protocol not only through the adoption of domestic policies and measures, but also by using the market-based mechanisms designed to reduce greenhouse gas emissions abroad—Joint Implementation (JI), Clean Development Mechanism (CDM) and Emissions Trading (ET). In particular, the potential of and experience with JI and CDM projects in the new Member States are addressed, as well as the issue of the decreased attractiveness of hosting JI projects in the new Member States due to their accession to the EU (Figs. 1.1, 1.2).

The second part of this book discusses the issues of responsibility and liability of the EC and the Member States in the event of non-compliance with the obligations established under the Kyoto Protocol. This issue is addressed from both the international law and the European law perspective. Chapter 6 focuses on the obligations created by the Kyoto Protocol for Annex I parties and the consequences of non-compliance. In respect of the EC and the Member States, the main legal questions addressed in Chap. 6 concern the composition of the EC in relation to the different obligations under the international climate regime. Also, the consequences of the failure to comply with those obligations by the EC, the

EU15 and the EU12 are discussed and the position of the different actors at the EU level is clarified. Furthermore, the EC legislation and policy adopted in response to the obligations arising from the Kyoto Protocol are assessed. Finally, the issue of responsibility for the failure to comply with the main obligations under the international climate regime is considered from the viewpoint of EC law. The book concludes with Chap. 7, which looks at the applicability of Article 10 TEC in respect of the Member States in non-compliance with the obligations of the Kyoto Protocol. Starting from the assessment of the scope of Article 10 EC Treaty and the jurisprudence of the European Court of Justice regarding the enforcement of this principle, the different obligations of the Kyoto Protocol are considered and for each the applicability of Article 10 TEC is tested.

Part I

Chapter 2
The EU Enlargement

2.1 History

Since the establishment of the European Coal and Steel Community (ECSC) in 1952, the European integration process has constantly developed both in terms of the increasing number of nations joining the European Union and in terms of revisions and amendments of the founding Treaties in order to better match the needs and necessities of the European states and citizens. The merging of the institutions of the ECSC, the European Economic Community (EEC) and the European Atomic Energy Community (EAEC) in 1967 was the first big EU reform, establishing a single Commission, a single Council of Ministers as well as the European Parliament. At the time, there were six members of the EEC, the so-called founding countries Belgium, Germany, Luxembourg, France, Italy and the Netherlands. The next step in the history of the European treaties, i.e., the adoption of the Single European Act in 1986 modifying the founding treaties and introducing qualified majority voting, was accepted by the European Community which had been enlarged to 12 Member States—Denmark, Ireland and the United Kingdom (1973), Greece (1981), and Spain and Portugal (1986). A complete new era for the Community started in the early 1990s with the adoption of the Treaty of Maastricht in 1992 and with the launch of the internal market on 1 January 1993. The Treaty of Maastricht established the three-pillar structure, introducing a pillar on Common Foreign and Security Policy and a pillar on Police and Judicial Cooperation, which, together with the European Community, constituted the foundation of the European Union. Moreover, co-decision power for the European Parliament was introduced by the Treaty of Maastricht. In the meantime, the European Council of Copenhagen adopted, in 1993, an important decision on the enlargement of the EU towards the east and established a list of eligibility criteria to be fulfilled by applicant states. Austria, Finland and Sweden entered the EU on 1 January 1995, and the Treaty of Amsterdam, introducing minor modifications to the existing structure of the EU Treaty, was adopted in 1997.

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In respect of the requirements for membership and the procedural aspects related to the EU enlargement included in the text of the Treaty, ex Article 237 of the EEC Treaty, stating that 'every European state can apply for membership', was changed several times in accordance with the Treaty modifications of the Single European Act, the Treaty of Maastricht and, finally, the Treaty of Amsterdam, which introduced a list of criteria for membership under Article 49 EU Treaty (TEU).

In 2001, the Treaty of Nice laid down the structural and institutional changes to the founding treaties required in order to ensure that the EU would function properly after the 2004 and 2007 enlargements to 27 Member States.

2.2 Legal Basis

The biggest and most important enlargement in the history of the EU was concluded with the accession of 12 Central and Eastern European countries[1] on 1 May 2004 and on 1 January 2007. Today, the express legal basis for the enlargement of the EU can be found in Articles 49 and 6 of the Treaty on European Union (ex Article O TEU).[2] Article 49 TEU includes an additional requirement for membership to be fulfilled by the applicant state in comparison with the pre-Amsterdam enlargement procedure, namely the reference to the basic principles of the EU enunciated in Article 6 TEU. Article 49 requires that 'any European State which respects the principles set out in Article 6(1) may apply to become a member of the Union'. The principles stated in Article 6 are 'liberty, democracy, respect for human rights and fundamental freedoms, and the rule of law'.[3] It is important to stress that Article 49 begins with the word 'European', thus first establishing a geographical condition to be fulfilled by the applicant state. The interpretation of this geographical condition is quite open, since there is no legal certainty regarding

[1] The new EU Member States are Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia. In the context of this dissertation, the term new Member States refers to these 12 countries. Further to the different listing of parties within the international climate regime, the EU15 refers to Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom, the EU12 to the new Member States and the EU10 to the new Member States with the exception of Malta and Cyprus.

[2] Any European State which respects the principles set out in Article 6(1) may apply to become a member of the Union. It shall address its application to the Council, which shall act unanimously after consulting the Commission and after receiving the assent of the European Parliament, which shall act by an absolute majority of its component members. The conditions of admission and the adjustments to the Treaties on which the Union is founded which such admission entails shall be the subject of an agreement between the Member States and the applicant State. This agreement shall be submitted for ratification by all the contracting States in accordance with their respective constitutional requirements [Article 49 TEU (ex Article O)].

[3] The Union is founded on the principles of liberty, democracy, respect for human rights and fundamental freedoms, and the rule of law, principles which are common to the Member States [Article 6 TEU (ex Article F)].

the borders of the European continent, and the case of Turkey clearly shows the difficulty of dealing with states whose political, historical and cultural boundaries may be interpreted differently by the rest of the EU Member States.

Before final agreement on the text of the Treaty of Amsterdam was reached, the European Council of Copenhagen (1993) decided on the eligibility rules and obligations for membership of the EU. The so-called Copenhagen criteria responded to the necessity that the accession process should imply harmonisation of all national legislation with European Community law. In Copenhagen, the European heads of state and government acknowledged, for the first time, the possibility of a European Union enlarged to the east. On the basis of the common principles of Community law and the practice of the Member States, the Copenhagen criteria set the rules to be fulfilled by the candidate states to become members. The Copenhagen criteria have been codified over the years by the European institutions through the adoption of adequate Community legislation, as well as by the jurisprudence of the European Court of Justice (ECJ or the Court) and the European Court of Human Rights (ECHR). The three accession criteria to be satisfied by the applicant states in order for the European Council to decide to open negotiations on accession are:

- stability of institutions guaranteeing democracy, the rule of law, human rights, and respect for and protection of minorities (political);
- existence of a functioning market economy and the capacity to cope with competitive pressure and market forces within the Union (economic);
- ability to take on the obligations of membership, including adherence to the aims of political, economic and monetary union (*acquis communautaire*).

The political criteria indicated above have been codified in the EU Treaty in Article 6, which states that 'the Union is founded on the principles of liberty, democracy, respect for human rights and fundamental freedoms, and the rule of law.' Article 49 of the EU Treaty defines the procedure for the accession of new states to the European Union and explicitly recalls the principles of democracy, human rights and the rule of law agreed in Copenhagen. An application for membership shall be addressed to the Council, which acts with the full support of the Commission and the Parliament (absolute majority of its component members).

Although the economic criterion is not mentioned in Article 49 EU Treaty, a few scholars distinguish in the EC Treaty a specific reference to such a criterion, namely in Article 4(1) which requires the Member States to adopt an economic policy based on, inter alia, the principle of an open market economy with free competition, or even in Articles 2 and 3(1)(g), which include among the general tasks and the activities of the Community the establishment of a 'common market', the promotion of 'a high degree of competitiveness and convergence of economic performance', and finally, the establishment of 'a system ensuring that competition in the internal market is not distorted'.[4] In this regard, it is important to bear in

[4] See Hoffmeister 2002a, b.

mind that the main goal of the European leaders in Copenhagen in 1993 was not to establish stringent and hard, measurable economic criteria for the Central and Eastern European states. On the contrary, for those countries accession to the EU should be considered the starting point of establishing a market economy.

Finally, the new Member States are required to comply with the so-called *acquis communautaire*: i.e., they shall accept the legal rules already binding on the existing Member States as of the date of accession. These are the obligations adopted within the framework of the Common Foreign and Security Policy (second pillar) and Justice and Home Affairs (third pillar) as well as resulting from the activities of the European institutions within the framework of the first pillar, notably secondary EC legislation. Additionally, the *acquis communautaire* encompasses all instruments related to Community legislation, such as ECJ jurisprudence and agreements with third states by which the Community is bound. Under the *acquis communautaire*, accession countries are obliged to harmonise national legislation with EU regulations. The implementation of the *acquis communautaire* by the new Member States shall concern two different aspects: firstly, the incorporation and transposition of all relevant and existing EU legislation into the national law systems, and secondly, its full implementation. In respect of the latter, the European Commission is very active in trying to ensure that not only Community legislation is incorporated into the national juridical framework, simply by transposition, but above all, that it works effectively and correctly. Two issues regarding the accession requirements are particularly relevant to the topic addressed in this book, i.e., the compliance by the European Community and the Member States with the international climate regime: firstly, the identification of the environmental *acquis* directly and indirectly related to European climate policy, and secondly, the consequences of the enlargement for the multilateral environmental agreements to which the Community and the Member States are contracting parties—in this case the UNFCCC and the Kyoto Protocol.

Immediately after a state's submission of its official request for accession to the Council, the European Commission is in charge of the preliminary verification of the applicant's ability to meet the criteria for membership. If the Commission's opinion is positive, it is the Council that is called upon to decide unanimously whether to grant that country or group of countries a negotiating mandate and eventually decide the date on which the negotiations between the candidate states and the Member States will be opened.

The process of EU enlargement to the east began in 1990 when the EC proposed that the former Central and Eastern European countries (CEECs) together with Malta and Cyprus sign the so-called *Europe Agreements*, a special form of Association Agreements[5] in order to establish closer collaboration and free trade between the EU and those states, and to prepare the

[5] According to [Article 310 (ex Article 238) of the EC Treaty] , the European Community can conclude association agreements with a non-Member State, or a union of states or an international organisation.

ground for full membership of the Union.[6] The Europe or Association Agreement represents the first official step of the pre-accession strategy and builds upon the bilateral relations between the applicant state and the European institutions. However, the main element of the pre-accession strategy is the Accession Partnership (AP). The AP is a legal instrument prepared by the Council on the basis of the Commission's annual reports on a candidate country's progress towards accession,[7] and it is this document which drives the new Member States in the accession procedure and requirements. The AP establishes the priorities and objectives to be pursued by the candidate country before accession. In order to comply with the obligations included in the Accession Partnership, the candidate country adopts the National Plan for the Adoption of the Acquis (NPAA).

Of the group of the 2004 new Member States, Hungary, Poland, the Czech Republic and the Slovak Republic were the first countries to sign a Europe Agreement with the EC in 1991, later followed by the remainder of the former CEECs. A pre-accession strategy based on the decisions of the European Councils following 1991 was designed at the Essen European Council (1994) where the European leaders decided to bring together into one single group those countries that had already signed a Europe Agreement with the European Community. Applications for membership of the EC were formally presented by the associated states according to the following timetable:

1. 1991: Cyprus and Malta;
2. 1994: Hungary and Poland;
3. 1995: Czech Republic, Romania, Slovak Republic, Lithuania, Latvia, Estonia and Bulgaria;
4. 1996: Slovenia.

Originally, the last EU enlargement was divided into two phases: the first wave of accession foreseen for 2003–2006 included Cyprus, the Czech Republic, Estonia, Hungary, Poland and Slovenia, while the second wave of countries scheduled to join the EU in 2005–2010 comprised Bulgaria, Latvia, Lithuania, Malta, Romania and the Slovak Republic. This orientation was the result of the European Commission's opinions on the application for EU membership of the CEECs that had signed the Europe Agreements concluded on 15 July 1997 in accordance with Article 49 of the EU Treaty. The Commission considered the progress of the applicant states towards compliance with the negotiation and accession criteria, as well as the political and economic differences among the applicant states.[8]

[6] Steiner and Woods 2001, p. 12; Weatherill and Beaumont 1999, p. 8.

[7] The Accession Partnership concept was first developed at the 1996 Dublin European Council and then defined in more detail by the Commission in the document 'Agenda 2000: for a stronger and wider union', COM(1997)2000, Brussels, 16 July 1997.

[8] In 1993, Cyprus as well as Malta had already received a favourable opinion as to their application for membership. Malta's application was suspended in 1996 because of the change of government and then resubmitted in 1998.

The Amsterdam European Council of 16 June 1997 agreed on the possibility to accept the requests presented by some of the former CEECs. The enlargement process was finally opened by the European Council of Luxembourg on 12 and 13 December 1997,[9] which offered Cyprus, the applicant states of Central and Eastern Europe and Turkey[10] the possibility to preliminarily demonstrate compliance with a wide range of accession criteria.[11] The conclusions of the Luxembourg Presidency opened the way to the establishment of an annual European conference bringing together EU Member States and applicant countries and to the official launch of the enlargement process for the former CEECs and Cyprus. On the basis of the principle of differentiation, the Luxembourg European Council decided that accession negotiations could start for the first six countries in March 1998, but at the same time confirmed that the accession process for the rest of the applicant states could continue despite the Commission's opinion. The door was left open for the remaining candidate states called upon to demonstrate substantial progress in the process of harmonisation of their political, economic and legal system with the European standards. Accession negotiations between the European institutions and representatives of the governments of Cyprus, Estonia, Hungary, Poland, the Czech Republic and Slovenia thus began in 1998. In March 1999, the European Council of Berlin decided to establish a number of pre-accession financial instruments designed to support the efforts of candidate countries to restructure existing legislation with a view to accession to the EU. Between 1998 and 1999,[12] the European Commission presented its Regular Reports on the progress made by each applicant state towards accession, and the Helsinki European Council of 10 and 11 December 1999,[13] only two years after the Luxembourg meeting, decided to start accession negotiations (beginning officially in February 2000) with the remaining six applicant states—Romania, the Slovak Republic, Latvia, Lithuania, Bulgaria and Malta. At the same meeting, Turkey was granted the status of candidate country.[14]

[9] Presidency Conclusions of the European Council meeting in Luxembourg on 12 and 13 December 1997.

[10] Following a change of government in October 1996, Malta had temporarily withdrawn its application.

[11] See point 5, Presidency Conclusions of the European Council meeting in Luxembourg on 12 and 13 December 1997: 'The members of the Conference must share a common commitment to peace, security and good neighbourliness, respect for other countries' sovereignty, the principles upon which the European Union is founded, the integrity and inviolability of external borders and the principles of international law and a commitment to the settlement of territorial disputes by peaceful means, in particular through the jurisdiction of the International Court of Justice in the Hague.'

[12] The first Regular Reports were presented on 17 December 1998 and updated versions on 13 October 1999.

[13] See *supra* n. 9.

[14] Turkey applied for membership of the European Community on 14 April 1987.

2.3 The Enlargement Procedure

Already at the beginning of the European Community, the European legislator had foreseen the possibility for countries interested in joining the European Union to apply for membership. The basic steps of the enlargement procedure are listed below, although the treaty amendments introduced in the course of EU history have slightly modified the role of the different institutions[15]:

- Opinion of the Commission on the progress of the applicant state towards the harmonisation of its national legislative system with the EU rules and in respect of the accession negotiations;
- Decision of the Council and of the Parliament[16] on the Commission's opinion;
- Agreement between the Member States and the candidate country, i.e., ratification of the Treaty of Accession.

The current procedure is, as mentioned above, indicated in Article 49 EU Treaty which grants the Council the power to decide on applications for membership, 'after consulting the Commission and after receiving the assent of the European Parliament, which shall act by an absolute majority of its component members.' The decision of the Council shall be taken unanimously.[17]

The final element of the enlargement procedure is the Treaty of Accession between the applicant state and the Member States.[18] The EU Treaty leaves the matter of formalisation of the new Member States' accession to the Community to the states.[19] Thus, approval of the Treaty of Accession by the European institutions is not required by the EC Treaty (Article 300). Following the collapse of the process of the adoption of the Constitution for Europe in 2005, due to the rejection by the referendums convened in France and the Netherlands aimed at its ratification, the procedure described in Article 49(2), notably 'the conditions of

[15] The Treaty of Rome establishing the EEC and the Treaty establishing the EAEC included a provision on enlargement in Article 237 and Article 205, respectively; the Single European Act amended Article 237, giving more power to the Parliament; the Treaty of Maastricht introduced Article O, which was followed by Article 49 of the Treaty of Amsterdam.

[16] The role of the European Parliament in the enlargement procedure was strengthened with the adoption of the Single European Act in 1986.

[17] At the time of writing, the Council of the EU has so far rejected only one application: Morocco in 1987.

[18] The Treaty of Accession to the EU of the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia included several legislative acts and other instruments, such as the Act concerning the conditions of accession which is composed of principles, adjustments to the Treaties, permanent and temporary provisions, provisions relating to the implementation of this Act and a long list of Annexes.

[19] The conditions of admission and the adjustments to the Treaties on which the Union is founded, which such admission entails, shall be the subject of an agreement between the Member States and the applicant State. This agreement shall be submitted for ratification by all the contracting States in accordance with their respective constitutional requirements [Article 49(2) EU Treaty].

admission and the adjustments to the Treaties on which the Union is founded […] shall be the subject of an agreement between the Member States and the applicant State', may be seen as an alternative, indirect way to modify the original EU Treaty. Indeed, some European scholars consider that a few amendments to the current infrastructure of the EU further to its enlargement could be shaped within the framework of the Treaty of Accession.

In practical terms, two milestones of the EU enlargement procedure, i.e., the approval by the Council and the adoption of the Treaty of Accession and the relevant legal documents, are clearly interrelated. As soon as the Council has agreed to start the procedure for the accession of a new Member State to the Union, negotiations on the details of the legislative acts to be included in the Treaty of Accession can be initiated.

Accession negotiations have been conducted by candidate countries individually with the Commission and with the existing Member States at bilateral intergovernmental conferences. The final result of the negotiations is a joint common position of the Member States and of the Commission, followed by the Treaty of Accession. Due to the quality of Community legislation in place, negotiations were divided into 31 chapters covering all matters of relevance at the Community level. The main subject of negotiations is the timeframe for the implementation of the legislation, followed by considerations over the candidate country's administrative needs and capacities and possibly the applications for transitional periods with respect to particular pieces of legislation. By the date of accession, the applicant states are expected to have accepted all the *acquis* and to have adopted all necessary measures to implement it, the only exceptions being those pieces of legislation with negotiated transition periods.[20] Progress of candidate countries towards accession since 1998 has been monitored via the Regular Reports, which, since 2000, have been regularly summarised in the Commission's Enlargement Strategy Papers.[21] Negotiations regarding the 2004 enlargement were formally opened on 31 March 1998 during the British Presidency, when the screening of the national CEECs' legislation was initiated. Right after that, in the second half of 1998 when Austria took over the EU Presidency, negotiations on the first chapters started. At the Göteborg European Council of 2001, the heads of state of the EU15 agreed that negotiations should be completed by the end of the Danish Presidency in 2002 for those candidate countries that were supposed to join the EU in the first wave. The main objective of this plan was to open the European Parliament elections foreseen for June 2004 to the representatives of the new Member States. The 2001 European Commission Strategy Paper on Enlargement confirmed the Göteborg timeframe and the year 2004 as the date of the forthcoming EU enlargement, reporting the positive progress of ten candidate countries towards the 2002 deadline for the end

[20] For instance, the Czech Republic asked seven transition periods for transposing certain Community legislation into national law, such as Directive 94/62/EC on packaging and packaging waste (2005) and Directive 91/271/EC on urban waste water treatment (2010).

[21] European Commission 2000.

of the negotiations.[22] In its Regular Reports and Strategy Paper adopted on 9 October 2002, the Commission recommended the conclusion of accession negotiations with the first ten applicant states by the end of the year and indicated 2007 as the potential date for accession of Bulgaria and Romania. The Presidency Conclusions of the Copenhagen European Council held on 12 and 13 December 2002 were welcomed as 'an unprecedented and historic milestone' in completing this process with the conclusion of accession negotiations with Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, the Slovak Republic and Slovenia.

2.4 The Treaty of Accession

On 1 April 2003, at the Thessaloniki European Council, the Treaty of Accession was signed by representatives of the Member States and of the candidate countries.[23] The Treaty of Accession of 2003 is very brief, consisting of three articles welcoming the new members of the EU as 'Parties to the Treaties on which the Union is founded as amended or supplemented [Article 1(1) Treaty of Accession]. It is integrated into the Act of Accession [Article 1(2) Treaty of Accession] concerning the conditions of accession for the new Member States and the adjustments to the EC founding treaties which are necessary for the proper functioning of the Union as a consequence of the enlargement. The Treaty of Accession entered into force on 1 May 2004[24] and includes an important clause allowing the Treaty to come into force for all ratifying states except those that failed to deposit their 'instrument of ratification in due time'.[25] In respect of the ratification process it is important to recall that the constitutional structure of many Member States requires an additional condition for the entry into force of the Treaty of Accession, in most cases a referendum where voters can decide to object to or approve the accession to the EU.[26]

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[22] European Commission 2001.

[23] All documents concerning the accession of the ten new Member States to the European Union can be found in Documents concerning the accession of the Czech Republic, the Republic of Estonia, the Republic of Cyprus, the Republic of Latvia, the Republic of Lithuania, the Republic of Hungary, the Republic of Malta, the Republic of Poland, the Republic of Slovenia and the Slovak Republic to the European Union *OJ* L 236, volume 46, 23 September 2003.

[24] At the Thessaloniki Summit, Romania and Bulgaria agreed on 1 January 2007 as the date of accession and signed the Treaty of Accession with the EU on 25 April 2005. The Accession Treaty of Bulgaria and Romania includes a clause [Article 39(1) of the Accession Protocol] on the possibility to postpone the joining date to 1 January 2008.

[25] Article 2 of the Treaty of Accession. This situation had already occurred in the history of the EU, namely when France vetoed Norway's entry in 1962 and 1967.

[26] Malta was the first country to ratify the Treaty of Accession, following the referendum of 8 March 2003. Slovenia held a referendum on 23 March 2003, followed by Hungary (12 April 2003), Lithuania (10–11 May 2003), Slovakia (16–17 May 2003), Poland (8 June 2003), the Czech Republic (15–16 June 2003), Estonia (14 September 2003) and Latvia (20 September 2003). The result of the referendums on EC membership in Malta, Slovenia and Estonia was not binding regarding their decision to join the EU, while it was binding in Hungary, Lithuania, Slovakia, Poland, Latvia and the Czech Republic.

The binding force of the enlargement is based on Article 1(3) of the Treaty of Accession which requires the new Member States to comply with 'the provisions concerning the rights and obligations of the Member States and the powers and jurisdiction of the institutions of the Union' as established under the founding EU treaties. In other words, the Treaty of Accession and its related legal documents set a general obligation for the CEECs to comply with the *acquis communautaire*.

Annex II of the Treaty of Accession includes, for each individual chapter of negotiations, a list of acts to be adopted by the new Member States upon accession to the Union.[27] This list does not include the entire set of legislation related to the *acquis communautaire* which the new Member States are required to adopt upon accession. The Annex II list concerns only the legislation requiring amendment due to the enlargement before transposition into the national legal systems of the new Member States.[28] The list does not have particular relevance for the analysis which will follow in this book since Article 16 of Annex II, which relates to the environmental *acquis*, does not include provisions directly aimed at the reduction of greenhouse gas emissions in the EU; it contains provisions on environmental protection in the following fields:

1. Waste management;
2. Water quality;
3. Nature protection;
4. Industrial pollution control and risk management;
5. Radiation protection.

In respect of the binding force of the Treaty of Accession, the European Court of Justice has clearly stated that this Treaty constitutes a primary source of Community law.[29] Therefore, in accordance with the EC Treaty, judicial control over the Treaty of Accession can be ensured either through preliminary rulings on questions of interpretation raised before a national court or tribunal or the ECJ (Article 234 EC Treaty), or through the infringement procedure for issues of compliance by the Member States with the legal requirements included in the Treaty of Accession (Articles 226 and 227 EC Treaty).

2.5 The Environmental *Acquis*

EU legislation on environmental protection represented one of the most complicated chapters of the negotiations relating to the enlargement, in particular due to

[27] Article 20 of the Act concerning the conditions of accession.

[28] Specific adaptation of environmental regulation often concerned amendments to the legislation due to the accession of new countries, such as, for instance, the listing of national measuring stations, the list of definitions, the list of species, etc.

[29] ECJ, joined cases 194/85 and 241/85 *Commission* v. *Greece* [1988] *ECR* 1037.

the strong political commitment of the European institutions and the stringency and complexity of EU law in this field. The Community has been very active worldwide in the fight against environmental pollution and more than 300 EU laws have been adopted by the European institutions in this respect. Among others, EC environmental policy is based on the promotion of sustainable development and the integration of environmental protection concerns into other Community policies. Candidate countries were required to transpose into their national legal order and implement approximately 200 legal acts covering horizontal legislation, water and air pollution, management of waste and chemicals, biotechnology, nature protection, industrial pollution and risk management, noise, and radiation protection. The approximation process required accession countries not only to adopt or change existing national laws, rules and procedures in accordance with the *acquis*, but also to provide sufficient guarantees to ensure the effective implementation and enforcement of that legislation.

The environmental *acquis* at the time of the EU enlargement of 2004 included a limited number of specific pieces of legislation designed to fight global warming, but also other legislation indirectly relevant for the reduction of greenhouse gas emissions. Although this book focuses in particular only on a few pieces of EU climate change legislation, it is important to stress that the new Member States were called upon to transpose into their national systems several legislative acts designed to contribute to the European climate policy at the time of and after their accession. Furthermore, accession countries were required to develop an accession strategy which would also take into account the integration of aspects related to the mitigation of and adaptation to climate change in the development of other policy areas such as transport, energy, industry and agriculture.

The main EU laws on energy, air, water, waste and industrial pollution, as well as a few pieces of horizontal legislation such as the directives on environmental impact assessment and on public access to environmental information, represented the core of the relevant environmental *acquis* in relation to climate policy at the time of the negotiations on the accession of ten new Member States in 2004. The following list includes an indicative set of legislation relevant to fight global warming:

- Council Directive 96/62/EC on ambient air quality assessment and management[30];
- Commission Recommendations 1999/125/EC, 2000/303/EC and 2000/304/EC on the reduction of CO_2 emissions from passenger cars[31];
- Council Directive 1999/13/EC on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations[32];

[30] *OJ* L 296, 21 November 1996, pp. 55–63.

[31] *OJ* L 40, 13 February 1999, pp. 49–50, and *OJ* L 100, 20 April 2000, pp. 55–58, respectively.

[32] *OJ* L 85, 29 March 1999, pp. 1–26.

- Council Directive 1999/32/EC on the reduction of sulphur content of certain liquid fuels[33];
- Council Directive 2001/81/EC on national emissions ceilings for certain atmospheric pollutants[34];
- Council Directive 2002/3/EC relating to ozone in ambient air[35];
- Council Directive 2001/100/EC of the European Parliament and of the Council of 7 December 2001 amending Council Directive 70/220/EEC on the approximation of the laws of the Member States on measures to be taken against air pollution by emissions from motor vehicles[36];
- Council Directive 2001/1/EC of the European Parliament and of the Council of 22 January 2001 amending Council Directive 70/220/EEC concerning measures to be taken against air pollution by emissions from motor vehicles[37];
- Council Directive 2003/17/EC of the European Parliament and of the Council of 3 March 2003 amending Directive 98/70/EC relating to the quality of petrol and diesel fuels[38];
- Council Directive 96/61/EC concerning integrated pollution prevention and control (IPPC)[39];
- Council Directive 2001/80/EC on the limitation of emissions of certain pollutants into the air from large combustion plants.[40]

The negotiations on the environmental chapter did not include a section on climate change as was the case for the other fields such as air pollution, waste, water and others. A proper chapter on climate change was not set up during the negotiation process as the only pieces of legislation directly dealing with the fight against global warming when negotiations were closed in November 2002 ('cut-off date')[41] were Council Decision 93/389/EEC as amended by Decision 99/296/EC for a monitoring mechanism of Community CO_2 and other greenhouse gas emissions[42] and Council Decision 94/69/EEC concerning the conclusion of the United Nations Framework Convention on Climate Change.[43] These two acts were included in the chapter on air quality covering a wide range of Community legislation with an indirect influence on the level of greenhouse gas emissions in Europe.

[33] *OJ* L 121, 11 May 1999, pp. 13–18.

[34] *OJ* L 309, 27 November 2001, pp. 22–30.

[35] *OJ* L 67, 9 March 2002, pp. 14–30.

[36] *OJ* L 16, 18 January 2002, pp. 32–34.

[37] *OJ* L 035, 6 February 2001, pp. 34–35.

[38] *OJ* L 76, 22 March 2003, pp. 10–19.

[39] *OJ* L 257, 10 October 1996, pp. 26–48.

[40] *OJ* L 309, 27 November 2001, pp. 1–27.

[41] As we will see in the next chapters, apart from these two regulations, further EU legislation aimed at combating climate change was adopted after negotiations were closed in November 2002.

[42] *OJ* L 117, 5 May 1999.

[43] *OJ* L 33, 7 February 1994.

The accession negotiations between the candidate states and the European institutions on the different chapters were officially closed in November 2002. Obviously, several provisions were adopted by the European Community after that date and some were also of specific relevance, especially in respect of climate change. This is particularly due to the fact that EC environmental law and policy developed significantly in those years, in particular in the field of climate change and clean energy, and because of the progress of the commitments undertaken at the international level. The period between the 'cut-off date' (1 November 2002) and the date of accession (1 May 2004) is called interim period. Accession negotiations did not cover EU legislation adopted during this period, nor is it included in the Treaty of Accession. Those EU laws were therefore designed by the European institutions and the Member States in accordance with the legislative procedure laid down in the EC Treaty, but with the cooperation of the candidate countries which were granted the status of observers. Their governments were allowed to assist and participate in the different sessions of the Parliament (right to speak in parliamentary committees and interparliamentary delegations, but not the right to vote or to be elected to any positions of responsibility) and to sit in as observers and comment at ministerial and Council meetings. Community legislation approved during that period was adopted with a view to an EU enlarged to 27 countries and therefore included, in some cases, special arrangements for the acceding countries in the form of clauses, amendments or articles referring to the obligations of the new Member States, negotiated on a case-by-case basis by the representatives of those countries involved in the EU legislative process. A clear example is provided by Directive 2003/87/EC (EATD) of 13 October 2003 establishing a Europe-wide allowance trading system (EU ETS)[44]: Article 9(1) of the EATD requires Member States to publish and notify to the Commission and to the other Member States the national allocation plans (NAPs) by 31 March 2004 at the latest. For the new Member States, this deadline was postponed to 1 May 2004, following their accession.

At the time of accession, the CEECs were therefore required to implement, inter alia, the following legislation on climate change adopted by the EC in the interim period:

- Council Decision 2002/358/EC of 25 April 2002 concerning the approval, on behalf of the European Community, of the Kyoto Protocol to the United Nations Framework Convention on Climate Change and the joint fulfilment of commitments thereunder[45];

[44] Directive 2003/87/EC of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC, *OJ* L 275, 25 October 2003, pp. 32–46.

[45] Council Decision 2002/358/EC of 25 April 2002 concerning the approval, on behalf of the European Community, of the Kyoto Protocol to the United Nations Framework Convention on Climate Change and the joint fulfilment of commitments thereunder, *OJ* L 130, 15 May 2002.

- Council Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community (EU ETS);
- Directive 2003/30/EC on the promotion of the use of biofuels[46];
- Directive 2003/96/EC on the taxation of energy products and electricity[47];
- Directive 2004/8/EC on the promotion of cogeneration of heat and electricity.[48]

Moreover, specific arrangements limited in time and scope were agreed between the new Member States and the Commission in respect of certain legislation, for which a clear plan of implementation was drawn up. For instance, in respect of the Directive on integrated pollution and prevention control (IPPC—96/61/EC),[49] transitional periods were granted to specific installations as regards compliance with the 'Best Available Techniques' in Latvia and Poland (by 2010) and Slovenia and the Slovak Republic (by 2011), while 2007 was the deadline for the other Member States. In addition, a transitional period was granted to a few new Member States as regards the Large Combustion Plants Directive (LCP).[50] None of the transitional arrangements conceded to the new Member States affect legislation directly aimed at the reduction of greenhouse gas emissions. Nevertheless, talks over the possibility of agreeing a few transitional arrangements for the candidate states in respect of the Emissions Trading Directive (EATD—2003/87/EC) were opened before this Directive was adopted.[51] The EATD is a completely new instrument for climate policy, and its implementation required a lot of effort, especially by those CEECs with a certain lack of skilled capacities and resources at governmental and ministerial level as well as in terms of technical expertise for monitoring, reporting and verifying greenhouse gas emissions by installations. In particular, the preparation and drafting of the national allocation plans (NAPs) through which EU allowances are distributed to national installations require adequate expertise and knowledge. At the second meeting of the Interim Committee on the EU ETS, the CEECs asked for 'further clarification' and time to examine the EATD proposal[52] because of the lack of resources at their disposal to ensure a correct implementation of the Directive.[53] Considering the fact that since 1990 the economic collapse in most accession countries has contributed to the reduction of greenhouse gas emissions well below the targets agreed

[46] *OJ* L 123/42, 17 May 2003.

[47] *OJ* L 283/51, 31 October 2003.

[48] *OJ* L 525/50, 21 February 2004.

[49] See *supra* n. 39.

[50] Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants, *OJ* L 309 of 27 November 2001, p. 1.

[51] Lithuania and Latvia were the two countries which tried hardest to obtain such a transitional arrangement. See 'Carbon Market Europe', 14 March 2003, Point Carbon, available at: http://www.pointcarbon.com.

[52] See Chap. 1 n. 3.

[53] Hungary had asked the meeting to convene and Latvia and Malta explicitly asked for further information on how the proposed Directive would be implemented.

under the Kyoto Protocol, a further reduction to be achieved through the emissions trading system would leave these countries with a slight margin of growth in respect of the obligations to reduce greenhouse gas emissions to the European and international level in the post-2012 phase. In this regard, at the Interim Committee meeting, the Hungarian representatives claimed that the acceding countries should have been granted emissions growth at least when the national allocation plans were drafted, as had been granted some EU countries when the EU Burden Sharing Agreement was negotiated in early 1998.[54]

[54] See Chap. 3.

Chapter 3
The International Climate Change Regime

3.1 Climate Change

Climate change is a relatively recent phenomenon and its coverage in the media as well as its importance in the development of international and European policies aimed at the protection of the environment have increased considerably in the recent past. Carbon dioxide and other gases contribute to keeping the planet's surface warm and habitable in a natural way by trapping part of the solar heat within the atmosphere. The burning of fossil fuels, such as coal, gas and oil, and phenomena like deforestation and the burning of forests have artificially increased the amount of carbon dioxide in the earth's atmosphere, thus contributing to a rise in temperature.[1] The release of greenhouse gases in the atmosphere is the main cause of the greenhouse effect, i.e., the excessive warming of the earth atmosphere caused by a disproportionate atmospheric concentration of water vapour, carbon dioxide and other GHGs. This is called global warming, the main cause of climate change, which directly and indirectly affects the ecosystems in many countries in the world and represents a serious threat to the environmental integrity of the globe. In particular, the alteration of the global temperature in the atmosphere contributes to several adverse effects, notably an unbalanced increase in sea level, melting of glaciers, changes in plant habitat and animal migration, a high frequency of rains and changes at regional level as well as a more intense hydrological cycle. By the year 2008, climate change was recognised as a human-induced global phenomenon by almost the entire international scientific community.[2] Proof of the adverse effects of climate

[1] Other human-induced activities contributing to global warming are the emissions of methane from landfills, rice paddies and livestock as well as the release in the atmosphere of chlorofluorocarbons (CFCs) from refrigerators and air conditioners.

[2] A few sceptical opinions remain on the reality of climate change and the necessity to intervene, but these are mostly politically inspired. The most famous case is the removal of a section on climate change from the Environmental Protection Agency's (EPA) annual air pollution report by the US administration in September 2002.

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change is becoming more and more clear and the following are only examples of the increasing evidence: in 2004, the highest level of global GHG concentrations ever was registered by the World Meteorological Organisation (WMO),[3] 2005 was considered the warmest year ever recorded according to Nature,[4] and according to Science, temperatures in the Antarctic have risen by three degrees in the last 30 years.[5]

The recognition of human influence on the global climate through the release of so-called greenhouse gases in the atmosphere was one of the key findings of the studies and assessments of the Intergovernmental Panel on Climate Change (IPCC). The IPCC was established in 1988 by the World Meteorological Organisation (WMO) and the UN Environment Programme (UNEP) in order to assist policy makers in the identification and interpretation of scientific information on climate change and to provide important scientific input to the climate change negotiating process. The IPCC is composed of member countries and scientists that are divided into three working groups: (1) science of climate change; (2) impacts, vulnerability and adaptation; and (3) mitigation. In addition to these three working groups, the IPCC also includes a task force on national greenhouse gas inventories. In 1990, the First Assessment Report of the IPCC found that human-induced climate change was a global threat, and contributed to the launch of the negotiations on the UN framework convention on climate change. The Second Assessment Report (1995) confirmed 'a discernible human influence on global climate' and contributed to the intensification of the negotiations towards the adoption of the Kyoto Protocol. The Third Assessment Report TAR (2001) provided new and stronger evidence of global warming and highlighted the importance of the integration of sustainable development policies with climate change mitigation measures. The TAR emphasised the key role to be played by decision makers at all levels, as well as the correct use of technologies to stop the growth of GHG emissions.[6] The IPCC findings are relevant to addressing questions such as whether global temperature is actually rising, to what extent GHG emissions affect changes in global temperature and, finally, to what extent human activity affects changes in global temperature. According to the IPCC, global warming is 'unlikely to be entirely natural in origin' and 'the balance of evidence suggests a discernible human influence on the global climate.' The future does not look bright: for instance, on 30 October 2006, the UK government released a report highlighting the economic costs of climate change, commonly known as the Stern Report. According to Stern, if no action is taken to reduce global warming, this will lead to 200 million refugees around the

[3] First WMO GHG Bulletin, No. 1 of 14 March 2006.

[4] 'The heat was on in 2005', *Nature*, 21 December 2005.

[5] Turner et al. (2006), pp. 1914–1917.

[6] IPCC (2001).

world by 2100 and cost approximately 20% of global GDP.[7] In 2007, the IPCC released its Fourth Assessment Report, concluding that climate change will continue in the coming centuries regardless of whether pollution will go on. According to the IPCC, a rise of 1.8 up to 4.1 degrees in temperature by 2099 is highly probable, as well as an increase in sea level rise of 18 up to 55 cm by 2099. Finally, more scientific certainty was provided about the question of whether the increase in tropical storms such as hurricanes since 1970 is caused by human activity.

Thus, the international community started to tackle the issue of climate change already in the early 1980s, in particular through the activities of the WMO and the United Nations Environment Programme (UNEP), but it is only since the late 1980s that international leaders have been gathering under the United Nations (UN) umbrella in order to discuss concrete political and legal actions to reduce global warming. While the first UN General Assembly Resolution on climate change (43/53) endorsed the establishment of the IPCC in 1988, Resolution 44/207 of 1989 announced the start of the negotiating process regarding the taking of international action to reduce global warming. Negotiations were conducted by the Intergovernmental Negotiating Committee created by Resolution 45/212 of 1990 and ended in 1992 at the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro, where the United Nations Framework Convention on Climate Change (UNFCCC) was adopted and opened for signature. The UNCED meetings are considered a key milestone in the development of international environmental law. In Rio, three major international agreements concerning sustainable development and environmental protection were adopted: Agenda 21, setting a plan of action at the global level for the promotion of sustainable development, the Rio Declaration on Environment and Development, identifying a set of principles and responsibilities for states with regard to environmental protection and development, and, finally, the Statement of Forest Principles, focusing on a sustainable approach to the management of forests on the globe. Moreover, apart from the UNFCCC, another important multilateral environmental agreement (MEA) was opened for signature in Rio: the Convention on Biological Diversity (UNCBD) aimed at the promotion of the diversity of biological species.[8]

[7] Stern (2006).

[8] The UNCED also supported a new approach to the fight against desertification and called on the UN General Assembly to start official negotiations on an international agreement on desertification, leading, in Paris in 1994, to the adoption of the United Nations Convention to Combat Desertification (UNCCD).

3.2 The United Nations Framework Convention on Climate Change (UNFCCC)

The UNFCCC is an international treaty which was adopted at the UN headquarters in New York on 9 May 1992 and which entered into force on 21 March 1994.[9] By 2008, the UNFCCC had received 189 instruments of ratification. According to Article 22(1) of the UNFCCC, 'the Convention shall be subject to ratification, acceptance, approval or accession by States and by regional economic integration organizations.' It is commonly accepted that Multilateral Environmental Agreements (MEAs) allow for different procedures to become party to an international treaty in order to take account of the different constitutional systems of countries—i.e., in the case of accession, the state joins a treaty already negotiated and signed by other parties. The procedures indicated in Article 22(1) require the state's consent to be bound by an international treaty and all related obligations.

The UNFCCC sets the international legal framework for combating climate change and recognises the vulnerability of the climate system affected by 'dangerous' anthropogenic emissions of carbon dioxide (CO_2) and other GHG emissions. The UNFCCC calls on governments to provide and make public relevant information on GHG emissions, as well as to develop national policies and best practices to combat global warming. The UNFCCC focuses on both mitigation of GHG emissions and adaptation to the adverse effects of climate change, in particular by requiring governments to cooperate and set up adequate national strategies accordingly. International cooperation is one of the major principles upon which the international climate regime is based, and particularly the UNFCCC and the Kyoto Protocol foster the transfer of technology, information and capacity from developed countries to developing countries.

The ultimate objective of the UNFCCC is the achievement of 'stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level has to be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner' (Article 2).

The international climate regime relies on the following principles commonly recognised in international environmental law (Article 3):

[9] The UNFCCC was adopted on 9 May 1992 at the Intergovernmental Negotiating Committee's (INC) resumed fifth session, within the framework of the negotiations on a climate change agreement launched by the UN General Assembly in December 1990. The UNFCCC was then opened for signature from 4 to 14 June 1992 at the Earth Summit [UN Conference on Environment and Development (UNCED)] in Rio de Janeiro, Brazil. All relevant information, documents and details of the UNFCCC are available at: http://www.unfccc.int. For a better understanding of the UNFCCC, see UNEP and UNFCCC (2002a, b) and UNFCCC (2006).

- The principle of equity in the commitment of parties to protect the climate;
- The recognition of developing countries' special needs and circumstances 'especially those that are particularly vulnerable to the adverse effects of climate change';
- The precautionary principle according to which action should be taken to 'anticipate, prevent or minimise the causes of climate change and mitigate its adverse effects';
- The promotion of sustainable development and growth.

Moreover, the UNFCCC recognises the 'common but differentiated responsibilities and respective capabilities' of parties and calls on the developed countries to 'take the lead in combating climate change and the adverse effects thereof' (Article 3(1)). The principle of common but differentiated responsibilities[10] is one of the key principles upon which the international climate regime and many other MEAs are founded. In accordance with this principle, the industrialised countries should take the lead in the fight against climate change and in the promotion of adaptation measures (Articles 3(1) and 4(2)a). By the same token, the Convention clearly establishes, in Article 4(7), a link between the performance of Annex I parties in meeting 'their commitments under the Convention related to financial resources and transfer of technology' and the effectiveness of the implementation of the Convention commitments by developing countries.[11]

The distinction between developed and developing countries and the definition of different responsibilities and duties among parties is the key milestone upon which the international climate regime created by the UNFCCC and the Kyoto Protocol is founded. The talks and negotiations at the international level on the future developments of the climate regime focus exactly on the redistribution of tasks, responsibilities and commitments among the parties to the UNFCCC and the Kyoto Protocol. The principle of common but differentiated responsibilities and its application within the framework of the UNFCCC is of high relevance not only because it represents the legal basis for the establishment of different sets of obligations among parties, but also because it provides the legal basis for the definition of a different status for parties which are granted a certain degree of flexibility in implementing the UNFCCC. In this respect, parties with economies in transition (EITs) to a market economy were given the possibility to negotiate and agree on a base year different from 1990 for the definition of the GHG reduction obligations under the Kyoto Protocol. The principle of common but differentiated responsibilities, which is included in many other MEAs, will be discussed in

[10] Articles 3(1) and 4(1) of the UNFCCC and Article 10 of the Kyoto Protocol.

[11] 'The extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country. Parties of their commitments under the Convention related to financial resources and transfer of technology and will take fully into account that economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties.'

Table 3.1 Annex I parties to the UNFCCC

Australia	Austria		Belarus	Belgium
Bulgaria	Canada		Croatia	Czech Rep.
Denmark	EC	Estonia	Finland	France
Germany	Greece		Hungary	Iceland
Ireland	Italy		Japan	Latvia
Liechtenstein	Lithuania		Luxembourg	Monaco
Netherlands	New Zealand		Norway	Poland
Portugal	Romania		Russian Fed.	Slovak Republic
Slovenia	Spain		Sweden	Switzerland
Turkey	Ukraine		UK	US

Chap. 6, focusing on the particular status of the new Member States in the international climate regime.

Annex I of the UNFCCC includes a list of industrialised countries which have committed themselves to reducing greenhouse gas emissions by the year 2000–1990 levels as prescribed under Article 4(2)b of the UNFCCC. These countries are the members of the Organisation for Economic Cooperation and Development (OECD) in 1992, excluding Mexico, together with designated countries undergoing the transition to a market economy—Economies in Transition (EITs),[12] the European Community and Turkey. Non-Annex I parties are those not listed in Annex I, notably developing countries such as least developed countries, most vulnerable countries, oil-exporting countries and other parties.

Annex I parties to the UNFCCC: See Table 3.1

Annex II of the UNFCCC includes a list of parties—Annex I parties excluding the EITs—which are required to assist the developing countries in the implementation of the Convention by providing new and additional financial resources necessary to meet the expenses of the preparation and submission of national inventories of GHG emissions and the costs of adaptation to the adverse effects of climate change. Furthermore, Annex II parties are required to promote the transfer of technology and know-how (Article 4(3), 4(4) and 4(5) of the UNFCCC).

Articles 4 and 12 of the UNFCCC identify and list the essential commitments that apply to all parties:

- Preparation of national inventories of GHG emissions and removals by sinks (Article 4(1)a)[13];

[12] Within the UNFCCC and the Kyoto Protocol, EITs are the ten new EU Member States without Malta and Cyprus and including Croatia, Belarus, the Russian Federation and Ukraine. In the context of this book, the term 'EITs' refers only to ten EU accession countries, without Malta and Cyprus, unless otherwise specified.

[13] 'Develop, periodically update, publish and make available to the Conference of the Parties, in accordance with Article 12, national inventories of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, using comparable methodologies to be agreed upon by the Conference of the Parties' (Article 4(1)a of the UNFCCC).

- Preparation of national and regional programmes containing measures regarding climate change (Article 4(1)b)[14]:
  - Mitigation by addressing GHG emissions sources and sinks;
  - Adaptation;
- Transfer and promotion of technologies, practices and processes aimed at the reduction of greenhouse gas emissions (Article 4(1)c)[15];
- Promotion of sustainable management and cooperation in the management of sinks (Article 4(1)d)[16];
- Cooperation in the preparation for adaptation to climate change (Article 4(1)e),[17] consideration of climate change in economic and environmental policy and actions (Article 4(1)f),[18] promotion of research, systematic observation and development of data archives to reduce uncertainties about the causes and effects of climate change (Article 4(1)g),[19] cooperation in the exchange of

[14] 'Formulate, implement, publish and regularly update national and, where appropriate, regional programmes containing measures to mitigate climate change by addressing anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, and measures to facilitate adequate adaptation to climate change' (Article 4(1)b of the UNFCCC).

[15] 'Promote and cooperate in the development, application and diffusion, including transfer, of technologies, practices and processes that control, reduce or prevent anthropogenic emissions of greenhouse gases not controlled by the Montreal Protocol in all relevant sectors, including the energy, transport, industry, agriculture, forestry and waste management sectors' (Article 4(1)c of the UNFCCC).

[16] 'Promote sustainable management, and promote and cooperate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all greenhouse gases not controlled by the Montreal Protocol, including biomass, forests and oceans as well as other terrestrial, coastal and marine ecosystems' (Article 4(1)d of the UNFCCC).

[17] 'Cooperate in preparing for adaptation to the impacts of climate change; develop and elaborate appropriate and integrated plans for coastal zone management, water resources and agriculture, and for the protection and rehabilitation of areas, particularly in Africa, affected by drought and desertification, as well as floods' (Article 4(1)e of the UNFCCC).

[18] 'Take climate change considerations into account, to the extent feasible, in their relevant social, economic and environmental policies and actions, and employ appropriate methods, for example impact assessments, formulated and determined nationally, with a view to minimizing adverse effects on the economy, on public health and on the quality of the environment, of projects or measures undertaken by them to mitigate or adapt to climate change' (Article 4(1)f of the UNFCCC).

[19] 'Promote and cooperate in scientific, technological, technical, socio-economic and other research, systematic observation and development of data archives related to the climate system and intended to further the understanding and to reduce or eliminate the remaining uncertainties regarding the causes, effects, magnitude and timing of climate change and the economic and social consequences of various response strategies' (Article 4(1)g of the UNFCCC).

information (Article 4(1)h),[20] promotion of education, training and public awareness regarding climate change (Article 4(1)i)[21];

- Communication of information in accordance with Article 12 of the UNFCCC (Article 4(1)j), notably a national inventory of anthropogenic emissions by sources and removals, a description of steps undertaken to implement the Convention and any other relevant information).[22]

Furthermore, on the grounds of the principle of common but differentiated responsibilities, Article 4 of the UNFCCC lists the differentiated commitments which apply only to Annex I and Annex II parties separately:

- For Annex I parties:

  – Adoption of national policies and measures (PAMs) aimed at the mitigation of climate change (Article 4(2)a)[23];

[20] 'Promote and cooperate in the full, open and prompt exchange of relevant scientific, technological, technical, socio-economic and legal information related to the climate system and climate change, and to the economic and social consequences of various response strategies' (Article 4(1)h of the UNFCCC).

[21] 'Promote and cooperate in education, training and public awareness related to climate change and encourage the widest participation in this process, including that of non-governmental organizations' (Article 4(1)i of the UNFCCC).

[22] 'Communicate to the Conference of the Parties information related to implementation, in accordance with Article 12' (Article 4(1)j of the UNFCCC).

[23] 'Each of these Parties shall adopt national policies and take corresponding measures on the mitigation of climate change, by limiting its anthropogenic emissions of greenhouse gases and protecting and enhancing its greenhouse gas sinks and reservoirs. These policies and measures will demonstrate that developed countries are taking the lead in modifying longer-term trends in anthropogenic emissions consistent with the objective of the Convention, recognizing that the return by the end of the present decade to earlier levels of anthropogenic emissions of carbon dioxide and other greenhouse gases not controlled by the Montreal Protocol would contribute to such modification, and taking into account the differences in these Parties' starting points and approaches, economic structures and resource bases, the need to maintain strong and sustainable economic growth, available technologies and other individual circumstances, as well as the need for equitable and appropriate contributions by each of these Parties to the global effort regarding that objective. These Parties may implement such policies and measures jointly with other Parties and may assist other Parties in contributing to the achievement of the objective of the Convention and, in particular, that of this subparagraph' (Article 4(2)a of the UNFCCC).

– Submission of relevant information on the above-mentioned PAMs as well as on projected GHG emissions 'with the aim of returning individually or jointly to their 1990 levels' (Article 4(2)b)[24];

- For Annex II parties[25]:

– financial and technical assistance to developing countries to enable them to comply with the obligations of information under Article 12 UNFCCC (Articles 4(3) and 4(5))[26];
– assistance to developing countries in meeting the costs of adaptation to the adverse effects of climate change (Article 4(4)).[27]

Finally, Article 4 of the UNFCCC provides for specific entitlements of certain parties, notably a certain degree of flexibility allowed to EITs in order to address

[24] 'In order to promote progress to this end, each of these Parties shall communicate, within six months of the entry into force of the Convention for it and periodically thereafter, and in accordance with Article 12, detailed information on its policies and measures referred to in subparagraph (a) above, as well as on its resulting projected anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol for the period referred to in subparagraph (a), with the aim of returning individually or jointly to their 1990 levels these anthropogenic emissions of carbon dioxide and other greenhouse gases not controlled by the Montreal Protocol. This information will be reviewed by the Conference of the Parties, at its first session and periodically thereafter, in accordance with Article 7' (Article 4(2)b of the UNFCCC).

[25] Annex II of the UNFCCC lists the same countries as included in Annex I, with the exception of parties with economies in transition (EITs).

[26] 'The developed country Parties and other developed Parties included in Annex II shall provide new and additional financial resources to meet the agreed full costs incurred by developing country Parties in complying with their obligations under Article 12, paragraph 1. They shall also provide such financial resources, including for the transfer of technology, needed by the developing country Parties to meet the agreed full incremental costs of implementing measures that are covered by paragraph 1 of this Article and that are agreed between a developing country Party and the international entity or entities referred to in Article 11, in accordance with that Article. The implementation of these commitments shall take into account the need for adequacy and predictability in the flow of funds and the importance of appropriate burden sharing among the developed country Parties' and 'The developed country Parties and other developed Parties included in Annex II shall take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies and know-how to other Parties, particularly developing country Parties, to enable them to implement the provisions of the Convention. In this process, the developed country Parties shall support the development and enhancement of endogenous capacities and technologies of developing country Parties. Other Parties and organizations in a position to do so may also assist in facilitating the transfer of such technologies' (Articles 4(3) and (5) of the UNFCCC).

[27] 'The developed country Parties and other developed Parties included in Annex II shall also assist the developing country Parties that are particularly vulnerable to the adverse effects of climate change in meeting costs of adaptation to those adverse effects' (Article 4(4) of the UNFCCC).

climate change and negotiate an appropriate base year for the calculation of the historical level of greenhouse gas emissions (Articles 4(6)),[28] as well as for 'the specific needs and special situations of the least developed countries' (Article 4(9)) and of developing countries with economies that are vulnerable to the implementation of mitigation measures (Article 4(10)).[29]

After this extensive description of the commitment of Annex I parties to reduce GHG emissions to 1990 levels, it is necessary, at this point, to mention that the Convention contrasts with the Kyoto Protocol in terms of the content of this specific obligation. This obligation in the Convention seems very similar to the greenhouse gas emissions limitation and reduction commitments agreed under the Kyoto Protocol (Annex B) and is discussed in Chap. 6. The contrast is emphasised by the different wording used in the two treaties when addressing the duties of Annex I parties. Under Article 4(2)a, the Convention obliges parties to adopt national policies to combat climate change with 'the aim of returning individually or jointly to their 1990 levels these anthropogenic emissions of carbon dioxide and other greenhouse gases not controlled by the Montreal Protocol' (Article 4(2)b). On the other hand, the Kyoto Protocol, under Article 3(1), uses the term 'shall' in reference to the obligations for Annex B parties to 'ensure that their aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases listed in Annex A do not exceed their assigned amounts.'[30]

Mention has already been made of the role of Annex II parties, whose main obligation is to assist and provide financial support to developing countries in the implementation of the Convention. As regards non-Annex I parties, Article 4(7) makes the effective implementation of their commitments dependent on the effective implementation by developed countries of their obligations to provide financial support and transfer technology to those countries. Furthermore, Article 4(8) urges parties to undertake 'actions related to funding, insurance and transfer

[28] 'In the implementation of their commitments under paragraph 2 above, a certain degree of flexibility shall be allowed by the Conference of the Parties to the Parties included in Annex I undergoing the process of transition to a market economy, in order to enhance the ability of these Parties to address climate change, including with regard to the historical level of anthropogenic emissions of greenhouse gases not controlled by the Montreal Protocol chosen as a reference' (Article 4(6) of the UNFCCC).

[29] 'The Parties shall take full account of the specific needs and special situations of the least developed countries in their actions with regard to funding and transfer of technology' and 'The Parties shall, in accordance with Article 10, take into consideration in the implementation of the commitments of the Convention the situation of Parties, particularly developing country Parties, with economies that are vulnerable to the adverse effects of the implementation of measures to respond to climate change. This applies notably to Parties with economies that are highly dependent on income generated from the production, processing and export, and/or consumption of fossil fuels and associated energy-intensive products and/or the use of fossil fuels for which such Parties have serious difficulties in switching to alternatives' (Articles 4(9) and (10) of the UNFCCC).

[30] See UNFCCC (2000), p. 31.

of technology' to address the specific needs of developing countries, especially with regard to adaptation measures.

Common to several existing multilateral environmental agreements, the institutional framework upon which the international climate regime is based relies on the Conference of the Parties (COP), which is the supreme body of the UNFCCC and has been established to keep under regular review the implementation of the Convention and to adopt the decisions necessary to promote the implementation of the Convention (Article 7 of the UNFCCC). The COP is supported by two subsidiary bodies which are relevant for the implementation of the UNFCCC: the subsidiary body for scientific and technological advice (SBSTA, Article 9), responsible for providing information and advice on scientific and technological matters, and the subsidiary body for implementation (SBI, Article 10) which assists the COP in the assessment and the review of the effective implementation of the Convention. The COP meets in plenaries where the heads of delegations vote on the draft decisions forwarded by the subsidiary bodies. In practice, the different issues on the agenda are separated into negotiating items which are discussed individually by the parties. The subsidiary bodies are responsible for the adoption of draft decisions on each of the negotiating items. All decisions within the framework of the UNFCCC are adopted by consensus, in line with UN practice. This 'default' procedure aims at seeking the agreement of most parties. No consensus is required for decisions on the rules of procedure. The COP can take 'decisions necessary to promote the effective implementation' of the UNFCCC—formally non-binding—and can adopt additional protocols by consensus which are subject to ratification, and amendments to the UNFCCC can be adopted by a 3/4 majority vote, but subject to subsequent acceptance by parties.

The secretariat of the UNFCCC (Article 8) is located in Bonn and acts as a coordination and administrative office in charge of, amongst others, collecting and preparing reports on the basis of the relevant information on GHG emission sources and sinks as well as national policies and measures submitted by parties. The UNFCCC has established a mechanism for the provision of financial resources and technology transfer administered by its own Council but subject to COP guidance (Article 11). This financial mechanism is the Global Environment Facility (GEF), which, like the IPCC, is not a formal institution of the UNFCCC.

3.3 The Kyoto Protocol

Pressing and increasing scientific evidence of climate change in the early nineties convinced the international community, after the entry into force of the UNFCCC, to start considering the necessity of a stricter and more efficient system for the reduction of global warming. To this end, in 1995, the first Conference of the Parties to the UNFCCC (COP1) endorsed the creation of the so-called Ad Hoc Group on the Berlin Mandate (AGBM). The Berlin Mandate was an agreement among parties to initiate a round of international talks aimed at the establishment

of quantifiable limitation and reduction targets for greenhouse gas emissions within a defined and clear commitment period. The Berlin Mandate included an agreement on the establishment of a pilot phase for projects between Annex I parties and non-Annex I parties aimed at the reduction of GHG emissions and the achievement of the UNFCCC objective. COP2 endorsed the IPCC Second Assessment Report (SAR) in which the human influence on the global climate was confirmed and the preparation of a new text in the form of a 'protocol or another legal instrument' was initiated. In 1997, at COP3, the details of the Berlin Mandate were translated into the Kyoto Protocol, a new international agreement in which the industrialised world accepted binding targets for the reduction of GHG emissions by 2012 compared to 1990 levels.[31]

The Kyoto Protocol is a legal instrument 'related' to the UNFCCC, adopted under COP3 (1997) and opened for signature at the UN headquarters in 1998. The Kyoto Protocol is a legally binding instrument to reduce GHG emission concentrations in the atmosphere in the commitment period 2008–2012. Such reductions are calculated in relation to a base year, which for the majority of Annex I parties is 1990. The idea to establish a multi-year target of a more flexible nature than a single-year target was first presented by the US delegation in 1997, supported by Iceland, New Zealand, Norway and the Russian Federation. The main reasoning behind the adoption of a multi-year approach can be divided into two parts: on the one hand, the intention to reduce the risk that annual fluctuations in the level of GHG emissions could be provoked by different natural factors; on the other hand, the necessity to ensure the success of emissions trading and the borrowing of assigned amounts as a way out for Annex I parties not complying with their reduction obligations.[32]

The Kyoto Protocol entered into force on 16 February 2005, following submission of the instrument of ratification by the Russian Federation to the UNFCCC secretariat 90 days earlier. Ratification by the Russian Federation became essential for the entry into force of the Kyoto Protocol according to the complex procedure foreseen under Article 25(1),[33] particularly after the refusal of the US and Australia to accept this treaty. This was due to the fact that the USA and Australia accounted for 36.1 and 2.1%, respectively, of the global level of GHG emissions, while the share of the Russian Federation was 17.4%. The Kyoto Protocol followed and reinforced the basic idea of the UNFCCC, namely the need for

[31] The Kyoto Protocol was adopted by the Parties to the UNFCCC on 11 December 1997 in Kyoto, Japan, at the Third Conference of the Parties to the UNFCCC (COP3). For additional information, documents and details on the Kyoto Protocol and subsequent decisions, see *supra* n. 9.

[32] UNFCCC (2000), p. 36.

[33] 'This Protocol shall enter into force on the ninetieth day after the date on which not less than 55 Parties to the Convention, incorporating Parties included in Annex I which accounted in total for at least 55 per cent of the total carbon dioxide emissions for 1990 of the Parties included in Annex I, have deposited their instruments of ratification, acceptance, approval or accession' (Article 25(1) of the Kyoto Protocol).

international action to mitigate GHG emissions and to adapt to the adverse effects of climate change.

The Kyoto Protocol builds upon the same infrastructure as designed by the UNFCCC. In particular, both treaties share the same principles and ultimate objectives, namely the reduction of global level greenhouse gas emissions and the distinction between developed and developing countries, as well as the same institutional structure. Article 2 of the Kyoto Protocol contains the basic principles that Annex I parties shall follow in order to meet their quantified emission limitation and reduction commitments (QELRCs). These are in line with Article 3 of the UNFCCC: promotion of sustainable development, cooperation among parties in the implementation of policies and measures for the purposes of Article 4(2) and minimisation of the adverse effects of climate change.

The Kyoto Protocol has two Annexes: Annex A, which includes the list of GHGs regulated by the Kyoto Protocol as well as an indicative list of sectors and source categories responsible for GHG emissions. Annex B contains the same list of countries included in Annex I of the UNFCCC—with the exception of Turkey and Belarus, which were not parties to the UNFCCC when the text of the Kyoto Protocol was agreed—that have assumed legally binding commitments for the period 2008–2012 pursuant to Article 3(1) of the Kyoto Protocol.

Annex A of the Kyoto Protocol: See Table 3.2

Annex B of the Kyoto Protocol: See Table 3.3

According to Article 3 of the Kyoto Protocol, Annex I parties shall ensure 'individually or jointly' that GHG emissions do not exceed 'their assigned amounts calculated pursuant to their quantified emission limitation and reduction commitments inscribed in Annex B' in the commitment period 2008-2012 with a view to reducing the global level of GHG emissions by 'at least 5 per cent below 1990 levels' in that period. The QELRCs listed in Annex B are expressed in percentages of 1990 emissions of greenhouse gases and the assigned amounts correspond to the total amount of GHG emissions in CO_2 equivalent that a country is allowed to emit during the 2008-2012 period (Article 3(7)). Article 3(5) of the Kyoto Protocol allows the EITs to use a base year different from 1990 in

Table 3.2 Annex A of the Kyoto protocol

Greenhouse gases	Sectors/source categories
Carbon dioxide Methane Nitrous oxide Hydrofluorocarbons Perfluorocarbons Sulphur hexafluoride	Energy (fuel combustion, fugitive emissions from fuels) Industrial processes (mineral products, chemical industry, metal production, other) Solvent and other product use (agriculture, enteric fermentation, manure management, rice cultivation, other) Waste (solid waste disposal on land, wastewater handling, waste incineration, other)

Table 3.3 Annex B of the Kyoto protocol

Party	Quantified emission limitation and reduction commitment (percentage of base year or period)
Australia	108
Austria	92
Belgium	92
Bulgaria[a]	92
Canada	94
Croatia[a]	95
Czech Republic[a]	92
Denmark	92
Estonia[a]	92
European Union	92
Finland	92
France	92
Germany	92
Greece	92
Hungary	94
Iceland	110
Ireland	92
Italy	92
Japan	94
Latvia[a]	92
Liechtenstein	92
Lithuania	92
Luxembourg	92
Monaco	92
Netherlands	92
New Zealand	100
Norway	101
Poland	94
Portugal	92
Romania[a]	92
Russian Federation[a]	100
Slovak Republic[a]	92
Slovenia[a]	92
Spain	92
Sweden	92
Switzerland	92
Ukraine[a]	100
UK and Northern Ireland	92
United States of America	93

[a]Countries that are undergoing the process of transition to a market economy

accordance with Decision 9/CP.2 of COP2. Article 3(6) allows such countries 'a certain degree of flexibility' in the implementation of the Kyoto Protocol. As mentioned above, the word 'shall' included in Article 3(1) contributes to giving these commitments a legally binding nature. This binding nature is reinforced by the rules of the non-compliance procedure established on the basis of Article 18 of the Kyoto Protocol. Explicit reference to the binding character of QELRCs was made in the AGBM4 conclusions and obtained the support of several parties also in future years, like, for instance, the US at COP2, the Geneva Ministerial Declaration, France, Germany and Poland.[34]

The Kyoto Protocol does not foresee any binding commitment for non-Annex I parties in the first commitment period, and the talks and negotiations on the future of the international climate regime are considering the possibility to include new binding reduction obligations for those non-Annex I parties with a high rate of economic development and a regular increase in the level of GHG emissions. According to Article 3(9) of the Kyoto Protocol, commitments for Annex I parties in the period post-2012 shall take the form of an amendment to Annex B, and the international negotiations about these issues started in 2005. The green light for the process of the definition of future rules to curb global warming was given by the international community at COP11 held in Montreal from 28 November to 9 December 2005.

Article 4 of the Kyoto Protocol establishes the possibility for Annex I parties to reach an agreement on the joint fulfilment of greenhouse gas emission reduction commitments. This Article was introduced in the final text of the Kyoto Protocol at the request of the European Community, which decided to fulfil its commitments jointly with the Member States (EU15).[35] Consequently, the global target of the EC has been redistributed internally among the Member States in different percentages following an agreement by the Ministers of the Environment at Council level. This topic will be discussed in Chap. 4.

The Kyoto Protocol has the same institutional framework as the UNFCCC. Furthermore, the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, the so-called COP/MOP, has similar functions, roles, duties and responsibilities to those of the COP for the Convention. The COP/MOP convenes at the same place and in the same period as the COP, but meetings are held separately and parties that are members of the Convention but have not ratified the Kyoto Protocol are allowed to participate in the COP/MOP as observers but have no rights in the decision-making process.[36] COP/MOP1 was

[34] UNFCCC (2000), p. 32.

[35] At the time of ratification there were fifteen EU Member States.

[36] It is important to stress that before the Kyoto Protocol entered into force in February 2005, the parties to the international climate regime met only within the framework of the COPs and therefore participated in all negotiations, including those concerning the rules and procedures of the Kyoto Protocol. Only after that date was the COP/MOP convened together with the COP, and since COP/MOP1 in Montreal in 2005, Parties which have not ratified the Kyoto Protocol are not allowed to take part in the decision-making process within the COP/MOP.

held together with COP11 in December 2005 in Montreal, Canada, following the entry into force of the Kyoto Protocol in February 2005. The main task of COP/MOP1 was to consider for approval all COP decisions adopted before 2005, in particular the Marrakech Accords of 2001. Prior to COP/MOP1, negotiations and talks over the rules of the Kyoto Protocol were conducted within the framework of the COP, thus also including countries parties to the Convention but not having ratified the Kyoto Protocol. Before the entry into force of the Kyoto Protocol, the COPs adopted several decisions which were forwarded to COP/MOP1 for consideration and adoption.

The two subsidiary bodies created by the Convention, SBSTA and SBI, as well as the bureau of the COP, also serve and assist the COP/MOP in its work and decisions. Parties to the UNFCCC and to the Kyoto Protocol participate in the meetings of the convention bodies through a national delegation which negotiate on the various negotiating issues on behalf of the national government. Based on UN practice, parties take part in the bodies' meetings via negotiating groups, which allows them to better meet their national and regional interests and to form common negotiating positions accordingly. In respect of countries with limited staff resources and expertise on climate change issues, the participation of delegation members in the negotiating groups is a way to fill the gaps of knowledge and lack of personnel which they face as regards the many complex items that countries have to deal with in the implementation of the international climate regime. These groups are usually defined on the basis of their regional location and reflect the basic North–South division proper of all UN institutions. However, within the international climate regime, the differentiation of groups is not only based on geographical considerations; there are also many differences in how they aim to reduce greenhouse gas emissions and in the efficiency of their energy systems, as well as in the role of technology and domestic fuel resources. The proliferation of negotiating items is due to the complexity of the issues discussed and to the different positions of the parties in this respect. The negotiating groups participating in the COPs and COP/MOPs are:

- Group of 77 and China, including more than 130 parties and comprising all developing countries. In this group, countries often take different negotiating positions, which is why usually smaller groupings are established, such as the African UN Regional Group, the Alliance of Small Island States (AOSIS) and the group of Least Developed Countries (LDCs);
- European Union (27 Member States);
- Umbrella Group (evolution of the JUSSCANNZ group during the Kyoto Protocol negotiations) including the following non-EU developed countries: Australia, Canada, Iceland, Japan, New Zealand, Norway, the Russian Federation, Ukraine and the US;
- Central Group 11 (CG11) (dissolved in 2001) including most EITs listed in Annex I of the UNFCCC;
- Central Asia, Caucasus, Albania and Moldova (CACAM), including non-Annex I parties from Asia and Central and Eastern Europe.

3.4 The Kyoto Protocol: Key Aspects

On many occasions, the international negotiations and talks over the implementing rules of the Kyoto Protocol turned out to be very complex and full of technical details. Many items were left unresolved and were forwarded to COP/MOP for a decision, and since decisions on international treaties falling under the umbrella of the UN are adopted through consensus, the price which the international community had to pay to have the Kyoto Protocol accepted by the majority of the state parties was high, especially in terms of environmental integrity and effectiveness of the measures at stake. In particular, the text of the Kyoto Protocol and the above-mentioned Marrakech Accords reflect the necessary concessions and compromises. However, there are three main aspects which contribute to making the Kyoto Protocol one of the most innovative and interesting multilateral environmental agreements in force at the time of writing. In particular, as we will see in the other chapters of this book, what makes the Kyoto Protocol very attractive and relevant for many actors is the combination of environmental protection concerns with the need to boost the world economy.

Firstly, the Kyoto Protocol established the so-called flexible mechanisms, a system of instruments to reduce GHG emissions in a cost-effective way, notably by providing Annex I parties with the possibility to implement projects and to invest in those countries where the marginal cost of the abatement of one tonne of CO_2 equivalent is lower than at the domestic level. The Kyoto Protocol builds upon the assumption that climate change is a global phenomenon and therefore global action is needed to mitigate and adapt to its adverse effects. The flexible mechanisms are instruments designed to combat global warming by combining the protection of the environment, namely the reduction of GHG emissions worldwide, with the necessity to lower the costs of the actions required to comply with those reduction obligations. The flexible mechanisms were included in the text of the Kyoto Protocol, with the support, in particular, of the Umbrella Group, whose representatives proposed a complementary alternative to green domestic actions for Annex I parties. In opposition to this, several other parties expressed concerns over the extent to which the flexible mechanisms could be used by Annex I parties to meet the reduction targets, in order to guarantee the environmental integrity of the system created by the Kyoto Protocol as well as the full respect of the principle of common but differentiated responsibilities. To this end, the principle of supplementarity was introduced in the text of the Kyoto Protocol (Articles 6 and 17): the flexible mechanisms 'shall be supplemental to domestic actions'. The flexible mechanisms are separated into two types: the emissions trading system and the project-based mechanisms. The details of the flexible mechanisms of the Kyoto Protocol will be addressed in Chap. 5.

The second important feature introduced by the Kyoto Protocol is the significant role assigned, at the international level, to the so-called carbon sinks. More precisely, the Kyoto Protocol provides Annex I parties with the possibility to offset their emissions by increasing the amount of greenhouse gases removed from the

atmosphere through activities relating to land use, land-use change and forestry (LULUCF). Article 2(1) of the Kyoto Protocol includes, among the duties of Annex I parties, the 'protection and enhancement of sinks and reservoirs of greenhouse gases […] the promotion of sustainable forest management practices, afforestation and reforestation […] [and] […] the promotion of sustainable forms of agriculture.' Annex I parties are given the possibility to account for the removals from the atmosphere of GHG emissions resulting from afforestation, reforestation and deforestation activities (Article 3(3)), as well as forest management, cropland management, grazing land management and revegetation activities (Article 3(4)) that have taken place since 1990, in their assigned amounts listed in Annex B of the Kyoto Protocol. These removals are eligible to generate emission reduction credits called removal units (RMUs) and the Marrakech Accords set a limit for each party in respect of the amount of credits which can be claimed to offset GHG emissions. Moreover, the Marrakech Accords and the subsequent COP/MOP decisions deal with various pending issues concerning the scientific and methodological uncertainties which relate to LULUCF activities and which have delayed the full utilisation of these activities by Annex I parties—e.g., the definition of forest baselines for the calculation of the carbon stock potential and net changes.

Finally, Article 18 of the Kyoto Protocol requires COP/MOP to adopt, at its first session, 'appropriate and effective procedures and mechanisms to determine and to address cases of non-compliance with the provisions of this Protocol.' This can also be defined as the non-compliance regime which, according to Article 18 of the Kyoto Protocol, shall be adopted as an amendment to the Protocol if it includes binding consequences for the parties. The Kyoto Protocol therefore provides for the establishment of a non-compliance regime and leaves it to the parties, under the guidance of the COP, to define the details and procedures regarding the functioning of such a mechanism. In this respect, parties were not able to find a common agreement at the time of the drafting of the text of the Kyoto Protocol. At COP7, the parties agreed on the rules and details of the non-compliance regime and COP/MOP1 decided to adopt this agreement as a decision and to postpone the discussion on the possibility to amend the Kyoto Protocol to COP/MOP3. Nonetheless, the establishment of an *ad hoc* system designed to address compliance by parties with the Kyoto Protocol obligations is important and innovative, particularly in comparison with the existing rules for the enforcement of international environmental law and the non-compliance regimes established under the existing MEAs. Unlike the non-compliance regime of the Kyoto Protocol and in line with a more classic approach, both the Convention and the Kyoto Protocol refer to the system for the settlement of disputes under Articles 14 and 19 respectively. These Articles rely on a more general approach which recommends that parties 'seek a settlement of the dispute through negotiation or any other peaceful means of their own choice.' More precisely, the Convention, in Article 14(2), requires parties to notify their own preferred method for the settlement of disputes, namely through submission of the dispute to the International Criminal Court and/or arbitration.

The details of the non-compliance procedure established under the Kyoto Protocol are discussed in Chap. 6. However, for reasons of clarity, it is important at this point to stress that the non-compliance regime of the Kyoto Protocol consists of the Compliance Committee which is divided into a facilitative branch and an enforcement branch. The facilitative branch assists all parties in the Kyoto Protocol implementation, while the enforcement branch is a quasi-judicial body which can propose decisions on parties in non-compliance, such as non-eligibility to participate in the flexible mechanisms. The main task of the Compliance Committee is to consider the 'questions of implementation' referring to the compliance by Annex I parties with the different obligations established by the Kyoto Protocol. These obligations are:

1. Monitoring, reporting and verification obligations under Articles 5(1)(2) and 7(1)(4) of the Kyoto Protocol (Monitoring, Reporting and Verification—MRV—obligations);
2. Eligibility requirements as defined under Articles 6, 12 and 17 of the Kyoto Protocol and the Marrakech Accords (eligibility requirements);
3. Quantified emission limitation and reduction commitments (QELRCs) under Article 3(1) of the Kyoto Protocol (Limitation and Reduction commitments).[37]

The above classification of the international obligations created by the Kyoto Protocol is intended to provide the reader with a clear and distinct picture of the requirements established by the international climate regime for Annex I parties. The term 'obligation' is explicitly mentioned in the Kyoto Protocol only in respect of the first sets of requirements, notably the monitoring, reporting and verification obligations. In Article 6 (Joint Implementation), the Kyoto Protocol refers to the obligations of parties under Articles 5 and 7. The term 'requirement' in reference to Articles 5 and 7 is explicitly mentioned in Decision 27/CMP.1 on the procedures and mechanisms relating to compliance under the Kyoto Protocol, section V, paragraph 4 of the Marrakech Accords and in Article 6(4) where the eligibility requirements are mentioned as a potential ground for a question of implementation by a party. Apart from that, the Kyoto Protocol refers to generic 'obligations of the parties under this Protocol' in Articles 13(4)b and 24(2). Finally, the limitation and reduction commitments are mentioned in several parts of Articles 2, 3, 4, 5, 6, etc.

One may argue that the classification provided above does not reflect the importance and substance of the different sets of obligations established by the Kyoto Protocol as regards compliance procedures. While compliance by Annex I parties with the MRV obligations and with the limitation and reduction commitments is required by the Kyoto Protocol as such, compliance with the eligibility requirements provides Annex I parties with a supplemental possibility to meet the limitation and reduction targets. These considerations already mark a significant difference between the Kyoto Protocol obligations. However, what justifies

[37] Procedures and mechanisms relating to compliance under the Kyoto Protocol, Decision 27/CMP.1, section V, paragraph 4, FCCC/KP/CMP/2005/8/Add.3, 30 March 2006.

grouping these obligations together is that the enforcement branch of the Compliance Committee is responsible for determining the consequences of non-compliance by Annex I parties with all three sets of obligations. Last but not least, the reader will benefit from such a classification.

3.5 The Kyoto Protocol: Rules of Implementation

At the Conference of the Parties following the adoption of the Kyoto Protocol—COP4 of 1998 in Buenos Aires—the parties and delegates agreed on a preliminary agenda for the development of the operational details of the Kyoto Protocol mechanisms and for the definition of rules and details regarding the main issues left unresolved in the previous negotiation phase. The first document in this regard is the Buenos Aires Plan of Action (BAPA),[38] including the work programme for the definition of the operational rules of the Kyoto Protocol with regard to the flexible mechanisms and the compliance regime, as well as to modalities, rules and guidelines, in particular for verification, reporting and accountability regarding greenhouse gas emissions.

In the meantime, in 2001, the IPCC released its Third Assessment Report (TAR) containing clear evidence of higher concentrations of carbon dioxide in the atmosphere in the past 200 years, of an increase in global mean temperatures and of an increase in precipitations, climatic variations and extreme weather events. Moreover, the IPCC confirmed the strong influence of human activity on the present and future levels of global GHG concentrations.

The negotiations on the details of the Kyoto Protocol rules and modalities started in Buenos Aires in 1998 and continued until 2001, when the parties to the UNFCCC, extraordinarily convened in Bonn from 16 to 27 June 2001 at COP6, part 2, following the political failure of COP6 in The Hague, agreed on the final text. This agreement was translated into legal texts after long and exhausting negotiations in Marrakech in November 2001 and the Marrakech Accords were finally adopted at COP7.

The Marrakech Accords define the framework for the implementation of the Kyoto Protocol and include, amongst others, a list of draft decisions on the details of the flexible mechanisms, reporting and methodologies, land use, land-use change and forestry (LULUCF) and the non-compliance regime to be adopted by COP/MOP1. In respect of the flexible mechanisms, the Marrakech Accords provide for the prompt start of the CDM (Clean Development Mechanism), identify the eligibility criteria to be met by parties to participate in the flexible mechanisms, and finally includes the rules for the implementation of the flexible mechanisms. Other issues mentioned in the Marrakech Accords are the support for developing

[38] The Buenos Aires Plan of Action, Decision 1/CP.4, FCCC/CP/1998/16/Add.1, 25 January 1999.

countries, capacity building needs, the transfer of technology, the answer to the adverse effects of climate change, as well as the establishment of three funds, namely the Least Developed Countries (LDC) Fund, the Special Climate Change Fund (SCCF) and the Adaptation Fund.

Furthermore, the Marrakech Accords identify the rules for the establishment of additional bodies for the implementation of the Kyoto Protocol, namely:

- The CDM Executive Board in charge supervising the CDM under the Kyoto Protocol and responsible for the accreditation of operational entities, the approval of baseline methodologies, the approval and registration of CDM projects, the maintenance of the CDM registry, etc.;
- The Joint Implementation Supervisory Committee (JISC), in charge of supervising, registering and verifying JI projects;
- The Compliance Committee governing the non-compliance regime.

In respect of the non-compliance regime, the Marrakech Accords include a draft decision identifying the structure, composition and rules of this system. In the event of non-compliance by a party with one or more of the above requirements, the Compliance Committee elected at COP/MOP1 may restore compliance or adopt sanctions, depending on the party's conduct.

As mentioned above, one of the main issues related to the compliance system, left unresolved first by the Kyoto Protocol negotiations within the COP and COP/MOP and then by the Marrakech Accords, concerns the binding force of this regime. Although Article 18 of the Kyoto Protocol requires parties to adopt 'any procedures and mechanisms under this Article entailing binding consequences […] by means of an amendment to this Protocol', the rules of the non-compliance regime of the Protocol have been adopted as a COP decision. However, the fact that parties have agreed on the adoption of such rules under the COP can be considered as an implicit expression of their willingness to be bound by the consequences of non-compliance mentioned in that decision.

The COP/MOP1 held in December 2005 in Montreal adopted all the package decisions included in the Marrakech Accords. Furthermore, COP11 and COP/MOP1 in Montreal adopted two important decisions on the future of the international climate regime, thus opening the way for further commitments of the developed and developing countries in respect of the fight against global warming in the period after 2012.[39]

[39] Dialogue on long-term cooperative action to address climate change by enhancing implementation of the Convention, Decision 1/CP.11, FCCC/CP/2005/5/Add.1 of 30 March 2006, and consideration of commitments for subsequent periods for Annex I Parties to the Convention under Article 3(9) of the Kyoto Protocol (KP), Decision 1/CMP.1, FCCC/KP/CMP/2005/8/Add.1 of 30 March 2006.

Chapter 4
The EC and the Member States in the Kyoto Protocol

4.1 The External Competence of the European Community in the Field of Environmental Protection

The division of internal and external competences between the European Community and the Member States is the first theme which needs to be considered when studying the participation of the EC and the Member States in an international treaty and the implications of this commitment in respect of joint and differentiated obligations and responsibilities of the Community and the Member States. Establishing a clear division of competences between the EC and the Member States is an essential starting point for the assessment of the participation of the EU in the international climate regime, where the EC and the Member States have jointly committed themselves to reducing their levels of greenhouse gas emissions. Nonetheless, it is important to keep in mind that once the reform of the EU Treaty, notably the Treaty of Lisbon on the Functioning of the EU, has entered into force, the EU will acquire international legal personality and replace the EC.

The legislative competence of the EC and the Member States to act in a specific area of Community law is defined by the EC Treaty, which is the main legal source of Community law. The competences in the different areas of Community law can be either shared between the EC and the Member States—in the majority of cases—or exclusively assigned to either of them. Although in most cases the EC Treaty explicitly identifies the boundaries of the various Community policies and specifies whether the competence is shared or exclusive, this distinction is sometimes open to different interpretations. In this respect, the opinion of the ECJ is required to clarify uncertainties which are generated by this lack of a clear demarcation between exclusive and shared competences in the EU. This is why, for instance, on several occasions, the European legislator considered Article 308

L. Massai, *The Kyoto Protocol in the EU*, DOI: 10.1007/978-90-6704-571-1_4,

TEC (ex Article 235) as the legal basis for acting, particularly where the Treaty failed to give the Community specific and express legislative power in a certain area.[1] This was the case with early adopted European environmental legislation and policy, until a specific title on environmental protection, which was not included in the Treaty of Rome,[2] was introduced by the Single European Act (1987). Before that, the Community institutions adopted several provisions aimed at the protection of the environment, opting, inter alia, for ex Article 235 TEC[3] as a legal basis. Ex Article 235 TEC conferred on the Council, acting unanimously on a proposal from the Commission and after consulting the Assembly,[4] the power to take the appropriate measures when 'the Treaty has not provided the necessary powers' in order to attain one of the Community objectives. A more frequently used legal basis for measures on environmental protection was Article 95 TEC on the approximation of legislation aimed at the establishment and functioning of the internal market.

Since the amendments introduced by the Single European Act, the division of competences on environmental protection matters between the EC and the Member States is regulated under Article 174 TEC et seq. Article 175 TEC is the relevant legal basis in the EC Treaty, giving the Community general competence to adopt the legislative measures necessary to achieve the objectives stated in Article 174(1).[5] The objectives of European environmental policy are listed in Article 174(1), notably the preservation and protection of the environment and human health, the rational utilisation of natural resources and the promotion of measures at the international level to deal with regional and global environmental problems. Along with these objectives, Community policy on environmental protection is based on the following set of principles enunciated in Articles 2, 6 and 174(2) TEC[6]:

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[1] 'If action by the Community should prove necessary to attain, in the course of the operation of the common market, one of the objectives of the Community and this Treaty has not provided the necessary powers, the Council shall, acting unanimously on a proposal from the Commission and after consulting the European Parliament, take the appropriate measures' (Article 308 EC Treaty).

[2] The Treaty of Rome established the European Economic Community (EEC) and was signed by France, West Germany, Italy, Belgium, the Netherlands and Luxembourg on 25 March 1957.

[3] Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds, *OJ* L 103, 25 April 1979, pp. 1–18; Council Decision 86/234/EEC of 10 June 1986 adopting multiannual R&D programmes in the field of the environment (1986–1990), *OJ* L 159, 14 June 1986, pp. 31–35; Council Directive 82/884/EEC of 3 December 1982 on a limit value for lead in the air, *OJ* L 378, 31 December 1982, pp. 15–18; Council Recommendation 81/972/EEC of 3 December 1981 concerning the re-use of waste paper and the use of recycled paper, *OJ* L 355, 10 December 1981, pp. 56–57.

[4] The body was renamed as the European Parliament in 1962.

[5] 'The Council […] shall decide what action is to be taken by the Community in order to achieve the objectives referred to in Article 174' (Article 175(1) TEC).

[6] For a better understanding of and for further reading on the objectives and principles of European environmental law see, amongst others, Jans and Vedder (2008) and Krämer (2006).

- Promotion of harmonious, balanced and sustainable development (Article 2).
- Principle of integration (Article 6).[7]
- High level of protection (Article 174(2)).
- Precautionary principle (Article 174(2)).
- Principle of prevention (Article 174(2)).
- Polluter-pays principle (Article 174(2)).

The extensive list of objectives and the broadness of the principles stated in the EC Treaty provides a comprehensive framework for the competence of the European Community in the field of environmental protection. Therefore, as defined by Epiney, it is 'difficult to imagine' a Community provision which is not covered by the objectives of Article 174(1).[8] In other words, Article 174(1) should not be considered as a limit but rather as an indication of the boundaries within which the EC can operate to protect European and global environmental integrity. Here, a few considerations need to be highlighted as to the role of the Member States in this field. Although the extensive interpretation of the list of objectives provided by Article 174(1) gives the Community very broad competence to legislate in the field of environmental protection,[9] it is not exclusive. The first reason is that the EC Treaty is not directly granting exclusive competence to the Community, as it clearly does in other domains.[10] Secondly, the EC Treaty, in Title XIX on Environment, leaves the Member States some room for action. Article 174(2) provides the Member States with a safeguard clause, notably the power to adopt provisional measures of environmental protection subject to the control of the Community. Moreover, Article 176 TEC gives the Member States the possibility to introduce 'more stringent protective measures', provided that such measures are compatible with the EC Treaty and are notified to the European Commission. Environmental protection is therefore a shared competence between the Community and the Member States[11] and this structure has so far enabled the EU to respond and react to the major global ecological threats in a very appropriate manner.

Since climate change not only raises environmental concerns but also affects a variety of other areas, a few considerations are necessary regarding the distribution of competences between the Community and the Member States in those areas. Community legislation adopted to implement European climate policy covers, amongst others, sectors such as energy, transport, public health and agriculture.

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[7] 'Environmental protection requirements must be integrated into the definition and implementation of the Community policies and activities referred to in Article 3, in particular with a view to promoting sustainable development' (Article 6 EC Treaty).

[8] Epiney (2003), p. 46.

[9] Epiney (2003).

[10] Only Articles 133 (commercial policy), 310 (association agreements), 302–304 (relation between the EC and international organisations) refer explicitly to the EC's external power.

[11] On this issue, see Bothe (2005b) and Neuwahl (1996).

Agricultural policy is one of the core areas of EU integration and is regulated under Articles 32 to 38 of the EC Treaty. A common agricultural policy (CAP) and a common organisation of agricultural markets among the Member States are defined in Articles 32(4) and 34(1) TEC respectively. The objectives of the common agricultural policy are set out in Article 33(1) TEC. Given the importance of this policy for the completion of the common market and considering the different circumstances and geographical conditions of the Member States, the CAP is a clear example of a competence where concerted action between the Community and the Member States is necessary and required.

Like environmental protection, public health (Title XII of the EC Treaty) is one of the Community flanking policies where Member States are given the power, if necessary, to adopt stricter national legislation. Public health is covered by Article 152 TEC, which requires a high level of human health protection to be ensured by complementary actions of the Community and the Member States. In this field, the Community's objective is to promote cooperation between the Member States and, where necessary, to support such action. The EC Treaty excludes full harmonisation in this sector (Article 152(4)(c) and (5)), thus making the Member States responsible for 'the organisation and the delivery of health services and medical care'.

Regarding the transport sector, the EC Treaty, in Title V, allows the Member States a wide margin of discretion, thus preventing the Community to intervene directly in this field. The Community is required to lay down a common transport policy (Article 70 TEC), necessary to ensure the correct functioning of the common market, notably the free movement of persons and goods. The definition of the modalities of transport by rail, road and inland waterways is left to the competence of the Member States.

A specific section of the EC Treaty on the regulation of the energy sector is lacking. More precisely, a proposal for the introduction of a specific title on energy is envisaged by the Treaty of Lisbon.[12] In this area, the Community has developed and implemented its policy in close cooperation with the Member States. The lack of an explicit legal basis in the EC Treaty regarding the adoption of legislation in the field of energy has not limited the Community's power in this area. This is due in part to the use of Treaty articles covering other areas of Community law such as environmental protection[13] and taxation[14] and, in part, to the doctrine of implied powers which is based on an extensive interpretation of some EC Treaty articles,

[12] See Treaty on the Functioning of the EU (TFEU).

[13] This is the case with Community legislation aimed at the promotion of renewable energy sources and energy efficiency adopted on the basis of Article 175(1) TEC on the protection of the environment.

[14] This is the case, for instance, with Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity which was adopted having regard to Article 93 of the EC Treaty and which is based on the harmonisation of taxation legislation and on the necessity to ensure the proper functioning of the internal market and the achievement of the objectives of other Community policies.

notably Articles 95 and 308. According to this doctrine, in areas where the EC Treaty does not expressly authorise the Community institutions to act, implicit broad legislative power to perform Community tasks can be derived from a broad interpretation of Articles 95 and 308 TEC.[15] In the energy sector, it is therefore due to the recourse to an implicit or indirect legal basis that the Community has been able to develop a very advanced EU policy on clean and green energy. An example in this respect is provided by the explanatory memorandum attached to the Proposal for a Directive on the promotion of the use of energy from renewable sources which led to the adoption of Directive 2009/28/EC on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC.[16] This Directive was adopted by the European Parliament and the Council having regard to Articles 175(1) and 95 of the EC Treaty. The explanatory memorandum refers to the shared competence between the Community and the Member States in the energy field by highlighting the need for concerted action in order to achieve an effective green energy policy and an equal distribution of efforts among the Community.[17]

This brief indication of the distribution of competences between the European Community and the Member States in areas related to climate change shows the complexity of the Community system in the identification of clear and precise boundaries in the actions of those actors. The system of EC competences is not static but rather in continuous evolution. The exercise of explicit and implicit power by the Community and the Member States influences and determines the system and division of competences in Community law.

If the confines of the distribution of internal competence within the Community are not always expressly defined by the EC Treaty, the identification of the EU's external competence certainly seems no less complex. The term external power or competence refers to the power of the Community to conclude an international agreement with third states and international organisations outside the EU. Although the Treaty of Rome did not mention the existence of clear external power for the EC, this gap has been filled by several amendments to the founding treaties and by the jurisprudence of the ECJ which contributed clearly to the definition of the boundaries of the Community's external competence.[18] Explicit external competence of the Community is limited to commercial policy (Article 133 TEC), association agreements (Article 310 TEC), the maintenance of relations with international organisations (Articles 302 to 304 TEC), development policy (Article 181 TEC), environmental policy (Article 174 TEC), research and

[15] Craig and De Búrca (2007), p. 539.

[16] Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC, *OJ* L 140, 5 June 2009, pp. 16–62.

[17] Proposal for a Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, COM(2008)19, Brussels, 23 January 2008, p. 9.

[18] This is the case with the following EC policies: development, environment, research and technology, monetary and foreign exchange matters, education, culture, health, and CCP.

technology (Article 170 TEC), monetary and foreign exchange policy (Article 111 TEC) and economic, financial and technological cooperation with third countries (Article 181(a) TEC). In areas where the EC Treaty is silent, the ECJ has made clear since the beginning of the seventies that even if no express external competence is granted to the Community, it can still make use of implied external power. On several occasions, the Court confirmed the capacity of the Community to conclude an international agreement, either in areas falling within the scope of the objectives expressly established by the EC Treaty, or in relation to areas where the Community order has created ad hoc internal powers to attain a specific objective.[19] EC external power is shared between the Community and the Member States in most areas. In a few cases, exclusive competence to conclude international agreements is conferred directly and specifically on the Community by the EC Treaty, notably in the field of common commercial policy (Article 133(3) EC Treaty) and fisheries (Article 102 of the Act of Accession of 1972).

4.1.1 Mixed Agreements and Environmental Protection

The legal basis of the external competence of the Community in the field of environmental protection is provided by Article 174(4) TEC which confers on the Community and the Member States 'within their respective spheres of competence' the right to 'cooperate with third countries and with the competent international organisations.' This cooperation or shared competence can form the basis for an agreement to be concluded by the Community 'in accordance with Article 300' TEC.[20] Furthermore, one of the objectives of the Community's environmental policy, referred to in Article 174(1), is the promotion of 'measures at international level to deal with regional and worldwide environmental problems.' MacLeod et al. are right in arguing that in those sectors where the Community shares its internal power to act with the Member States, such as environmental protection, the Community holds no exclusive external competence.[21] Therefore, Article 174(4) TEC must be read as conferring on the Community and the Member States a shared competence in external matters. The Council's and Parliament's

[19] ECJ, case 22/70 *Commission* v. *Council* [1971] *ECR* 263, cases 3, 4 and 6/76 *Kramer* [1976] *ECR* 1279, opinion 1/76 (Draft Agreement Establishing a Laying-up Fund for Inland Waterway Vessels) [1977] *ECR* 741, opinion 2/91 re *ILO Convention* 170 on Chemicals at Work [1993] *ECR* I-1061, opinion 2/94 (Accession of the Community to the European Human Rights Convention) [1996] *ECR* I-1579.

[20] 'The arrangements for Community cooperation may be the subject of agreements between the Community and the third parties concerned, which shall be negotiated and concluded in accordance with Article 300. The previous subparagraph shall be without prejudice to Member States' competence to negotiate in international bodies and to conclude international agreements' (Article 174(4) EC Treaty).

[21] MacLeod et al. (1996), pp. 325–326.

practice of approving the conclusion of an international agreement by the EC and the Member States confirms this approach. Internal EC legislation adopted to achieve a specific objective of environmental protection is nearly always the legal basis for justifying the external power of the EC and the Member States.

Another interesting question regarding the EU external competence for environmental protection concerns the extent to which Member States are limited by Community law to a unilateral exercise of external power. According to the ECJ in the *ERTA* case,[22] the Community enjoys external competence in areas where common provisions have been adopted by the Community institutions and Member States are pre-empted from undertaking 'obligations with third countries which affect those rules or alter their scope.' The limitations of the external power of the Member States set by the Court in the *ERTA* case was in part modified by a later judgement. In the *Kramer* case,[23] the Court, on the one hand, extended the theory of implied powers by acknowledging the external power of the Community even in areas where no internal measures have been adopted, and, on the other hand, recognised the Member States' external power to act in those areas, provided that such action is compatible with the Community objectives.

The discourse about Community harmonisation[24] is relevant for the identification of the boundaries between the Community's and Member States' external competence. Exclusive external powers can be enjoyed by the Community in areas where Community legislation aims at the complete harmonisation of a certain issue. This is the case, defined by some scholars as new harmonisation, where Community legislation is designed to fully harmonise national legislation in order to arrive at a common European set of rules.[25] In areas where Community rules are complete and exhaustive, Member States are prevented from acting at both internal and external level.[26] Contrary to full harmonisation is the concept of minimum harmonisation, where the EC aims at establishing a minimum common level playing field further to which Member States have the power to introduce more stringent national rules. In the field of environmental protection, EC measures are often designed to establish a minimum level of harmonisation and since it is very unlikely that multilateral environmental treaties fully cover existing Community legislation in this sector, it is commonly accepted that Member States are left sufficient room to introduce more stringent rules at the national level should they so wish. Furthermore, Article 176 TEC may offer some room to Member States to

[22] Judgment of the Court of 31 March 1971, *Commission of the European Communities* v. *Council of the European Communities—European Agreement on Road Transport*, case 22/70 [1971] *ECR* 263.

[23] See supra n. 19, pp. 1309–1311.

[24] On this matter, see also O'Keeffe (2000).

[25] For the new approach to harmonisation in the European Community, see Craig and de Búrca (2007), p. 620 et seq.

[26] ECJ, opinion 1/94 (WTO Agreement) [1994] *ECR* I-5267, para 96.

enter into an international agreement in areas covered by EU 'minimum requirements', as concluded by the Court in opinion 2/91.[27]

In theory, Member States can retain a certain power to independently conclude an international agreement with third parties in those areas where the Community has failed to provide an exhaustive set of legislation, in other words, in those sectors where the Community has not been able to attain the objectives of Article 174(1) TEC. In practice, it is very unlikely that a conflict between the Community and the Member States will arise over the exercise of external power in the area of environmental protection, and we can take on board the conclusions adopted by MacLeod et al. On the basis of the above considerations, it may be affirmed that, in principle, the external power of the Community and the Member States regarding environmental protection is not exclusive and is mainly based on a specific shared external competence provided for in Article 174(4) and on an implicit external power derived from the implementation of a clear internal competence regarding environmental protection.

This book studies the participation of the Community and the Member States in the international climate regime. It appears very clearly that the power and efficacy of the international action of the EC and the Member States as regards climate change rely on the quality and robustness of the European set of rules aimed at the reduction of greenhouse gas emissions and on the unity in the Community's and Member States' positions in this field.

Consequently, in the environmental sector it is common practice for the Community and the Member States to conclude so-called mixed agreements.[28] Although a definition of mixed agreement is lacking in both international and Community law, it can be concluded from Community and Member States' practice that a mixed agreement is an international treaty which can be ratified (a) by both the Community and the Member States, (b) only by the Member States, or (c) only by the Community. Some scholars have defined a mixed agreement as 'any treaty to which an international organization, some or all of its Member States and one or more third State are parties and for the execution of which neither the organization nor its Member States have full competence'.[29] Regarding environmental protection, all international agreements to which the Community is a party are mixed agreements in the sense that one or more Member States are also party to those treaties.[30]

A multilateral environmental agreement (MEA) may take several forms: at the global level, it is usually an agreement, adopted within the framework of United Nations bodies[31]; at the regional level, it is an agreement concluded for instance, in

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[27] ECJ, opinion 2/91 (ILO Convention) [1993] *ECR* I-1061.

[28] On this matter, see Rosas (2000), MacLeod et al. (1996), pp. 142–164, O'Keeffe and Schermers (1983) and Heliskoski (2001).

[29] Schermers (1983), pp. 25–26.

[30] MacLeod et al. (1996), p. 329.

[31] For instance, the United Nations Framework Convention on Climate Change (1994) or the United Nations Convention on Biological Diversity (1992).

the framework of the UN Economic Commission for Europe or the Council of Europe (UNECE)[32]; and, finally, at the intra-regional level, it is an agreement entered into, for instance, in the field of management of seas or transboundary rivers.[33] The latter typology of agreements normally applies to specific geographical areas and therefore not all 27 EU Member States participate. Below is an indicative list of relevant MEAs to which the EC and the Member States are parties:

- Geneva Convention on Long-Range Transboundary Air Pollution (CLRTAP—1979).
- Cartagena Biosafety Protocol (2000) to the Rio Convention on Biological Diversity (CBD—1992).
- Stockholm Convention on Persistent Organic Pollutants (POP—2001).
- UNFCCC (1992) and the Kyoto Protocol (1997).
- Vienna Convention for the Protection of the Ozone Layer (1985) and the Montreal Protocol.
- Aarhus Convention on Access to Environmental Information (1998).
- UN Convention to Combat Desertification (UNCCD—1994).

Mixed agreements concluded by the EC and the Member States are a source of many and different legal challenges and questions. In particular, mixed agreements may give rise to questions of respective responsibilities, which are especially difficult to determine in the case of joint commitments. The UNFCCC and the Kyoto Protocol represent a typical example of mixed agreements where the EC and the Member States share the same status—Annex I parties—with the exception of Malta and Cyprus, and have the same rights and duties. Less clear are issues such as the hierarchy and balance between the Community and the Member States in the implementation and fulfilment of the obligations created by the Kyoto Protocol. What could be subject to different interpretation is, in fact, the extent to which the Community is predominantly setting the stage as opposed to the Member States in the implementation of the Kyoto Protocol. Some scholars argue that when considering that the EC and the Member States have different QELRCs under the Kyoto Protocol, that the position of the EC is of absolute prominence under international law, and that the individual targets of the Member States have been decided internally in the EU, this mixed agreement may not represent a perfect balance between the Community and the Member States. The case of EU climate policy indeed represents a situation where the EU's political commitment is very strong, thus implying a very active role of the European institutions, which have adopted a wide range of policies and measures in this field. If we look at Directive 2003/87/EC establishing the European Allowance Trading System (EU ETS), we see a piece of EC legislation designed with the aim to contribute to the

[32] For instance, the UNECE Convention on Long-Range Transboundary Air Pollution (1979) or the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (1992).

[33] For instance, the Barcelona Convention for the Protection of the Mediterranean (1978) or the Convention for the Protection of the Rhine (1976).

EU's and Member States' greenhouse gas emission commitments under the Kyoto Protocol where Member States play a minor role compared to the EU institutions. Under the EU ETS, the role and the position of the European Commission in the definition of the national cap on greenhouse gas emissions under the National Allocation Plans (NAPs) are of principal significance. The decision on the national level of greenhouse gas emissions allowed for the sectors falling within the scope of Directive 2003/87/EC adopted by the Member States is subject to the final approval of the European Commission.

What makes the Kyoto Protocol rather unique from a legal perspective is the nature of the agreement between the Community and the Member States as regards some of the obligations created by the Kyoto Protocol. It is a mixed agreement by which the EC and the Member States are jointly bound under international law but not all in the same manner. A similar situation can be found only in another MEA, i.e., the Vienna Convention for the Protection of the Ozone Layer (1985) and the Montreal Protocol on Substances That Deplete the Ozone Layer (1987), where the European Community and the Member States decided to jointly fulfil their obligations under Articles 2A to 2I of the Montreal Protocol, in accordance with Article 2(8) of the Protocol and provided that their combined level of consumption does not exceed levels set by the Protocol.[34] Unlike the Kyoto Protocol, the joint agreement of the Community and the Member States under the Montreal Protocol covers all the Member States. The nature of this special agreement foreseen under the Kyoto Protocol is studied in detail in this chapter and in Chap. 6.

This book's relevance lies in the determination of the different levels of responsibility between the EC and the Member States in respect of the compliance with the obligations established under the Kyoto Protocol. In the case of a mixed agreement, it is particularly important to identify which actors are responsible for what. Before addressing this question, we should first focus on the Community's and Member States' joint commitment under international law and the division of competences between the EC and the Member States indicated in the instrument of ratification of the Kyoto Protocol (Council Decision 2002/358/EC).[35] The demarcation of powers between the Community and the Member States is based on the declaration of competence by the Community included in Council Decision 2002/358/EC which follows directly from the differentiation of obligations

[34] Article 2(8) of the Montreal Protocol: '(a) Any Parties which are Member States of a regional economic integration organization as defined in Article 1(6) of the Convention may agree that they shall jointly fulfil their obligations respecting consumption under this Article and Articles 2A to 2I provided that their total combined calculated level of consumption does not exceed the levels required by this Article and Articles 2A to 2I. (b) The Parties to any such agreement shall inform the secretariat of the terms of the agreement before the date of the reduction in consumption with which the agreement is concerned. (c) Such agreement will become operative only if all Member States of the regional economic integration organization and the organization concerned are Parties to the Protocol and have notified the secretariat of their manner of implementation.'

[35] See Chap. 2, n. 45.

described above. In this sense, it is important to call to mind a few ECJ judgments which give a uniform interpretation to the legal issues related to the implementation of mixed agreements by the European institutions and the Member States. According to the Court, the adoption by the Community and the Member States of a joint commitment under a mixed agreement implies that all actors involved shall implement this agreement in compliance with the principle of unity. That is to say, the EC and the Member States are required to ensure a uniform application of the obligations created by the mixed agreement and to cooperate accordingly. Furthermore, the ECJ clarified that the division of responsibility between the Community and the Member States is a matter of Community law.[36]

In the Kyoto Protocol, the question of responsibility of the Community and the Member States in the event of non-compliance with the international obligations is addressed under international law by Article 4, but falls within the sphere of EC law.[37]

4.2 The EC in the International Climate Regime

The European Community is included in the list of Annex I parties to the UNFCCC.[38] The EC Treaty explicitly confers legal personality on the Community: in accordance with Article 281 TEC 'the Community shall have legal personality'. Furthermore, Article 300(1) empowers the Community to conclude international agreements with one or more states and international organisations. The legal personality of the Community, as well as the capacity of the Community institutions to represent it in international treaties, was mentioned for the first time by the Court in the *Costa/ENEL* case.[39] As already mentioned, according to the Treaty of Lisbon (Treaty on the Functioning of the EU—TFEU) designed to

[36] Ruling 1/78, 'Draft Convention of the International Atomic Energy Agency …' [1978] *ECR* 2151, para 35.

[37] See supra n. 27, paras 34–36, opinion 2/91 [1993] *ECR* I-1061, para 36, opinion 1/94 [1994] *ECR* I-5267, para 108 and opinion 2/00 [2001] *ECR* I-09713, para 18. This issue is considered in detail in Chap. 6.

[38] The question of the legal personality of the EU has not yet been resolved at the Treaty level. The Treaty of Maastricht (1992) modified the treaties establishing the three European Communities but did not replace them. The EC has legal personality while the legal personality of the EU was foreseen in the Treaty establishing a Constitution for Europe, which was rejected by the Netherlands and France in the referendums of 2005.

[39] 'By contrast with ordinary international treaties, the EEC Treaty has created its own legal system which, on the entry into force for the Treaty, became an integral part of the legal systems of the Member States and which their Courts are bound to apply. By creating a Community of unlimited duration, having its own institutions, its own personality, its own legal capacity and capacity of representation on the international plane and, more particularly, real powers stemming from a limitation of sovereignty or a transfer of powers from the States to the Community, the Member States have limited their sovereign rights and have thus created a body of law which binds both their nationals and themselves', ECJ, case 6/64 *Costa/ENEL* [1964] *ECR* 585, para 3.

reform the EU and not in force at the time of writing, the Community will be replaced by the European Union (EU).[40]

Within the international climate regime, the Community and the Member States participate with an equal status (Annex I parties) in the UNFCCC and in the Kyoto Protocol. Furthermore, both the UNFCCC and the Kyoto Protocol follow the practice of agreements adopted within the framework of the United Nations, i.e., they do not refer specifically to the European Community but are open to the participation of 'regional economic integration organisations' (REIO).[41] In the international climate regime, REIO refers to the Member States of the EU at the time of the signature and ratification of the UNFCCC and the Kyoto Protocol (EU15).

As we have seen, the international climate regime deals with a matter falling within the competence of both the Community and the Member States. It is therefore commonly accepted that in this case the responsibility for negotiating, concluding and implementing the UNFCCC and the Kyoto Protocol is the result of close cooperation between the Member States and the EU institutions, in particular the European Commission. The duty of close cooperation applied to the external relations of the Community was introduced by the Court in ruling 1/78[42] and opinion 2/91,[43] later reformulated in opinion 1/94[44] and in the *FAO* case.[45]

In accordance with Article 300(1) TEC, the European Commission is authorised by the Council to conduct international negotiations aimed at the conclusion of an agreement 'between the Community and one or more States or international organisations.' The signature and conclusion of such an agreement is decided on by the Council, 'acting by a qualified majority on a proposal from the Commission' (Article 300(2) TEC).

The EC Treaty rules and the principle of Community and Member States' coordination referred to above are translated in practice by the EU institutions, and the Member States talk with one voice and work and cooperate very closely in defining a united position at international negotiations.

However, the procedure for negotiating and concluding a mixed agreement is not fixed, and it is not always generally accepted that the Community is mandated to negotiate at the international level on behalf of the Member States. This is particularly true of mixed agreements which in some parts cover matters where the Member States are exclusively competent. Moreover, the details and terms of EU

[40] Articles 1 and 32 FEU.

[41] For instance, the Convention on the Control of Transboundary Movements of Hazardous Waste and Their Disposal (Basel Convention), Articles 2(20) and 22(1).

[42] ECJ, ruling 1/78 (Draft Convention on the Physical Protection of Nuclear Materials) [1978] *ECR* 2151, paras 34–36.

[43] ECJ, opinion 2/91 (ILO Convention) [1993] *ECR* I-1061, para 36.

[44] ECJ, opinion 1/94 (WTO Agreement) [1994] *ECR* I-5267, para 19.

[45] ECJ, case C-25/94, *FAO* [1996] *ECR* I-1469, paras 48–49.

coordination in international negotiations are not static and may vary although the goal remains to reach consensus on a common standpoint.[46]

In the international climate regime the EU delegation is formally represented by the so-called troika: a representative of the Commission and representatives of both the present and next EU Presidencies. In reality, the negotiations on the different agenda items discussed at the COP and COP/MOP meetings are left to the experts of the European Commission and the Member States that represent the Community and all the Member States and act under the flag of the current EU Presidency.[47] Behind the scenes, the principle of close cooperation is effectively applied through regular meetings between the representatives of the Member States and the EU institutions aimed at discussing and seeking a common position on the different agenda items. The EU coordination meetings are held either in Brussels or at the location of the international talks in which the EC and the Member States participate.

The general EU position for the COP and COP/MOP meetings is adopted by qualified majority voting in the Council. The responsibility for drafting the EU position to be presented at the international level falls under the competence of the EU Presidency in cooperation with the Commission and the Parliament (consultative role). The draft position is scrutinised by the Council working group on climate change, COREPER I and, finally, the Environment Ministers of the Member States.

Since the early nineties, the EC's position on the fight against global warming has focused on the following objectives:

- To ensure the environmental integrity of the international climate regime designed under the UNFCCC and the Kyoto Protocol.
- To ensure compliance with the quantified emission limitation and reduction commitments included in Annex B of the Kyoto Protocol.
- To ensure that the reduction of greenhouse gas emissions is achieved through the introduction of national policies and measures and only in a way supplemental to the implementation of the flexible mechanisms.
- To maintain a multilateral approach in the fight against global warming.
- To promote sustainable development.

At the level of the EU Council of Ministers, the first steps towards the establishment of a solid European climate policy date back to the Dublin meeting of June 1990, where the European Council urged the adoption of targets and strategies for limiting the emissions of greenhouse gases and to the Council Environment of 29 October 1990 where European ministers agreed to take actions to stabilise, by 2000, CO_2 emissions at the 1990 level in the Community as a whole.

[46] MacLeod et al. (1996), p. 148.

[47] For instance, in 2009, the climate change negotiations on the adoption of the post-2012 regime were conducted under the flag of the Czech Republic in the first semester and under the flag of Sweden in the second semester.

The Council Environment of 13 December 1991 invited the Commission to take the lead in formulating proposals for concrete policies and measures. The first Community legislation adopted within the framework of what in the future would be called the European climate policy was Council Decision 93/389/EEC which established a monitoring mechanism for anthropogenic CO_2 and other greenhouse gas emissions not controlled by the Montreal Protocol in the Member States and which required the Member States to 'publish and implement national programmes for limiting' their carbon dioxide emissions.[48]

The European Community and the Member States have accepted the rules of the international climate regime and are therefore committed to contributing to the fight against global warming by developing and implementing national policies aimed at the mitigation of and adaptation to climate change. The EC and the Member States approved the UNFCCC through Council Decision 94/69/EEC concerning the conclusion of the United Nations Framework Convention on Climate Change[49] and ratified the Kyoto Protocol through Council Decision 2002/358/EC.

Council Decision 2002/358/EC concerning the approval, on behalf of the European Community, of the Kyoto Protocol to the UNFCCC and the joint fulfilment of commitments thereunder is a complex provision which differs from other similar decisions adopted by the Community to ratify an international agreement. At this point, it is important to clarify the general scope and legal value of decisions in Community law. In fact, the normal procedure for the adoption of an international treaty by the Community provides for the adoption by the European institutions of a decision designed exclusively to give effect to an international treaty under Community law and containing the declaration on the division of competences between the Community and the Member States. Decisions on the ratification of an international agreement aim at the introduction of international obligations in the Community legal order. These are decisions sui generis, which are different from the decisions defined in Article 249 EC Treaty, which are more specific, complex and designed to regulate a certain matter and to be directly applicable in the Member States—for instance, the above-mentioned Council Decision 93/389/EEC establishing a monitoring mechanism for anthropogenic CO_2 and other greenhouse gas emissions. Both types of decisions generate legal obligations for the Member States. Council Decision 2002/358/EC can be placed in between these two types of decisions since it is aimed at the approval of the Kyoto Protocol and its obligations by the Community and the Member States, but has also formalised, at the Community level, the EU Burden Sharing Agreement which creates individual obligations for the Member States.

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[48] Council Decision 93/389/EEC of 24 June 1993 for a monitoring mechanism of Community CO_2 and other greenhouse gas emissions, *OJ* L 167, 9 July 1993, pp. 31–33.

[49] Council Decision 94/69/EEC of 15 December 1993 concerning the conclusion of the United Nations Framework Convention on Climate Change, *OJ* L 33, 7 February 1994, p. 11.

In the EU Council Conclusions of 4 March 2002, the EC and the Member States agreed[50] to opt for a coordinated ratification of the Kyoto Protocol by the Community and the Member States. In order to ensure the simultaneous deposit of the instrument of ratification with the Community, the Member States were required 'to make every effort to deposit their instruments of ratification or approval at the same time as those of the Community and, as far as possible, no later than 1 June 2002.' Furthermore, the joint ratification of the Kyoto Protocol by the EC and the Member States was a political signal to the international community and aimed at setting an example to other Annex I parties that had not yet ratified the Kyoto Protocol. The aim was that the Protocol should enter into force before the Johannesburg World Summit in September 2002.

With regard to the legal basis chosen for the adoption of Decision 2002/358/EC, although the initial proposal of the European Commission, referred to Article 174(4) in its preamble,[51] the Commission decided to change the legal basis to Article 175(1) as a result of the ECJ's opinion on the legal basis required for the conclusion of a mixed agreement.[52] Although the procedure provided for by Article 175(1) requires qualified majority voting, Decision 2002/358/EC was finally adopted with unanimity after a few Member States had requested, without success, that this instrument be adopted on the basis of Article 175(2), namely the procedure requiring unanimity, in consideration of the substantial impact that the ratification of the Kyoto Protocol could have on the national energy policies of the Member States. Council Decision 2002/358/EC also authorised the European Commission to adopt further decisions through the comitology procedure,[53] as, for instance, Decision 2006/944/EC determining the respective emission levels allocated to the Community and to the Member States in terms of CO_2 equivalent as required under Article 4(2) of the Kyoto Protocol.[54]

While the UNFCCC established the international framework based on mitigation and adaptation measures to combat global warming through a set of non-

[50] 2413rd Environment Council meeting, Brussels, 4 March 2002.

[51] See Chap. 1, n. 1, recital 11: 'The subject matter of the Kyoto Protocol comes under the heading of Community environment policy. This proposal is based on Article 174(4) of the Treaty establishing the European Community, in conjunction with the first sentence of Article 300(2) and the first subparagraph of Article 300(3). Article 174(4) confers express competence on the Community to conclude the Kyoto Protocol, while Article 300 lays down the procedural requirements. The Commission's proposal is subject to approval by a qualified majority in the Council after consultation of the European Parliament.'

[52] Opinion 2/00 (Cartagena Protocol on Biosafety) 6 December 2001 [2001] *ECR* I-09713.

[53] Articles 5 and 7 of Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission, *OJ* L 184,17 July 1999, p. 23.

[54] Commission Decision 2006/944/EC of 14 December 2006 determining the respective emission levels allocated to the Community and each of its Member States under the Kyoto Protocol pursuant to Council Decision 2002/358/EC.

binding recommendations and principles, the Kyoto Protocol introduced binding GHG emission limitation and reduction commitments for industrialised countries. To this end, the preamble of Council Decision 94/69/EC clearly specifies that the Community and the Member States will fulfil the 'commitment to limit anthropogenic CO_2 emissions set out in Article 4(2)' as a whole but also through action in accordance with their respective competences.[55]

The EC and the EU15 are Annex I and Annex II parties, and are included in Annex B of the Kyoto Protocol. With regard to the new Member States (the EU12 or EU10 if excluding Malta and Cyprus), they are also included in both the Annex I and Annex B list, with the exception of Malta and Cyprus, but are still considered as non-Annex I parties under the UNFCCC. In this respect, in the international climate regime the EC is considered, as regards some of the obligations created by the Kyoto Protocol, as a regional economic integration organisation of 15 and not 27 Member States (after the two latest enlargements in 2004 and 2007). In Chap. 6, we will address the terms, limits and nature of these obligations according to the different articles of the Kyoto Protocol. This special form of mixed agreement is often 'legally complex and politically controversial'[56] and also likely to raise many questions concerning competence, democracy (Article 300 EC Treaty) and responsibility of the EC and the Member States under international and EC law. The distribution of powers and competences between the EC and the Member States to conclude and participate in the Kyoto Protocol is indicated in Annex III of Council Decision 2002/358/EC where 'the European Community declares that, in accordance with the Treaty establishing the European Community, and in particular Article 175(1) thereof, it is competent to enter into international agreements, and to implement the obligations resulting therefrom.'

The UNFCCC and the Kyoto Protocol required both the Community and the Member States to deposit their own instruments of ratification, approval or accession with the secretariat under Articles 22(1) and 24 respectively. The EC and the Member States deposited their instruments of ratification, approval or accession with the Depositary on 31 June 2002. On that same day, the EU15 notified the UNFCCC secretariat of their decision to jointly commit to the Kyoto Protocol in accordance with Article 4. In the Member States, ratification of the Kyoto Protocol took place in accordance with the national procedures established by the different constitutional systems. Since 31 May 2002, the Kyoto Protocol has been part of the *acquis communautaire* and therefore all obligations arising from this treaty are binding on all Member States.

[55] Article 4(2) of the UNFCCC touches upon several commitments of Annex I parties which affect different competences under the EU system.

[56] Craig and De Búrca (2003), p. 131.

4.3 EC Greenhouse Gas Emissions Limitation and Reduction Commitments Under the Kyoto Protocol

According to Article 3(1) of the Kyoto Protocol, Annex I parties 'shall, individually or jointly, ensure that their aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases listed in Annex A do not exceed their assigned amounts' determined on the basis of the quantified emissions limitation and reduction commitments (QELRC) inscribed in Annex B. The EC and the Member States shall ensure that in the first commitment period (2008–2012) their greenhouse gas emissions will not exceed the caps agreed under the Kyoto Protocol, i.e., their assigned amounts calculated on the basis of a percentage of reduction of greenhouse gas emissions below the 1990 levels by the period 2008–2012. Within the framework of the Kyoto Protocol and on the basis of Article 4, the EC negotiated and agreed a reduction of 8% of its overall greenhouse gas emissions below the 1990 levels by the period 2008–2012. This is the quantified emission reduction commitment of the European Community as a whole under the Kyoto Protocol. Due to the EU15's inability to agree on a common European-wide greenhouse gas reduction target to be applied by every Member State, this obligation has been distributed internally at the European level in the form of differentiated greenhouse gas emission limits for each of the pre-2004 Member States. This agreement is known as the 'Burden Sharing Agreement' (BSA or, alternatively, EU Bubble).[57] These limits are expressed in terms of percentages by which the Member States must reduce or in some cases stabilise or increase their emissions in comparison with the levels in the base year (1990).

4.3.1 History of the EU Burden Sharing Agreement

The concept of the BSA adopted under the Kyoto Protocol has been already used in Community law, i.e., in the case of the sulphur dioxide emission ceilings agreed under Directive 88/609/EC on the limitation of emissions of certain pollutants from large combustion plants into the air.[58] While the latter is a Community Directive addressed to the Member States, the EU Bubble under the Kyoto Protocol is an agreement derived from an international treaty which has been transposed into Community law through a Council Decision. The logic behind the EU BSA, namely the differentiation of the commitments under the international

[57] Doc. 9702/98 of 19 June 1998 of the Council, Annex I, reflecting the outcome of proceedings of the Environment Council of 16–17 June 1998.

[58] Council Directive 88/609/EEC of 24 November 1988 on the limitation of emissions of certain pollutants into the air from large combustion plants, *OJ* L 336, 7 December 1988, pp. 1–13.

climate regime among Member States, builds on the so-called Triptych approach,[59] which is an application of the 'bottom-up' approach commonly used in the field of international cooperation. The Triptych approach is considered by several experts as quite attractive in the case of the international climate regime, since it not only offers the possibility to distribute among members the individual reduction obligations but also guarantees that the aggregate level of emissions is rationally distributed.[60] The Triptych approach is based on the identification of an initial general target which has to be distributed among parties in a differentiated way but in compliance with an implicit fairness principle. That is to say that all parties need to contribute to the general target to reach the common goal, and the differentiation is based, at least in the initial proposal, on the identification at the national level of three sectors responsible for emissions of greenhouse gases: the electricity sector, energy-intensive industries and households.[61] Moreover, the identification of Member States' individual contributions to the EC reduction target under the Kyoto Protocol was based on several criteria. Firstly, calculations and estimations of the reduction of carbon dioxide emissions at the national level in accordance with the national energy structure and consumption rate were taken into consideration. Other considerations concerned economic aspects: for instance, maintaining economic stability in the Union and ensuring adequate economic development in the Member States. In this respect, the decision of the European institutions on the EU BSA was taken assuming that members of the Cohesion Fund (Ireland, Spain, Portugal and Greece)[62] would be allowed to increase their levels of greenhouse gas emissions, though up to a limited percentage. The difference in the national levels of marginal abatement costs across Europe was also considered. Furthermore, account was taken of the level of Member States' commitment to the fight against climate change, notably the adopted and planned domestic activities and measures aimed at curbing global warming. Last but not least, the decision on Member States' individual targets was taken at the end of the negotiations within the Council by the government representatives and resulted in long and complex political negotiations.

Since the early nineties, European climate policy has been founded on, among others, a common position at the international level based on a two-step approach: first the EU aimed at reaching a compromise with the international community on a general commitment to stabilisation of greenhouse gas emissions at the 1990 level in 2000. Only after having reached this goal, would the EU and the

[59] The Triptych approach considered the differentiation of commitments within the EU Bubble and was developed in the Netherlands during the EU Dutch Presidency (January–June 1997), see Groenenberg (2002).

[60] More information on this approach is available via the project 'Burden sharing in climate policy agreements' of CICERO and ECN (Netherlands Energy Research Foundation), at http://www.cicero.uio.no/projects/detail.asp?project_id=62&lang=en.

[61] Torvanger and Ringuis (2000).

[62] These were the poorest Member States in the EU in terms of GDP. See Dessai and Michaelowa (2001).

international community focus their efforts on a significant reduction of greenhouse gas emissions. These ideas were integrated into the EU position for the Second World Climate Conference held in Geneva in 1990 and aimed at a review of the UNEP/WMO World Climate Programme (WCP) and at the identification of policy recommendations and actions at the global level. In Geneva, the Commission made the first official attempt at establishing a European-wide Burden Sharing Agreement indicating individual greenhouse gas emissions reduction targets for the Member States to be adopted already in 1991. Subsequently, the issue of the EU Burden Sharing Agreement was set aside especially because of the reluctance of several Member States (France, the UK and the southern European states). In the meantime, in 1994, the UNFCCC was ratified by the Community. A new proposal for a general reduction target to be distributed among the Member States was prepared by the European Commission in 1996, but the most serious input to the definition of the EU Bubble came from the Dutch Presidency in the first half of 1997 and was finally formulated as a proposal in March 1997, only a few months before the Kyoto Protocol was adopted in Japan. The first draft of the EU BSA covered only CO_2 emissions and a revision of this agreement was needed soon after it had first been drawn up. In fact, in the meantime, the Kyoto Protocol was adopted in 1997 at COP3, including six greenhouse gases in the agreement and identifying differentiated targets for Annex I parties. The first round of EU internal negotiations on the distribution of the common target in 1997 was characterised by the Dutch proposal which aimed at introducing stringent reduction targets for the Member States.

This proposal was objected to by several European capitals and especially by the members of the Cohesion Fund mentioned above which were clearly in favour of less stringent targets. The deal was finalised in 1998 thanks to a UK proposal which took into account a few changes included in the Kyoto Protocol, such as for instance the coverage of six instead of three greenhouse gases as agreed previously. This proposal softened the Dutch proposal by accepting a few concessions to the 'cohesion' countries in terms of less rigid greenhouse gas emissions reduction targets. The final agreement of the Environment Council of June 1998[63] represents the existing framework of the EU Bubble and established strong reduction obligations for nearly all Member States. Furthermore, the individual greenhouse gas emissions reduction targets agreed under the EU bubble were obviously in line with the UNFCCC's main objective, namely stabilisation of CO_2 emissions at the 1990 level by 2000. However, the importance of the EU BSA in terms of its effective contribution to the fight against global warming is reduced considerably by the fact that this agreement is not based on a top-down approach whereby the individual targets would be set by EC law; rather, the power to negotiate on the basis of national circumstances was left to the national governments.[64]

[63] See supra n. 57.

[64] See Haigh (1996).

Table 4.1 Quantified emission limitation and reduction commitments for the purpose of determining the respective emission levels allocated to the European Community and its member States in accordance with Article 4 of the Kyoto Protocol

Party	Quantified emission reduction commitment under the Kyoto Protocol (percentage 2008–2012 compared to base year)
European Community	−8
Party	Quantified emission reduction commitment under the Kyoto Protocol (percentage 2008–2012 compared to base year)
Austria	−13
Belgium	−7.5
Denmark	−21
Finland	0
France	0
Germany	−21
Greece	25
Ireland	13
Italy	−6.5
Luxembourg	−28
Netherlands	−6
Portugal	27
Spain	15
Sweden	4
UK	−12.5

The final details of the EU BSA are shown in Table 4.1.

4.4 Greenhouse Gas Emissions in the EU

A few considerations on the level of greenhouse gas emissions in the EC and the Member States and their distance to the Kyoto Protocol reduction targets should be made prior to addressing the issue of compliance by these actors with the obligations created by the international climate regime. Although it will be clarified that the Kyoto Protocol has established a set of different types of obligations for Annex I parties, it is still important to recognise that the obligations to reduce greenhouse gas emissions attract a great deal of attention from the general public as well as stakeholders. Moreover, the non-compliance regime of the Kyoto Protocol acknowledges the importance of the limitation and reduction commitments in comparison with the other obligations, which is confirmed by the consequences for Annex parties in the event of failure to comply with those obligations.

The information on the levels of greenhouse gas emissions in the Community is provided by the Member States and processed by the European Environment Agency, which publishes a yearly report on greenhouse gas emissions trends and

projections in the EU as well as periodical reports on the European environment outlook. Furthermore, it is the duty of the European institutions, in particular the European Commission, to provide periodical information on the levels of greenhouse gas emissions in the EU to the Parliament and the Council as well as to the UNFCCC secretariat. For instance, under Article 5(3) of Decision 280/2004/EC concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol, the Commission is required to prepare a report on the EC's progress towards the Kyoto Protocol targets achieved by 2005.

Indeed, the European Environment Outlook 2005, released by the EEA in September 2005,[65] affirmed that key EU environmental targets, including greenhouse gas emissions targets and renewable energy goals, were unlikely to be met by the Community and the Member States. According to this report, greenhouse gas emissions in the EU25 area in the period 2008–2012 were expected to be less than 3% below 1990 levels despite the 8% reduction target for the EU15. The European Environment: State and Outlook 2005 report, released by the EEA in that same year on 29 November, indicated an increase in the European average temperature by 0.95°C in the 20th century (35% higher than the global average increase of 0.7°C) and a trend of temperatures continuing to rise. The report considered climate change as one of the top environmental challenges for the EU.

In February 2005, the European Commission issued the Communication 'Winning the battle against global climate change', which, on the basis of the latest available greenhouse gas emissions figures, affirmed that 'the EU has succeeded in reducing its emissions by 3% below the 1990 level, but much more needs to be done to reach the 8% emission reduction targets agreed in the Kyoto Protocol.'[66] Moreover, in accordance with the annual European Community greenhouse gas inventory 1990–2003 and inventory report 2005 prepared by the EEA,[67] despite a slight reduction in 2002, EU greenhouse gas emissions increased again in 2003, by 1.5% in the EU25 and by 1.3% in the EU15, respectively. GHG emissions had increased most in two countries in particular: Spain and the UK. In 2005, the EU15's GHG emissions were 1.7% below 1990 levels compared with the Kyoto greenhouse gas emissions reduction target of −8% by 2008–2012.

In December 2005, the Commission confirmed the findings of the 2005 EEA report in Communication COM(2005)655[68] which emphasised the need for the EU15 to rely on the fundamental contribution of the EU25 in order to meet the 8% reduction target. The report confirmed that ten EU Member States, among which

[65] EEA (2005a).

[66] Communication from the Commission to the Council, the Parliament, the European Economic and Social Committee and the Committee of the Regions, Winning the battle against global climate change, COM(2005)35, Brussels, 9 February 2005.

[67] EEA (2005b).

[68] European Commission, Report of 15 December 2005: Progress towards achieving the Community's Kyoto target, COM(2005)655, Brussels, 15 December 2005.

three new Member States, were still above their Kyoto Protocol target according to the 2005 data. Aggregate projections for the EU25 showed that total emissions of greenhouse gases would be 5% below 1990 levels in 2010 if existing domestic policies and measures were implemented. The implementation of additional measures could contribute to achieving a 9% reduction by 2008–2012 compared with 1990 levels.

The 2006 edition of the EEA report[69] confirmed the negative trend of the efforts of the Member States to fight global warming, namely an increase in GHG emissions in the EU in 2004 by 0.4% for the EU25 and by 0.3% for the EU15 in comparison with 2003. In 2004, GHG emissions in the EU15 were 0.9% below the 1990 levels, but still far from reaching the −8% target. The data indicated that in the event of the Member States implementing all planned additional policies and measures, GHG emissions in the EU15 would be 6.8% below the 1990 levels by 2010. For the first time, the data collected by the EEA showed that the EU was not too far from reaching the GHG emission reduction obligation agreed under the Kyoto Protocol (−8%). The inclusion in these scenarios of the contribution made by the Member States' implementation of the flexible mechanisms would allow the EU15 to reach a −9.3% reduction level by 2008–2012, thus in compliance with the international greenhouse gas emissions reduction obligations.[70]

The EEA Report 5/2008 of 16 October 2008, highlighting the greenhouse gas emissions and trends in Europe in 2008, confirmed the progressive reduction of greenhouse gas emissions in the EU15 and EU27 between 2005 and 2006 (−0.8 and −0.3%, respectively) and certified a distance between actual emissions and base-year levels of −2.7% for the EU15 (−7.7% for the EU27).[71] According to the EEA, the data on the level of greenhouse gas emissions in the EU clearly showed the difference between the EU15 and the EU27 as regards the Kyoto Protocol targets. In 2008, the EEA and the European Commission declared their confidence that the Kyoto Protocol reduction targets would be overachieved (−11.3%) but only in the event that: (1) all existing and additional measures would be implemented in the EU Member States; (2) the flexible mechanisms of the Kyoto Protocol would actually be used; and (3) the offsetting of greenhouse gas emissions through LULUCF activities would be included. Finally, the EEA data showed that the EU15's compliance with the 8% reduction obligation would in any case be ensured by some Member States' overachievement of the individual greenhouse gas emissions reduction targets.

The latest EEA report available at the time of writing indicated the following trends in greenhouse gas emissions in the EU[72]:

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[69] EEA (2006b).

[70] Doubts on the real contribution of JI and CDM credits to filling the existing and future gaps have been raised by some scholars. See, for instance, JIKO (2006).

[71] EEA (2008b).

[72] EEA (2009).

- GHG emissions EU15 2006–2007: −1.6%.
- GHG emissions EU15 1990–2007: −4.3%.
- GHG emissions EU27 2006–2007: −1.2%.
- GHG emissions EU27 1990–2007: −9.3%.

The main reasons for the decrease in GHG emissions between 2006 and 2007 in the EU15 are lower CO_2 emissions in households and services sectors as well as in manufacturing industries and lower use of fossil fuels, while in those countries CO_2 emissions from public electricity and heat production generally increased. Between 2006 and 2007, in the EU27, GHG emissions decreased in households and services sectors as well as in manufacturing industries, excluding iron and steel, while several new Member States reported a substantial increase in those emissions.

In conclusion, after a general trend of increase, EU15 greenhouse gas emissions declined between 2001 and 2002 and at a constant rate after 2005. This was mainly due to several reasons: warmer weather in most EU countries, slower economic growth in manufacturing industries, a continuing shift from coal to gas and the introduction of specific measures to reduce greenhouse gas emissions. However, the data reported above show that in 2009 the level of EU15 GHG emissions is still not in line with the joint international target agreed under the Kyoto Protocol (−8% by 2008–2012). Moreover, a substantial part of the greenhouse gas emissions reductions achieved in the EU15 took place in Germany and the UK as a result of two events not directly related to the adoption of climate-related policies and measures. In particular, in Germany and the UK, GHG emissions dropped between 1990 and 2000 by 18 and 12%, respectively, due to the breakdown and restructuring of the East German economy after reunification in 1990 and to the liberalisation of the electricity and gas markets in the UK in the early 1990s resulting in a fuel switch from carbon-intensive coal to natural gas in combination with a higher nuclear output. According to the EEA report of 2009, the largest emitters in the EC are: Germany, the United Kingdom, Italy, France, Spain and Poland. Apart from Germany and the UK, the general trend of GHG emissions among the rest of the EU's largest emitters is an increase in those emissions. The main sectors responsible for that augmentation are: road transport, electricity and heat production (Italy), road transport (France), road transport, electricity, heat production and manufacturing industries (Italy), and road transport (Poland).

Projections of GHG emissions reveal that existing domestic policies and measures at the EU level will not be sufficient to reduce the Community's total greenhouse gas emissions in 2010 to the percentages required under the Kyoto Protocol commitments. Therefore, existing and planned domestic measures in the Community seem to be insufficient to meet the Kyoto Protocol reduction targets and the implementation of flexible mechanisms such as Emissions Trading, Joint Implementation and Clean Development Mechanism is considered as the most serious option by several Member States. To this end, several initiatives aimed at the promotion of these projects among public and private entities as well as at the acquisition of carbon credits have recently been taken in the EU at public and

Table 4.2 Planned use of flexible mechanisms by the EU Member States

Member state	Planned use of Kyoto mechanisms by government to meet its burden-sharing target	Projected emission reduction 2008–2012 through the use of Kyoto mechanisms (Mt CO_2-eq. per year)	Allocated budget (EUR million)
Austria	Yes	9.0	531
Belgium	Yes	7.0	104
Denmark	Yes	4.2	152
Finland	Yes	1.4	121
France	No	–	–
Germany	No	–	23
Greece	No	–	–
Ireland	Yes	3.6	290
Italy	Yes	20.7	79
Luxembourg	Yes	3.6–4.3	400
Netherlands	Yes	13	505
Portugal	Yes	5.8	354
Spain	Yes	57.8	384
Sweden	No	[1.3]	9
United Kingdom	No	–	–
EU15	Yes	126.5	2,951
Slovenia	Yes	<0.6	–

Source EEA (2008b)

private level. These may take the form of purchase and development programmes, where investment opportunities and public tenders are presented, as well as of carbon funds, where public and private capital is invested in activities aimed at the reduction of greenhouse gas emissions.[73]

This section includes a few tables with data and information on the performance of the Member States in respect of the limitation and reduction commitments agreed under the Kyoto Protocol. These data show that uniformity and coordination among the Member States is still lacking as far as compliance with the QELRCs is concerned.

Table 4.2 indicates the planned use of the flexible mechanisms by the EU Member States.

Moreover, Table 4.3 summarises the greenhouse gas emissions scenario in the EU regarding the Kyoto Protocol's first commitment period developed and presented by the European Commission and the EEA since 1996.

Table 4.4 shows a combination of the available data on greenhouse gas emissions levels and scenarios in the EU15.

[73] For instance, the ERUPT/CERUPT programme in the Netherlands, the Austrian JI/CDM programme, the Finnish CDM/JI pilot programme, the Danish carbon programme, the Swedish international climate investment programme (SICLIP) and the Belgian federal JI/CDM tender.

Table 4.3 Greenhouse gas emissions scenario in the EU regarding the Kyoto Protocol's first commitment period developed and presented by the European Commission and the EEA since 1996

Data[a,b]	EU15 GHG emissions base year (Mt CO_2 eq)[c]	1990-XX (%) (CO_2 eq)	1990–2010 BAU (%)	1990–2010 Additional policies and measures (PAMs) (%)	1990–2010 Flexible mechanisms (%)
European Commission COM(1994)67[d]	–	No guarantees that commitments referred to in Article 2 of Decision 93/389/EEC (stabilisation CO_2 emissions by 2000 at 1990 levels in the Community as a whole) will be achieved	–	–	–
European Commission COM(1996)91[e]	CO_2 EU15 3,329.7	1990–1993 –2.2 energy CO_2 EU15	It cannot be excluded that CO_2 emissions of the EU15 will increase within a range between 0–5% by 2000 over 1990 levels	–	–
EEA 41/2000[f]	4,149.5	–	–	–	–
EEA 6/2000[g]	4,149.5	1990–1998 −2.5 EU	–	–	–
European Commission COM(2000)749[h]	4,194.5	1990–1998 −2.5 EU15	−1.4	−7.0	–
EEA 60/2001[i]	4,199	–	–	–	–

(continued)

Table 4.3 (continued)

Data[a,b]	EU15 GHG emissions base year (Mt CO_2 eq)[c]	1990-XX (%) (CO_2 eq)	1990–2010 BAU (%)	1990–2010 Additional policies and measures (PAMs) (%)	1990–2010 Flexible mechanisms (%)
EEA 10/2001[j]	4,198.7	1990–1999 −4 EU15	DTT − 0.4	–	–
European Commission COM(2001)708[k]	4,198.6	1990–1999 −4 EU15	Stabilisation at 1990 levels (at best)	−5.0	–
EEA 7/2002[l]	4,207.6	1990–2000 −3.5 EU15	2000 DTT 0.5	–	
EEA 75/2002[m]	4,207.6	1990–2000 −3.5 EU15	–	–	
EEA 1/2002[n]	–	–	At best stabilisation GHG emissions at 1990 level for the EU15	–	
EEA 33/2002[o]	–	1990–2000 −3.5 EU15	−4.7 EU15 DTT + 0.5	–	
European Commission COM(2002)702[p]	4,207.6	1990–2000 −3.5 EU15	−4.7	−12.0	
EEA 95/2003[q]	4,192	1990–2001 −2.3 EU15	DTT + 2.1	–	–
EEA 77/2003[r]	–	–	−4.7	–6.0	–
European Commission COM(2003)735[s]	4,204	1990–2001 −2.3 EU15	−0.5	−7.2	−0.5

(continued)

Table 4.3 (continued)

Data[a,b]	EU15 GHG emissions base year (Mt CO_2 eq)[c]	1990-XX (%) (CO_2 eq)	1990–2010 BAU (%)	1990–2010 Additional policies and measures (PAMs) (%)	1990–2010 Flexible mechanisms (%)
EEA 36/2003[t]	4,204	1990–2001 −2.3 EU15	−0.2 DTT 2.1	−7.2	–
EEA 4/2004[u]	4,204	1990–2001 −2.3 EU15	−0.5 DTT + 2.1	−7.2	–
EEA 2/2004[v]	4,245.2	1990–2002 −2.9 EU15	DTT + 1.9	–	–
European Commission COM(2004)818[w]	4,245.2	1990–2002 −2.9 EU15 −2.9 EU15 −9.0 EU25	DTT 1.9	–	−8.0
EEA 5/2004[x]	–	1990–2002 −2.9 EU15 −9.0 EU23	1990–2002 −1.0 EU15 −9.0 EU23	−7.7	−8.8
EEA 4/2005[y]	4,252.5	1990–2003 −1.7 EU15 −5.5 EU25	−4.5 EU15 DTT 3.5	–	–
EEA 8/2005[z]	4,252.4	1990–2003 −1.7 EU15 −8.0 EU25	−1.6 EU15 DTT + 3.5 −5.0 EU25 DTT − 2.9	−6.8 EU15 −9.3 EU25	−9.3 EU15 DTT + 1.9 DTT − 4.2 EU25

(continued)

Table 4.3 (continued)

Data[a,b]	EU15 GHG emissions base year (Mt CO_2 eq)[c]	1990-XX (%) (CO_2 eq)	1990–2010 BAU (%)	1990–2010 Additional policies and measures (PAMs) (%)	1990–2010 Flexible mechanisms (%)
European Commission COM(2005)655[aa]	4,179.6	1990–2003 −1.7 EU15 −8.0 EU25	−1.6 EU15 DTT + 1.9 −5.0 EU25	−6.8 EU15 −9.0 EU25	−9.3 EU15
EEA 6/2006[ab]	4,265.7	1990–2004 −0.6 EU15 −4.8 EU25	−0.9 EU15 DTT + 4.7	–	–
European Commission COM(2006)658[ac]	4,266.4	1990–2004 −0.9 EU15 −7.3 EU25	−0.6 EU15 DTT + 4.7 −4.6 EU25	−4.6 EU15 −8.1 EU25	−7.2 EU15 (−8.0 sinks) −10.8 EU25
EEA 9/2006[ad]	4,266.4	1990–2004 −0.9 EU15 −7.3 EU25	−0.6 EU15 DTT + 4.7 −2.1 EU23	−4.6 EU15 −5.6 EU23	−7.2 EU15 (−8.0 sinks) DTT + 2.3
EEA 2006[ae]	4,280.4	1990–2004 −1.1 EU15 (−0.8 to 1990) −4.9 EU25	DTT +4.5	–	–
EEA 10/2006[af]	4,263 (1990)	1990–2004 −0.8 EU15 −4.9 EU25	–	–	–
EEA 7/2007[ag]	4,278.8	1990–2005 −1.5 EU15 −7.9 EU27	–	–	–

(continued)

Table 4.3 (continued)

Data[a,b]	EU15 GHG emissions base year (Mt CO_2 eq)[c]	1990-XX (%) (CO_2 eq)	1990–2010 BAU (%)	1990–2010 Additional policies and measures (PAMs) (%)	1990–2010 Flexible mechanisms (%)
EEA 5/2007[ah]	–	1990–2005 EU15 EU27	−4.0 EU15	−7.9 EU15	−10.4 EU15
European Commission COM(2007)757[ai]	–	1990–2005 −2.0 EU15 −11.0 EU27	−4.0 EU15 −10.7 EU27	−7.4 EU15 −13.2 EU27 (Flexible mechanisms and sinks)	−11.4 EU15 −16.7 EU27 (Additional PAMs)
EEA 6/2008[aj]	4,265.5	1990–2006 −2.7 EU15 −7.7 EU27	–	–	–
EEA 5/2008[ak]	4,266.0	1990–2006 −2.7 EU15 −7.7 EU27	−3.6 EU15	−6.9 EU15	−9.9 EU15
EEA 4/2009[al]	4,265.5	1990–2007 −4.3 EU15 −9.3 EU27	–	–	–

[a] The difference in data referring to the base-year emissions reported in this and forthcoming tables relates to the fact that before 2006 final data on EU Member States' greenhouse gas emissions were not available in the reports on the EU's assigned amount (required under Article 3(7) and (8) of the Kyoto Protocol) under the UNFCCC, as indicated in Commission Decision 2006/944/EC of 14 December 2006 determining the respective emission levels allocated to the Community and each of its Member States under the Kyoto Protocol pursuant to Council Decision 2002/358/EC, *OJ* L 358, 16 December 1996, pp. 87–89

[b] Unless otherwise specified, the data in this table do not take into consideration offsets of GHG emissions from land use, land-use change and forestry activities

Table 4.3 (continued)

[c] The base-year emissions of the EC are the sum of the respective base-year emissions of the 15 Member States that agreed to jointly fulfil their respective commitments under Article 3 of the KP. This rule also refers to the base year for hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF6). For these gases, parties included in Annex I of the KP can select either 1995, in accordance with Article 3(8) of the KP, or the base year for other Annex A greenhouse gases (mostly 1990). Austria, France and Italy selected 1990 as the base year for these gases, all other MS chose 1995. The base year for all other GHG emissions under the KP is 1990 for the EU-15. The base year for HFCs, PFCs and SF6 for the new MS with commitments under the KP is 1995, except for Slovakia which chose 1990 as base year for fluorinated gases. The base year for all other GHG emissions under the KP is 1990, except for Poland (1988), Slovenia (1986) and Hungary (1985–1987)

[d] Report from the Commission of the European Communities under Council Decision 93/389/EEC – First Evaluation of existing national programmes under the Monitoring Mechanism of Community CO_2 and Other Greenhouse Gas emissions, COM(1994)67, Brussels, 10 March 1994

[e] Report from the Commission under Council Decision 93/389/EEC – Second Evaluation of National Programmes under the Monitoring Mechanism of Community CO_2 and Other Greenhouse Gas emissions: Progress towards the Community CO_2 Stabilisation Target, COM(1996)91, Brussels, 14 March 1996

[f] EEA (2000a)

[g] EEA (2000b)

[h] Commission of the European Communities Report under Council Decision 1999/296/EC for a monitoring mechanism of Community greenhouse gas emissions, COM(2000)749, Brussels, 22 November 2000

[i] EEA (2001a)

[j] EEA (2001b)

[k] Report 2001 under Council Decision 93/389/EEC for a monitoring mechanism of Community greenhouse gas emissions, COM(2001)708, Brussels, 30 November 2001

[l] EEA (2002a)

[m] EEA (2002b)

[n] EEA (2002c)

[o] EEA (2002d)

[p] EEA (2002e)

[q] EEA (2003a)

[r] EEA (2003b)

[s] Report from the Commission under Council Decision 93/389/EEC as amended by Decision 99/296/EC for a monitoring mechanism of Community greenhouse gas emissions, COM(2003)735, Brussels, 28 November 2003.

[t] EEA (2003c)

[u] EEA (2004a)

[v] EEA (2004b)

Table 4.3 (continued)

[w] Commission Report of 20 December 2004: Catching up with the Community's Kyoto target (under Decision 280/2004/EC of the European Parliament and of the Council concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol), COM(2004)818, Brussels, 20 December 2004
[x] EEA (2004c)
[y] EEA (2005b)
[z] EEA (2005c)
[aa] Report from the European Commission: Progress towards Achieving the Community's Kyoto Target, COM(2005)655, Brussels, 15 December 2005
[ab] EEA (2006b)
[ac] Report from the Commission: Progress towards Achieving the Kyoto Objectives, COM(2006)658, Brussels, 27 October 2006
[ad] EEA (2006c)
[ae] EEA (2006d)
[af] EEA (2007a)
[ag] EEA (2007b)
[ah] EEA (2007c)
[ai] Communication from the Commission: Progress towards Achieving the Kyoto Objectives, COM(2007)757, Brussels, 27 November 2007
[aj] EEA (2008a)
[ak] EEA (2008b)
[al] EEA (2009)

Table 4.4 Combination of the available data on greenhouse gas emissions levels and scenarios in the EU15

State	GHG emissions base year (1990)[a]	GHG emissions in 2007	Kyoto Protocol target	Gap between 2010 projections and Kyoto targets (existing PAMs)	Gap between 2010 projections and Kyoto targets (additional PAMs, carbon sinks, Kyoto mechanisms)	Projected emission reduction 2008–2012 through use of Kyoto mechanisms (Mt CO_2 eq per year)
Austria	79.0	88.0		24.1	−0.2	9.0
Belgium	145.7	131.3		5.5	−1.5	7.0
Denmark	69.3	66.6		13.0	6.5	4.2
Finland	71.0	78.3		14.0	−0.4	1.4
France	563.9	531.1		4.4	−23.7	–
Germany	1,232.4	956.1		−18.5	−63.9	–
Greece	107.0	131.9		−1.2	−4.5	–
Ireland	55.6	69.2		5.5	−0.3	3.6
Italy	516.9	552.8		72.2	9.6	20.7
Luxembourg	13.2	12.9		4.1	0.0	3.6–4.3
Netherlands	213.0	207.5		8.0	−5.1	13.0
Portugal	60.1	81.8		10.3	−2.6	5.8
Spain	289.8	442.3		107.2	15.8	57.8
Sweden	72.2	65.4		−4.9	−74.0	(1.3)
United Kingdom	776.3	636.7		−53.9	−58.0	–
EU15	4,265.5	4,052.0	−341	185.9	−139.0	126.5
%			−8%			
EU27	–	5,045.1				

Source Wuppertal (2006), EEA (2008b) and (2009)

[a] Numbers are expressed in million tonnes of CO_2 equivalent unless otherwise specified

In 1993, the first official evaluation of Member States' programmes to combat climate change indicated the EC's difficulty to meet the greenhouse gas emissions reduction commitments agreed under the international climate regime. The first Report of the Commission under Council Decision 93/389/EEC concluded that 'there is no guarantee that the commitments referred to in Article 2 of the Council Decision will be achieved.'[74] Article 2 of Council Decision 93/389/EEC called on the EU Member States to achieve 'the stabilization of CO_2 emissions by 2000 at 1990 levels in the Community as a whole.' The second evaluation of national programmes in 1993 under Council Decision 93/389/EEC did not identify the trend in all sectors as regards CO_2 emissions in the period 1990–1993 because of the lack of information available, notably the failure by Member States to provide the Community with sufficient information to compile the CO_2 inventory for

[74] Report from the Commission under Council Decision 93/389/EEC: First Evaluation of Existing National Programmes under the Monitoring Mechanism of Community CO_2 and Other Greenhouse Gas Emissions, COM(1994)67, Brussels, 10 March 1994, p. 6.

1993.[75] However, the conclusions of the second evaluation report contained two significant sentences about the future of the greenhouse gas emissions level in the EU: (1) 'it cannot be excluded that Community emissions will increase within the range of 0–5% by 2000 over 1990 levels', and (2) according to the International Energy Agency (IEA) energy projections for eight EU countries[76] that submitted post-2000 projections showed that 'energy related emissions in 2010 could be 7% higher than in 1990.'

The annual European Community greenhouse gas inventory 1990–2006 and inventory report 2008[77] compiled by the European Environment Agency on the basis of the national inventories submitted by the EC Member States under Council Decision 280/2004/EC showed that in 2006 the EU15's GHG emissions, without LULUCF, were 2.2% below the 1990 level, and compared to the base year emissions were 2.7% or 114 million tonnes CO_2 equivalents lower. In respect of the level of greenhouse gas emissions of the EU15 by 2010, the EEA confirmed in Report 5/2008 that the implementation of the existing policies and measures to address climate change would imply a reduction of 3.6% below base-year levels; the implementation of additional planned policies and measures would mean a reduction of 3.3%; the implementation of the flexible mechanisms would reduce GHG emissions by a further 3%; and carbon sink activities would result in a further 1.4% reduction. In the event that all these measures are implemented correctly and according to plan, the EU15 will, in 2008–2012, show a level of GHG emissions that is 11.3% lower than base-year levels, thus overachieving the 8% reduction target agreed under the Kyoto Protocol.

The above-mentioned data show two main things: first, information on the level of historical greenhouse gas emissions is not uniform and varies from year to year due to the development of more precise techniques for measurement, monitoring and verification. In this respect, EU legislation on the monitoring, reporting and verification of greenhouse gas emissions in the Member States has been amended and improved over the years. The quality of EU legislation in this sector and Member States' capacity to implement it correctly are two relevant aspects considered in Chap. 6, which addresses the compliance by the Community and the Member States with the monitoring, reporting and verification obligations created by the international climate regime.

The second aspect that emerges from the report is that the correct implementation of additional and planned policies and measures as well as of the flexible mechanisms is necessary for the fulfilment of the Kyoto Protocol limitation and reduction commitments by the Community and the Member States. These two

[75] Second Evaluation of National Programmes under the Monitoring Mechanism of Community CO_2 and Other Greenhouse Gas Emissions: Progress towards the Community CO_2 Stabilisation Target. Report from the Commission under Council Decision 93/389/EEC, COM(1996)91, Brussels, 14 March 1996.

[76] Belgium, Finland, France, Germany, Ireland, Luxembourg, Netherlands and the UK, IEA, energy-related CO_2 projections, June 1995.

[77] EEA (2008a).

considerations, particularly the uncertainty related to the historical data on the levels of greenhouse gas emissions and the necessity to rely on estimations of the reduction in these emissions related to future different types of activities, contribute to generating doubts as to the capacity of the Community and the Member States to meet their obligations under the Kyoto Protocol. In other words, the EU system mainly relies on current and future political choices which need to be implemented without considering that other factors such as the future economic situation, investment decisions, technological developments and natural events may have a negative impact on the implementation of the planned EU climate policy as well as on greenhouse gas emission levels in Europe. The probability that the Community is not going to meet the −8% greenhouse gas emissions reduction target by 2008–2012 through the implementation of adequate policies and measures is rather high and the contribution of the flexible mechanisms in this respect is decisive.

Projected policies and measures contributing to the fight against global warming include not only direct legislation aimed at the reduction of greenhouse gas emissions such as the European Allowance Trading Directive,[78] the Linking Directive[79] and the European Climate Change Programme. Climate change is a transboundary phenomenon and the international climate regime established a regulatory system for six gases which contribute to the greenhouse effect. It is therefore clear that many European provisions adopted within the framework of the environmental and energy policies may contribute directly or indirectly to the reduction of greenhouse gas emissions. Amongst others, indirect legislation covers areas that range from the promotion of electricity from renewable energy, the promotion of combined heat and power (CHP), improvements in the energy performance of buildings and energy efficiency in large industrial installations, and the promotion of the use of energy-efficient appliances. Other key policies and measures include the promotion of biofuels in transport, the reduction of average carbon dioxide emissions of new passenger cars, the recovery of gases from landfills, the reduction of fluorinated gases and the capture and storage of CO_2 emissions.

Table 4.5 provides a summary of the policies and measures (PAMs) of the EU Member States in relation to the agreed Kyoto Protocol limitation and reduction commitments.

The uncertainty over the Community's and the Member States' compliance with the Kyoto Protocol limitation and reduction commitments is confirmed by Table 4.5, which sends a clear message in this respect. According to the EEA projections in 2008 and 2009, a few Member States were not on track in the process of complying with their Kyoto Protocol limitation and reduction commitments.

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[78] See Chap. 2, n. 44, pp. 32–46.

[79] Linking Directive 2004/101/EC of the European Parliament and of the Council of 27 October 2004 amending Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community, in respect of the Kyoto Protocol's project mechanisms, *OJ* L 338, 13 November 2004, pp. 18–23.

Table 4.5 Summary of planned measures and progress towards targets (by country)

Country	EU burden-sharing or Kyoto target	2006 emissions lower than Kyoto target?	Planned measures with quantified 2010 reductions projections				Kyoto target projected to be reached?
			Existing policies and measures	Additional policies and measures	Use of Kyoto mechanisms	Net removal from carbon sinks	
EU-15	− 8.0 %	No	✓	✓	✓	✓	Yes
EU-15 Member States							
Austria	− 13.0 %	No	✓	✓	✓	✓	Yes
Belgium	− 7.5 %	No	✓		✓		Yes
Denmark	− 21.0 %	No	✓		✓	✓	No
Finland	0.0 %	No	✓	✓	✓	✓	Yes
France	0.0 %	Yes	✓	✓		✓	Yes
Germany	− 21.0 %	No	✓	✓		✓	Yes
Greece	+ 25.0 %	Yes	✓	✓		✓	Yes
Ireland	+ 13.0 %	No	✓	✓	✓	✓	Yes
Italy	− 6.5 %	No	✓	✓	✓	✓	No
Luxembourg	− 28.0 %	No	✓	✓	✓		Yes
Netherlands	− 6.0 %	No	✓		✓	✓	Yes
Portugal	+ 27.0 %	No	✓	✓	✓	✓	Yes
Spain	+ 15.0 %	No	✓	✓	✓	✓	No
Sweden	+ 4.0 %	Yes	✓			✓	Yes
United Kingdom	− 12.5 %	Yes	✓			✓	Yes
EU-12 Member States							
Bulgaria	− 8.0 %	Yes	✓	✓			Yes
Czech Republic	− 8.0 %	Yes	✓	✓		✓	Yes
Cyprus	n.a.	n.a.	✓	✓	n.a.	n.a.	n.a.
Estonia	− 8.0 %	Yes	✓	✓			Yes
Hungary	− 6.0 %	Yes	✓	✓			Yes
Latvia	− 8.0 %	Yes	✓				Yes
Lithuania	− 8.0 %	Yes	✓				Yes
Malta	n.a.	n.a.	✓		n.a.	n.a.	n.a.
Poland	− 6.0 %	Yes	✓			✓	Yes
Romania	− 8.0 %	Yes	✓	✓			Yes
Slovak Republic	− 8.0 %	Yes	✓	✓			Yes
Slovenia	− 8.0 %	No	✓	✓	✓	✓	Yes
EU candidate countries							
Croatia	− 5.0 %	Yes	✓	✓		✓	Yes
Turkey	n.a.	n.a.	✓				n.a.
Other EEA member countries							
Iceland	10.0 %	No	✓				Yes
Liechtenstein	− 8.0 %	No	✓		✓		Yes
Norway	+ 1.0 %	No	✓		✓	✓	Yes
Switzerland	− 8.0 %	No	✓	✓	✓		No

Source EEA Report No.5/2008

4.5 Central and Eastern European Countries and the International Climate Regime

The new Member States are fully integrated into the international framework for combating climate change. Despite the political and economic changes which the majority of these countries have faced since the early nineties, the general awareness among policy makers and public opinion regarding global warming has increased considerably in the recent past, also as a result of the approximation of the national legal systems of these countries to the EU principles and *acquis communautaire*. The new Member States are legally and politically committed to the fight against climate change and have agreed to fulfil the obligations of the Kyoto Protocol accordingly. The Kyoto Protocol has recognised that in Central and Eastern Europe the big reduction of greenhouse gas emissions occurred in the early nineties as a result of the economic and political collapse following the fall of the Soviet system. In Chap. 6, two main issues concerning the participation of the new Member States in the Kyoto Protocol are considered: on the one hand, the potential assistance which the new Member States could provide to the Community and the Member States as regards compliance with the Kyoto Protocol obligations, and, on the other hand, the issue of responsibility in the event of non-compliance by the EC and the Member States with international and European Community law in the field of climate change.

The new Member States have ratified the UNFCCC and are included in the list of Annex I parties[80]; they have also accepted the Kyoto Protocol where they are listed in Annex B, with the exception of Malta and Cyprus which at the time of writing have still not been included in the Annex I list.

Since the national procedure for the ratification of an international treaty may differ from country to country, Article 25 of the Kyoto Protocol allows parties to choose the legal instrument to be deposited with the secretariat: ratification,[81] acceptance and approval[82] or accession.[83] Table 4.6 shows the details of the CEECs' process of ratification of the Kyoto Protocol.

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[80] The Czech Republic, Slovakia and Slovenia were added to the Annex I list by an amendment that entered into force on 13 August 1998, following Decision 4/CP.3 adopted at COP 3. Malta and Cyprus have ratified the UNFCCC but are not included in the Annex I list.

[81] Through ratification of an international treaty a state expresses its consent to be bound by it. In the case of the Convention and the Protocol, the secretariat must collect the ratifications of all states. Through ratification, the state commits itself to giving domestic effect to the treaty itself. See the Vienna Convention on the Law of Treaties 1969, Articles 2(1)(b), 14(1) and 16.

[82] Acceptance and approval have the same legal effect as ratification. These two instruments are often used by states whose constitutional law does not expressly require the treaty to be ratified to enter into force. See the Vienna Convention on the Law of Treaties 1969, Articles 2(1)(b) and 14(2).

[83] Accession has the same legal effect as ratification, and with this instrument a state agrees to become a party to a treaty already negotiated and signed by other parties. See the Vienna Convention on the Law of Treaties 1969, Articles 2(1)(b) and 15.

Table 4.6 CEECs' process of ratification of the Kyoto Protocol

Country	Signature	Ratification, approval or accession[a]
Bulgaria	18.09.1998	15.08.2002 R
Cyprus	–	16.07.1999 Ac
Czech Republic	23.11.1998	15.11.2001 Ap
Estonia	03.12.1998	14.10.2002 R
Hungary	–	21.08.2002 Ac
Latvia	14.12.1998	05.07.2002 R
Lithuania	21.09.1998	03.01.2003 R
Malta	17.04.1998	11.11.2001 R
Poland	15.07.1998	13.12.2002 R
Romania	05.01.1999	19.03.2001 R
Slovak Republic	26.02.1999	31.05.2002 R
Slovenia	21.10.1998	02.08.2002 R

Source UNFCCC (2002)
[a] Ratification (R), Accession (Ac), Acceptance (At) and Approval (Ap)

The new Member States' decision to ratify the Kyoto Protocol is the result of a combination of reasons:

- The ratification of the Kyoto Protocol has been part of the *acquis communautaire* subsequent to the adoption of Council Decision 2002/358/EC,[84] and the new Member States were required to ratify the Kyoto Protocol by the date of accession (1 May 2004) at the latest in order to comply with Community law.
- The level of greenhouse gas emissions in the CEECs was particularly low before the accession due to the closure of several industries in the region at the beginning of the nineties; this means that these countries will face no particular problems in achieving their limitation and reduction commitments under the Kyoto Protocol.[85]
- The participation of the new Member States in the Kyoto Protocol's flexible mechanisms is likely to provide these countries with economic and environmental benefits, as well as technology and capacity derived from the implementation of these instruments and investments from abroad.[86]

Regarding the inclusion of the Kyoto Protocol in the *acquis communautaire*, it is important to remember that the binding force of an international agreement within the Community law system has been confirmed by the Court in the *Kupferberg* case. In this case, the Court recalled its judgement of 30 April 1974 in the

[84] See Chap. 2, n. 45.

[85] Slovenia is the only new Member States that will probably fail to meet its reduction targets domestically.

[86] Decision 15/CP.7 of the UNFCCC requires Annex I parties to ratify the Kyoto Protocol in order to be able to participate in the flexible mechanisms, see UNFCCC document FCCC/CP/2001/13/ADD.2.

Haegeman case,[87] stating that the provisions of an international agreement concluded by the Community 'form an integral part of the Community legal system.'[88]

4.5.1 Malta and Cyprus

As stated above, Cyprus and Malta have ratified both the UNFCCC and the Kyoto Protocol but are not included in the list of Annex I parties. Cyprus accepted the Kyoto Protocol on 16 July 1999 and Malta ratified it on 11 November 2001.

The exclusion of Malta and Cyprus from the Annex I and Annex B lists is legitimate under international law but rather controversial if seen from the perspective of European law and policy, especially insofar as the Community is a regional economic integration organisation party to the international climate change regime. However, in practical terms, the consequences of this distinction are not very relevant, especially considering the limited importance of these two countries in terms of greenhouse gas emissions and potential for investments in GHG emission reduction activities. The difference between Annex I and non-Annex I parties is relevant in particular where it concerns the implementation of the flexible mechanisms, since Malta and Cyprus are eligible to host CDM projects. In general, under the UNFCCC, Annex I and non-Annex I parties have differentiated commitments in accordance with the principle of common but differentiated responsibilities. Under the Kyoto Protocol, the difference between these two groups of countries is relevant as regards monitoring, reporting and verification obligations, as well as in terms of the eligibility criteria which must be met to participate in the flexible mechanisms. In this respect, non-Annex I parties are subject to less stringent obligations than Annex I parties. However, since Malta and Cyprus are members of the EU and are therefore obliged to comply with the European legislation on monitoring and reporting of GHG emissions, in practice the position of those two countries does not differ from the other EU Member States as far as the monitoring, reporting and verification obligations of the Kyoto Protocol are concerned. That is to say, the EC's GHG inventory is the direct sum of the EU27's national inventories. Nonetheless, the chance that a few new Member States are in non-compliance with those obligations is quite high, considering the lack of capacity and resources and, above all, the lack of information on past levels of greenhouse gas emissions in these countries. The issue of the new Member States in non-compliance with the eligibility obligations could turn out to be very relevant in the sense that these countries may risk being excluded from using the flexible mechanisms and will therefore be unable to cooperate with the EU and the Member States in this respect.

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[87] Case 181/73 *Haegeman* [1974] *ECR* 449.

[88] Case 104/81 *Kupferberg* [1982] *ECR* 3641, para 13.

The issue of Malta and Cyprus is more problematic when looking at the post-2012 negotiations at the international level. In this regard, these two countries will have to be included in the Annex I list so that the Community can use the option provided for by Article 4 of the Kyoto Protocol to create a new bubble agreement for the EU27 in the subsequent commitment periods. The inclusion of Malta and Cyprus in the Annex I list requires an amendment to the Kyoto Protocol and this amendment is very likely to be included in the general amendments to the Protocol necessary for the establishment of a new post-2012 climate regime. Malta and Cyprus are included in the EU negotiating group and fully share the EU's common position on the post-2012 phase adopted by the EU Council and presented to the international community at the UNFCCC meetings.[89]

Finally, Malta and Cyprus have no binding quantified emission limitation and reduction commitments under the Kyoto Protocol for the following reasons:

- They are not included in Annex I of the UNFCCC.
- They are not included in Annex B of the Kyoto Protocol.
- They were not members of the EU when the Burden Sharing Agreement regarding the distribution of targets between the EU Member States in the first commitment period was adopted.

4.5.2 Certain Degree of Flexibility

In both Annex I and Annex B, the new Member States are indicated as 'countries that are undergoing the process of transition to a market economy.' These countries are commonly designated as Economies in Transition (EITs). Furthermore, CEECs are members of the Annex I Expert Group[90] established in 1994 to support the efforts of these countries in the development of climate change policies and to increase the collaboration and the exchange of information among governments.

Until recently, the new Member States, together with Croatia, took part in the UNFCCC and Kyoto Protocol negotiation process, assembled in Central Group 11

[89] In terms of national capacity regarding climate policy, Malta established, in 1999, a National Board on Climate Change Affairs composed of experts from the University of Malta and in charge of preparing the first national communication and designing the national climate policy. This document was submitted to the UNFCCC on 1 April 2004. In 2005, Cyprus submitted to the European Commission a Strategic Plan for the reduction of greenhouse gases emissions, prepared by the National Observatory of Athens and commissioned by the Ministry of Agriculture, Natural Resources and Environment. The Strategic Plan provides an evaluation of the greenhouse gas emissions scenario up to 2020. As regards the European climate policy, i.e., the implementation of the EU ETS, both countries prepared national allocation plans for the distribution of the European allowances in both periods.

[90] The Annex I Expert Group is an ad hoc group of government officials from Environment, Energy and Foreign Affairs Ministries of countries listed in Annex I to the UNFCCC.

(CG11),[91] which included eleven countries that had emission reduction commitments under the Kyoto Protocol and shared common views and a common approach regarding several negotiating issues. The group was dismissed after the EU enlargement and the accession of the CEECs to the EU group.

Article 4(6) of the UNFCCC and Article 3(6) of the Kyoto Protocol provides the EITs with a 'certain degree of flexibility' in the implementation of their commitments under the international climate regime. According to Article 4(6) UNFCCC 'in the implementation of their commitments under paragraph 2 above, a certain degree of flexibility shall be allowed by the Conference of the Parties to the Parties included in Annex I undergoing the process of transition to a market economy, in order to enhance the ability of these Parties to address climate change, including with regard to the historical level of anthropogenic emissions of greenhouse gases not controlled by the Montreal Protocol chosen as a reference.' Article 3(6) of the Kyoto Protocol stipulates that 'taking into account Article 4, paragraph 6, of the Convention, in the implementation of their commitments under this Protocol other than those under this Article, a certain degree of flexibility shall be allowed by the Conference of the Parties serving as the meeting of the Parties to this Protocol to the Parties included in Annex I undergoing the process of transition to a market economy.' This principle has been applied by the new Member States both in the negotiation of greenhouse gas emissions reduction targets (QELRCs) and in the negotiation of the base year for the calculation of their limitation and reduction commitments.

The base year—the year on which the commitments to reduce greenhouse gas emissions are based[92]—is indicated in Article 3(1) of the Kyoto Protocol, namely the year 1990 for nearly all countries. The new Member States negotiated with the UNFCCC bodies a base year different from 1990 and the details of this agreement can be found in Decision 9/CP.2 of the second session of the Conference of the Parties[93] and Decision 11/CP.4 of the fourth session of the Conference of the Parties.[94] In this regard, at COP4, five CEECs invoked the principle of flexibility mentioned in Article 4(6) of the UNFCCC and agreed to change their base year as follows: Bulgaria chose 1988, Hungary the average period between 1985–1987,[95]

[91] The group was created at COP 6 in The Hague, and Malta and Cyprus also take part in this group as observers.

[92] The year indicates the establishment of the first national greenhouse gas inventory and is used to calculate the countries' emissions targets.

[93] See UNFCCC document FCCC/CP/1996/15/Add.1.

[94] See UNFCCC document FCCC/CP/1998/16/Add.1.

[95] 'In the light of characteristic features of the process of economic transition, the period 1985–1987 which precedes the current economic recession is considered as the base period for comparison of the carbon dioxide emissions', Hungary's First National Communication under the UNFCCC, 1994, p. 8.

Poland 1988,[96] Romania 1989[97] and Slovenia 1986.[98] The reason why these countries asked and were allowed to disregard 1990 as the base year for calculating their greenhouse gas emission levels lies in several political and economic changes that occurred in the region in the early nineties and were due to the breakdown of the communist system and the shutting down of several inefficient and old industrial plants. The different base year was chosen to maximise the difference of aggregate GHG emissions with those in the year 2000. In other words, the new Member States tried to benefit as much as possible from the economic changes in terms of baseline level of greenhouse gas emissions and decided on a base year just prior to the start of the restructuring of the national industrial system.

The new Member States have adopted legally binding commitments under Annex B of the Kyoto Protocol, notably quantified emission limitation and reduction commitments (QELRCs) or individual reduction targets in accordance with Article 3 of the Protocol. This is in line with Article 2(3) of the UNFCCC and the principle of common but differentiated responsibilities and respective capabilities.

GHG emissions reduction targets for Annex B parties were fixed at COP 3 in 1997, after long and complicated negotiations. Although the initial proposal for the establishment of binding commitments for the new Member States included the proposal for a −8% reduction commitment for all CEECs, the final decision adopted on 11 December 1997 amended that proposal.[99] Poland and Hungary agreed a reduction commitment of −6% and the other new Member States maintained the proposed −8%.

Table 4.7 shows the level of carbon dioxide emissions of the EU10 in the base year used to calculate the percentage of the reduction target of the new Member States.

[96] The baseline chosen is 1988 because 1990 was a very special time for Poland from an economic and political point of view. The 1990 baseline represents neither the normal Polish emissions trend nor the real Polish economic situation as this was the first year after the economic and political reforms had been launched due to the recession.

[97] 'The pollutant emissions in Romania have decreased starting with 1989, especially due to the cut-down in the production activities, a situation which makes 1989 as a possible reference year when preparing reports on pollution abatement', Romania's First National Communication under the UNFCCC, January 1995, p. 8.

[98] 'The transformation of the political and economic systems in the late 1980s resulted in a temporary decline in industrial production and the standard of living in Slovenia. This in turn temporarily reduced greenhouse gas emissions', Slovenia's First National Communication under the UNFCCC, Ljubljana, July 2002, p. 8.

[99] Malta and Cyprus are not bound by any greenhouse gas emissions reduction commitment.

Table 4.7 Carbon dioxide emissions of the EU10 in the base year

Party	CO_2 emissions (Gg)[a]	Base year	KP target (%)
Bulgaria	82.990	1988	−8
Czech Republic	169.514	1990	−8
Estonia	37.797	1990	−8
Hungary	71.673	1985–1987	−6
Latvia	22.976	1990	−8
Poland	414.930	1988	−6
Romania	171.103	1989	−8
Slovak Republic	58.278	1990	−8
Slovenia		1986	−8
Total	1,029.261		

Source UNFCCC (1997)

The table does not include data from Lithuania, Slovenia, Malta and Cyprus as it is based on information from Annex I Parties which submitted their first national communications on or before 11 December 1997. See UNFCCC (1997)

[a] In the UNFCCC documents emissions are measured in gigagrams, while several other studies express the emissions of CO_2 equivalents in million tonnes

4.6 GHG Emissions Surplus in the New Member States

The aggregate level of greenhouse gas emissions in the Central and Eastern European countries has dropped significantly since the late 1980s and is far below the base-year levels.[100] This is due to two main reasons. On the one hand, as mentioned above, it is the side effect of the severe economic recession in Central and Eastern Europe in the early 1990s.[101] The other reason is related to the accession of these countries to the EU and the process of approximation of national legislation to the EU *acquis communautaire*. In this respect, the approximation process can be considered a driving force in the process of the improvement of national legislation on the protection of the environment in the new Member States. Measures such as basic fuel switching and general environmental action programmes[102] introduced by the CEEC governments in the nineties have in fact improved energy efficiency standards in the region and consequently reduced the level of national carbon intensity. Thus, the reduction of greenhouse gas emissions in the region is the result of the combination of unexpected economic developments and political and legislative pressure from the EU, rather than the effect of domestic policies and measures directly aimed at the curbing of greenhouse gas emissions. Yet, it is important to stress that while emissions were decreasing in the

[100] Petkova and Faraday (2002), p. 49.

[101] Rizzo (2001).

[102] Structural changes included, for example, a shift toward cleaner fuels, such as natural gas, and a more diffuse use of energy-efficient devices. This was the case in the Czech Republic, Poland and Slovakia, which have produced essential energy efficiency gains in their economies (from 15 to 32%), see UNFCCC (2002), p. 15.

region, most countries have seen their economies recover. Indeed, in these countries the relation between greenhouse gas emissions and gross domestic product (GDP) significantly dropped between 1990 and 2000. For instance, in Poland, despite a high economic growth after 1995 with an annual rate of 6.6% between 1995 and 1997 and 4.3% between 1998 and 1999, GHG emissions decreased in the same period.[103] Around that period, the decline in greenhouse gas emissions in the new Member States ranged from 65.6% in Latvia to 17% in Hungary and 23.6% in the Czech Republic.

According to the 2003 EEA report on greenhouse gas emission trends and projections in Europe,[104] the emissions of greenhouse gases in the new Member States in 2001 were 36% below the base-year levels—Latvia and Estonia, respectively, 58.2 and 56.6% had the largest emission reductions compared with the base year 1990, while only in Slovenia did the greenhouse gas emissions increase by 1.4% in comparison with the base year (1986), with an expected increase of 9.6% in 2010. According to the EEA report, greenhouse gas emissions from the transport sector show an increasing trend and six countries—Bulgaria, Czech Republic, Estonia, Latvia, Poland and Slovak Republic—will comfortably meet the Kyoto targets thanks to existing domestic policies and measures. Several new Member States did not provide greenhouse gas inventory data for all gases for the period 1990–2001 (Bulgaria, Czech Republic, Estonia, Hungary, Lithuania and Slovenia). Compared with the trends in most new Member States, Slovenia will probably represent an exception and present an excess of absolute greenhouse gas emissions at the end of the first commitment period.[105]

On the basis of the EEA Report on greenhouse gas emissions trends and projections in Europe 2008, the latest available data on greenhouse gas emissions and removals excluding removals from LULUCF activities, in the new Member States are shown in Table 4.8.[106]

The above data show that nearly all the new Member States are very likely to meet their limitation and reduction commitments under the Kyoto Protocol and that a certain amount of 'hot air' could be available in these countries by the end of the first commitment period. The term 'hot air' indicates the shortage of greenhouse gas emissions in the early nineties in the region due to the closure of a large number of industrial plants. Hence, 'hot air' represents the extent of excess assigned amount units (AAUs) resulting from the difference between the legally binding emission limits set by the Kyoto Protocol and the business-as-usual

[103] See UNFCCC (2002), pp. 11–13.

[104] EEA (2003c).

[105] In Slovenia, which will probably have to reduce its emissions in order to meet the Kyoto Protocol targets, this is due to the high emissions growth in the early nineties. In Lithuania, the closure of the first Ignalina nuclear reactor in 2005 has affected the general level of emissions, while the second reactor will be closed in 2009. The Ignalina nuclear power station in Lithuania supplies 70–80% of national electricity consumption. The closure of its two reactors was agreed during the EU accession negotiations within the framework of the energy chapter.

[106] EEA (2008a).

Table 4.8 Greenhouse gas emissions and removals excluding removals from LULUCF activities, in the new Member States; data are expressed in million tons of CO_2 equivalent

State	GHG emissions base year 1990	GHG emissions in 2007	Kyoto Protocol target	Kyoto Protocol target[a] %	Change base year—2007%	GHG emissions surplus %	GHG emissions surplus
Bulgaria	133		−11	−8	−38.9		
Czech Republic	194		−16	−8	−23.7		
Estonia	43		−3	−8	−54.6		
Hungary	115		−7	−6	−20		
Latvia	26		−2	−8	−56.1		
Lithuania	49		−4	−8	−53		
Poland	563		−34	−6	−11.7		
Romania	282		−23	−8	−36.7		
Slovak Republic	72		−6	−8	−33.6		
Slovenia	20		−2	−8	+10.8		
EU10							
%		−0.9%			−3		

Source EEA (2009)

[a] Data are expressed in million tonnes of CO_2 equivalent

emissions trends in the period 2008–2012.[107] The 'hot air' potential offers these states the possibility to sell part of this amount in the form of assigned amount units to countries in non-compliance with their limitation and reduction commitments under the international emissions trading regime established by the Kyoto Protocol. The problem which these countries face in respect of their greenhouse gas emissions surplus is how to allocate this surplus internally, and therefore a constructive dialogue among policy makers and stakeholders has been ongoing within the CEECs. The new Member States can consider several options: banking the surplus AAUs until the next commitment period when it will help to meet the binding reduction obligations that will be agreed for post-2012—a position supported by Poland and Slovak Republic—or integrating the measures adopted at the domestic level with the international financial mechanisms. Other options are to distribute part of the surplus to the national installations included in the European emissions trading system or retain part of the AAUs until the last moment in order to sell them on the international market to the best bidder. Whether the latter actions are in compliance with Community law is a subject tackled in Chap. 7.

The role played by Joint Implementation (JI) and Emissions Trading (ET) in the allocation of the GHG emissions surplus by the new Member States is crucial since these mechanisms offer the CEECs a big chance to generate revenue. Activities

[107] The 'hot air' issue was the subject of a long discussion within the AGBM in 1997. See also ECO (1997) and Woerdman (2005).

Implemented Jointly (AIJ)[108] have already taken place among these countries, in particular involving the participation and support of EU and Member States' cooperation programmes. With regard to Emissions Trading, a number of initiatives and proposals for pilot schemes and capacity-building activities were implemented before the entry into force of Directive 2003/87/EC in the Slovak Republic, the Czech Republic and Poland. The implementation of JI and ET in the new Member States is relevant, especially because these mechanisms have offered the new Member States the opportunity not only to comply with European climate policy and law and the obligations of the Kyoto Protocol, but also to attract financial investment and technology from other Annex I parties. After the EU enlargement, the rules created by the EU ETS Directive—as well as other legislation of the *acquis communautaire*—lowered the potential for the exchange of reduction units via both ET and JI projects. In particular, the number of sectors and activities eligible for JI projects in the EU were reduced by the Linking Directive amending the EU ETS Directive, amongst others, in the field of nuclear energy, hydro-electric power and in the forestry sector. Furthermore, the obligation of the new Member States to comply with the *acquis communautaire* contributed to raising the national levels of business-as-usual GHG emissions and consequently the baseline for projects aimed at the reduction of these emissions. The issue of projects additionality and attractiveness of the new Member States is addressed in Chap. 6.

Although different studies and experts have affirmed that the greenhouse gas emissions surplus in the CEECs will be enough to cover the EC's and Member States' delay in the reduction of those emissions in the first commitment period, at the time of writing there is still a lot of speculation on the exact amount of the surplus. This is mainly due to the uncertainty related to the measurement of greenhouse gas emissions in the new Member States, but also to the EU accession requirements in the field of environmental protection which have in fact contributed to generating further greenhouse gas emissions reductions due to energy efficiency and renewable energy rules and other Community-related measures. Speculation also remains about the possibility for the new Member States to establish generous national allocation plans under the EU ETS scheme and thus spend part of the emissions surplus on the European carbon market, and about governments' decisions to retain part of it and sell the excess assigned amount units under the international emissions trading scheme after 2008. Finally, it is important to remember that a few more Annex I parties will have 'hot air' available for trading at the international level, notably the Russian Federation and Ukraine, thus increasing the level of competition in terms of supply of GHG emissions reduction units.[109]

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[108] Decision 5/CP.1 at COP 1 launched the pilot phase of AIJ, during which parties can implement, in the territories of other parties, projects to reduce greenhouse gas emissions or foster removals of greenhouse gas by sinks besides the business-as-usual activities. However, no credits can be generated by these projects.

[109] See Douma and Ratsiborinskaya (2007), in Douma et al. (2007), pp. 135–144.

4.7 Article 4 of the Kyoto Protocol

In order to provide an exhaustive assessment of the legal problems arising from the Community's position within the international climate regime and, consequently, from the distribution of the joint greenhouse gas emissions reduction commitments among the Member States at the EU level, the European Burden Sharing Agreement has to be considered hand-in-hand with Article 4 of the Kyoto Protocol, i.e., the legal basis for the joint fulfilment of the limitation and reduction commitments by the European Community and the Member States.

First of all, it is the UNFCCC, to which the Community and the Member States are party that, in Article 1, recognizes a regional economic integration organisation (REIO) as 'an organization constituted by sovereign States of a given region which has competence in respect of matters governed by this Convention or its protocols and has been duly authorized, in accordance with its internal procedures, to sign, ratify, accept, approve or accede to the instruments concerned.'

Furthermore, the UNFCCC, in Article 4(2)(a), sets a commitment for each party to this Convention, including REIOs, to adopt 'national policies and take corresponding measures on the mitigation of climate change.' Article 14 of the UNFCCC on the settlement of disputes clarifies the rights of a REIO in this respect and, more exactly, introduces the possibility for a REIO to settle a potential dispute over the interpretation or application of the Convention either 'through negotiation or any other peaceful means of their own choice' or through arbitration. Article 18 of the UNFCCC refers to the right to vote of a REIO, notably the 'right to vote with a number of votes equal to the number of their member States that are Parties to the Convention.' This right does not apply if 'any of its member States exercises its right, and vice versa.' Articles 20 and 22 UNFCCC mention the parties' entitlement to sign and ratify the Convention, and include a reference to REIOs. In particular, Article 22(2) UNFCCC introduces the issue of state responsibility for the performance of the obligations of the Convention. This Article states that in case of REIOs 'one or more of whose Member States is a Party to the Convention, the organization and the member States shall decide on their respective responsibilities for the performance of their obligations under the Convention' and 'the organization and the member States shall not be entitled to exercise rights under the Convention concurrently.' The rule that responsibility is distributed between the regional organisation and the Member States is therefore introduced by the UNFCCC and assumes major importance in the Kyoto Protocol, especially when considering the binding character of the commitments under the Protocol.

As mentioned above, the Community and the Member States have ratified the UNFCCC by adopting Council Decision 94/69/EEC, and the preamble of this document clarifies that the commitments set out in Article 4(2) of the Convention, namely the limitation of EC levels of CO_2 emissions, 'will be fulfilled by the Community as a whole, through action by the Community and its Member States, within the respective competence of each.'

Article 3 of the Kyoto Protocol sets one major obligation for the industrialised countries regarding the fight against global warming: the quantified emission limitation and reduction commitments (QELRCs) for Annex I parties and their overall emissions should be reduced 'by at least 5 per cent below 1990 levels in the commitment period 2008 to 2012.' Furthermore, Article 3(1) refers to the right of Annex I parties to ensure 'individually or jointly' the achievement of their QELRCs. Negotiations over the final text of Article 3 at the different meetings of the Ad Hoc Group on the Berlin Mandate (AGBM) included different versions, and the two most controversial issues were the legal nature of the QELRCs and the provisions related to the joint target. In this regard, the EU position aimed at introducing the phrase 'individually or jointly' in Article 3 in respect of the internal decision to distribute the overall target among the then 15 Member States. This position was supported by, among others, the Czech Republic, Hungary and the Russian Federation, while it was opposed by several other parties, in particular the JUSSCANNZ group headed by the US delegation.[110] At the 8th meeting of the AGBM held in Bonn from 22 to 31 October 1997, the joint commitment issue was the object of three alternative texts: on the one hand, the EU position (A) which included the words 'individually or jointly', and on the other hand, the texts of JUSSCANNZ (B) and the G77 and China group (C) which made no mention of this phrase. The main concerns about including the reference to 'individually or jointly', mainly on the part of Australia and Japan, related to the lack of legal clarity regarding the distribution of competences between the EU and the Member States. Some Annex I parties were afraid that the EU reduction commitment would be softened by including the GHG emissions surplus of the new Member States in the calculation of the EU15 targets. The Community's proposal was accepted by COP3 in Japan only after the EC had made a few concessions to the JUSSCANNZ requests that the EU enlargement would not affect the joint agreement in the Kyoto Protocol's first commitment period.[111]

Article 4 of the Kyoto Protocol gives all Annex I parties, whether nation states or regional economic integration organisations, the opportunity to fulfil their reduction commitments jointly.

> Any Parties included in Annex I that have reached an agreement to fulfil their commitments under Article 3 jointly, shall be deemed to have met those commitments provided that their total combined aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases listed in Annex A do not exceed their assigned amounts calculated pursuant to their quantified emission limitation and reduction commitments inscribed in Annex B and in accordance with the provisions of Article 3. The respective emission level allocated to each of the Parties to the agreement shall be set out in that agreement (Article 4(1) of the Kyoto Protocol).

[110] JUSSCANNZ stands for Japan, the US, Switzerland, Canada, Australia, Norway and New Zealand. See UNFCCC (2002), pp. 30–32.

[111] See UNFCCC (2000), pp. 58–59.

Although Article 4(1) refers generically to Annex I parties, the history of the COP negotiations clearly shows that this possibility was included in the text of the Kyoto Protocol under the pressure of the EC delegation and in reference to the EC's position and composition. In fact, the European Community is the only regional organisation party to the UNFCCC and the Kyoto Protocol, and it decided to implement both treaties by making use of Article 4. After all, usually it is not in the interest of a nation state to be jointly committed with one or more states under an international agreement, especially in the case of compulsory obligations. The European BSA was negotiated and agreed at the Community level in accordance with Article 4 of the Kyoto Protocol, and in 1998 the EU15 agreed to share the common reduction goal internally and to divide it into 15 different targets. The EU BSA was notified to the UNFCCC together with the instrument of ratification of the Kyoto Protocol by the Community, i.e., Council Decision 2002/358/EC of 31 May 2002.[112]

> The Parties to any such agreement shall notify the secretariat of the terms of the agreement on the date of deposit of their instruments of ratification, acceptance or approval of this Protocol, or accession thereto. The secretariat shall in turn inform the Parties and signatories to the Convention of the terms of the agreement (Article 4(2)).

With the adoption of Council Decision 2002/358/EC, including the EU BSA in Annex II, the position of the 15 European Ministers of the Environment at the Environment Council of 1998 acquired legal value also in terms of Community law. Council Decision 2002/358/EC clearly states that 'the European Community and its Member States shall fulfil their commitments under Article 3(1) of the Protocol jointly, in accordance with the provisions of Article 4 thereof.' Through this Decision, Member States agreed on the establishment of national greenhouse gas emissions reduction targets and on the joint fulfilment of such obligations under the Kyoto Protocol. Member States committed themselves to contributing to the Community's overall compliance with the international climate regime. Under point 10 of the preamble of Council Decision 2002/358/EC, 'in deciding to fulfil their commitments jointly in accordance with Article 4 of the Kyoto Protocol, the Community and the Member States are jointly responsible, under paragraph 6 of that article and in accordance with Article 24(2) of the Protocol, for the fulfilment by the Community of its quantified emission reduction commitment under Article 3(1) of the Protocol.' Furthermore, point 12 of the preamble stresses once more the responsibility of the Member States regarding the EC commitment: 'the Community and its Member States have an obligation to take measures in order to enable the Community to fulfil its obligation under the Protocol without prejudice to the responsibility of each Member State towards the Community and other Member States to fulfilling its own commitments.'

Council Decision 2002/358/EC concerns the ratification of a mixed agreement by the European Community and the Member States. According to the definition of a decision provided by the EC Treaty under Article 249, this instrument is

[112] See Chap. 2, n. 45.

'binding in its entirety upon those to whom it is addressed.' The binding effect of this Decision covers the ratification of the Kyoto Protocol as well as Annex II which includes the table of quantified emission limitation and reduction commitments agreed within the EU. Those obligations are binding on the Community and the Member States under Community law, independently of the entry into force of the Kyoto Protocol. Annex II of Decision 2002/358/EC does not mention the new Member States. All aspects associated with the EU BSA and the position and role of the Community and the Member States in respect of their compliance with the Kyoto Protocol obligations are addressed further in Chap. 6.

4.7.1 The Blocking Clause

> Any such agreement shall remain in operation for the duration of the commitment period specified in Article 3, paragraph 7 (Article 4(3)).

According to Article 4(3) of the Kyoto Protocol, the details of the joint commitment of the Community and the Member States to the Protocol's greenhouse gas emission limitation and reduction commitments shall not be modified until the end of the first commitment period (2012). The European institutions and the Member States negotiated and defined at the Community level the extent of each Member State's contribution to the joint target. During the negotiations on the adoption of the Kyoto Protocol (1997) the right of parties to agree on the joint fulfilment of the greenhouse gas emission limitation and reduction commitments was highly debated. The international community aimed at ensuring that this agreement would not be altered in the years prior to the end of the first commitment period (2012), namely through the enlargement of the Community. This was partially due to the international community's will to safeguard the environmental integrity of the Kyoto Protocol reduction obligations, but in particular to the intention of avoiding any advantage for parties to the Kyoto Protocol that decided to adopt a joint reduction commitment.

> If Parties acting jointly do so in the framework of, and together with, a regional economic integration organization, any alteration in the composition of the organization after adoption of this Protocol shall not affect existing commitments under this Protocol. Any alteration in the composition of the organization shall only apply for the purposes of those commitments under Article 3 that are adopted subsequent to that alteration (Article 4(4)).

The limits set by Article 4(4) regarding the joint commitment agreed under the Kyoto Protocol by a regional economic integration organisation are of a geographical and temporal nature: this joint commitment shall not be affected by a change in the composition of the regional economic integration organisation in the first commitment period established by the Kyoto Protocol. This is what is defined as the blocking clause.

After the definition of the scope and details of the blocking clause in the Kyoto Protocol, it is important to consider this in relation to international law and in

particular vis-à-vis the principle of moving treaty borders, boundaries or frontiers.[113] The point that needs to be addressed here concerns the nature and scope of application of this principle under international law and the extent to which it is applicable to an international organisation changing its borders. Finally, since we are studying the application of this principle in respect of the European Community and the Member States, a few considerations on Community law and external relations will be made.

According to literature and state practice, the principle of moving treaty borders applies to states when they are acquiring or loosing territory, in particular in the case of state succession. According to Klein, the principle of moving treaty frontiers is 'commonly accepted as a rule of customary international law' and has a negative and a positive aspect. As identified by Malanczuk, in the event of losing territory, a state renounces the rights and obligations under international treaties applying to that territory. Vice versa, in the event of the acquisition of territory, a state's right and obligations arising from international treaties become automatically applicable to that territory. An indirect reference to the principle of moving treaty borders can be found in the Vienna Convention on the Law of Treaties in Article 29: 'Unless a different intention appears from the treaty or is otherwise established, a treaty is binding upon each party in respect of its entire territory.' Furthermore, this principle is mentioned in several treaties under international law, as well as in several decisions of national courts.[114]

Malanczuk and Boleslaw refer to the principle of moving treaty boundaries as applicable 'in the case when an existing state transfers sovereignty over a part of its territory to another state', especially when the treaties concluded by the successor state apply to that territory.[115] In practice, the principle of moving treaty borders thus defined was applied, amongst others, in the case of Germany's reunification in 1990 when the German Democratic Republic (East Germany) acceded to the Republic of Germany (West Germany) and ceased to exist. The unification of East and West Germany involved the incorporation of a state into another state. The unified state continued the membership of international organisations.[116]

Different is the situation where the border of an international or regional organisation changes, such as in the case of the acquisition of territory by the European Union in the event of enlargement. While the case of Germany involved incorporation of one state into another, the EU enlargement concerns a situation

[113] Literature on this principle is relatively scarce, see Klein (1984), Boleslaw (2005) and Malanczuk (1997).

[114] Klein (1984), p. 474.

[115] The only exception mentioned by Malanczuk in this case is when 'the application of a particular treaty to a certain territory is incompatible with the object and purpose of that treaty', Malanczuk (1997), pp. 164–165 and Boleslaw (2005), p. 138.

[116] On the principle of moving treaty borders and the reunification of Germany, see Malanczuk (1997), p. 164 et seq., Boleslaw (2005), p. 138 et seq., Tomuschat (1990), p. 415 et seq., and Timmermans (1990), p. 437 et seq.

where a state does not cease to exist but is included in the Community. This is a case of extension of territory and inclusion of a new state. According to Malanczuk, commenting on the German unification, the EEC fully accepted the principle of moving treaty boundaries in the sense that the Community's territory was automatically enlarged and the application of Community law extended to the new territory.[117] In the literature and jurisprudence, nothing prevents the full application of this principle to a regional organisation like the EU as well.

The principle of moving treaty borders is applicable to the Kyoto Protocol, and is in line with state practice under international law. In the brief history of the international climate regime, there have been changes in the territory of a few parties, as well as cases of dissolution of national states and the consequent formation of different entities. In these cases, the states notified the change of borders to the secretariat, or the new states simply submitted the required documentation to the UNFCCC and the Kyoto Protocol and they were accepted as new parties.[118] The principle of moving treaty borders applies unless otherwise decided by the parties to an international treaty. Therefore, since the principle of moving treaty borders applies to the EC, the blocking clause of the Kyoto Protocol in Article 4(4) is an exception to Article 29 of the Vienna Convention on the Law of Treaties and to the principle itself. The intention of parties prevails over this principle and, as confirmed by Klein, parties 'may limit it to their existing territory at the time of the treaty's conclusion or may explicitly refer to the territories to which the treaty applies.'[119] Under the Kyoto Protocol, the principle of moving treaty boundaries does not apply in the event of modification of the composition of a REIO, which is due to the particular nature of the commitment that such organisations can negotiate within the international climate regime, especially a joint obligation on all parties to the organisation. This exception applies only in respect of part of the obligations created by the Kyoto Protocol, such as the QELRCs, and not with regard to the remaining obligations, concerning which the principle of moving treaty borders is maintained. The approval and ratification of the Kyoto Protocol by the European Community and the Member States and the consequent acceptance of the blocking clause by all parties to the Protocol contribute to legitimating this exception under international law.

At this point, one may wonder why the other states wanted and accepted the inclusion of this exception in the Kyoto Protocol. The incorporation of the blocking clause into the Kyoto Protocol is mainly the result of the pressure of the JUSSCANNZ group during the negotiations on the text of the Kyoto Protocol, notably Australia, Japan and the US, which opposed any change in the composition of REIOs in the first commitment period. The reason behind this decision is

[117] Another example is the unification of Yemen in 1990, when two states merged into one.

[118] This was the case, for instance, with the State Union of Serbia and Montenegro which was dissolved in 2006. Consequently, Serbia and Montenegro ratified the Kyoto Protocol on 19 October 2007 and 4 June 2007, respectively. However, this case concerned not only moving treaty boundaries but also state succession into multilateral treaties.

[119] Klein (1984), p. 475.

related to the fact that at the time of the negotiations on the Kyoto Protocol, the enlargement of the EU towards the east was already ongoing and the parties feared that including the CEECs in the EU would undermine the QELRCs of the EC and the EU15 on account of the GHG emissions surplus of the new Member States.

In accordance with Article 4(3) and (4) of the Kyoto Protocol, the joint greenhouse gas emission and reduction limitation commitment of the European Community is fixed until 2012 and covers the 15 Member States which originally negotiated it, but excludes the new members after the enlargement of 1 May 2004 and 1 January 2007. Since the enlargement occurred after the adoption of Council Decision 2002/358/EC by the EC, the ratification and implementation of the Kyoto Protocol are part of the *acquis communautaire* and are therefore a compulsory obligation for the new Member States from a Community law viewpoint.

The integration of international agreements into the EC legal order is based on the EC Treaty and on the jurisprudence of the Court. According to Article 300(7) TEC, the Community institutions and the Member States are bound by international agreements concluded under Community law and this commitment applies to the new Member States from the moment of accession to the EU. This is due to the fact that international agreements form an integral part of the Community legal system, just as the rest of the EC's legally binding acts. As specified by Hoffmeister, 'once a candidate country has acceded to the EU, it must fulfil all its obligations under EU law.'[120] The new Member States are therefore required to accept the obligations created by international treaties concluded by the Community, unless otherwise provided in the Treaty of Accession to the EU. In the *Haegeman* case in 1974, the ECJ stated: 'The provisions of the agreement, from the coming into force thereof, form an integral part of Community law.'[121]

Treaty practice after the various enlargements of the EU confirms that adherence of the acceding states to the Community's global commitments is one of the fundamental conditions for accession. The application of the principle of moving treaty borders in respect of the international treaties by which the European Community is bound is therefore ensured by the Community legal order, i.e., by the requirements for accession to the EU.

In terms of the participation of the Community and the Member States in a mixed agreement, the new Member States are required, under Article 6 of the Act of Accession,[122] to accede to the agreements or conventions by which the EC and the Member States are bound and to implement these treaties in accordance with the details and obligations already negotiated. Considering that the protection of the environment is a policy falling within the Community's competence and in view of

[120] Hoffmeister (2002b), p. 218.

[121] See ECJ, case 181/73 *Haegeman* v. *Belgian State* [1974] *ECR* 449.

[122] Act concerning the conditions of accession of the Czech Republic, the Republic of Estonia, the Republic of Cyprus, the Republic of Latvia, the Republic of Lithuania, the Republic of Hungary, the Republic of Malta, the Republic of Poland, the Republic of Slovenia and the Slovak Republic and the adjustments to the Treaties on which the European Union is founded, *OJ* L 236, 23 September 2003, pp. 33–50.

the limits set in Article 4(4) of the Kyoto Protocol, there is no need for the EC in its new composition to renegotiate the Kyoto Protocol or to add any additional protocol in order to reflect the EU enlargement. New Member States have negotiated and agreed their own individual greenhouse gas emissions reduction targets under the international climate regime and are therefore required to comply with those obligations under international law, independently of Community law. However, the case of the EC's participation in the international climate regime is quite unique for the reasons already mentioned, i.e., on the one hand, the EC and the Member States are parties to the Kyoto Protocol as a regional international economic organisation and, on the other hand, the EC has agreed to fulfil jointly with the Member States the obligation to reduce its levels of greenhouse gas emissions.

4.7.2 Addressing Responsibility

Finally, Article 4(5) and (6) of the Kyoto Protocol deals with the issue of responsibility and compliance by the REIO and its parties with the QELRCs.

> In the event of failure by the Parties to such an agreement to achieve their total combined level of emission reductions, each Party to that agreement shall be responsible for its own level of emissions set out in the agreement (Article 4(5)).

Article 4(5) is clear about state responsibility. In the event that the Community is not in compliance with the agreed greenhouse gas emission limitation and reduction commitments, the Member States are individually responsible under international law for the entire failure on the basis of their 'level of emissions' indicated in the BSA and therefore communicated to the UNFCCC. If, for instance, at the end of the first commitment period (2008–2012) the EC is not in compliance with the 8% GHG emissions reduction obligation and Italy and Spain are in non-compliance with the level of QELRCs agreed under the BSA—a reduction of 6.5% and an increase of 15% by 2012, respectively, compared to 1990—Article 4(5) considers these two countries in breach of the Kyoto Protocol GHG emissions reduction obligations and responsible for non-compliance under international law.

> If Parties acting jointly do so in the framework of, and together with, a regional economic integration organization which is itself a Party to this Protocol, each member State of that regional economic integration organization individually, and together with the regional economic integration organization acting in accordance with Article 24, shall, in the event of failure to achieve the total combined level of emission reductions, be responsible for its level of emissions as notified in accordance with this Article (Article 4(6)).

The issue of responsibility for and consequences of non-compliance with the agreed levels of greenhouse gas emissions reductions becomes more complex when considering Article 4(6) of the Kyoto Protocol, whose interpretation may lead to some legal doubts. In particular, as regards the responsibility of parties for failure to achieve a total combined level of emission reductions, Article 4(6) refers to the individual responsibility of each Member State of the regional economic

integration organisation and introduces this type of responsibility. The Member States are responsible for their own level of GHG emissions. In respect of the example mentioned above where Italy and Spain may be in a situation of non-compliance with their greenhouse gas emissions reduction targets, not only those countries are held liable under international law; the Community as Annex I party is also responsible for the non-compliance with its reduction commitments. The definition of party responsibility in respect of the international obligations established by the international climate regime is fundamental to going more deeply into the issue of the consequences of non-compliance.

4.8 Conclusions

The Kyoto Protocol and the UNFCCC are mixed agreements to which the European Community and the Member States are signatory parties sharing the same status. Within the international climate regime, the EC and the Member States are listed in Annex I of the Convention, and both the UNFCCC and the Kyoto Protocol consider the Community as a 'regional economic integration organisation'. An exception in this respect is represented by Malta and Cyprus which, though members of the EU since 1 May 2004, are still not listed in Annex I and are therefore considered by the international climate regime as non-Annex I parties. The participation of the Community and the Member States in the Kyoto Protocol is based on Council Decision 2002/358/EC concerning the approval, on behalf of the European Community, of the Kyoto Protocol to the UNFCCC and the joint fulfilment of commitments thereunder. Decision 2002/358/EC is a complex provision differing from other decisions adopted by the Community to ratify an international treaty since it aims at the approval of the Kyoto Protocol and its obligations by the Community and the Member States and at the formalisation of the EU Burden Sharing Agreement which established common obligations for the reduction of greenhouse gas emissions by the Member States.

On the basis of Articles 3(1) and 4 of the Kyoto Protocol, the European Community and the Member States have agreed to jointly fulfil their commitments regarding the reduction of the aggregate anthropogenic carbon dioxide equivalent emissions of greenhouse gases corresponding to an obligation of 8% below 1990 levels by the period 2008–2012. The Member States have agreed to internally distribute the overall target in the form of differentiated greenhouse gas emission limitations and reductions expressed in percentages. This is called the EU Burden Sharing Agreement (EU BSA) or EU Bubble. The latest data on the level of greenhouse gas emissions in the EU available at the time of writing show that the EU as a whole is still far from reaching its Kyoto reduction target. In this respect, the Community and the Member States will reach their targets only if the existing domestic policies and measures (PAMs) aimed at curbing global warming will be complemented by additional PAMs and by participation in the flexible mechanisms of the Kyoto Protocol.

The new Member States (EU12) are divided into Annex I parties (10) and non-Annex I parties (Malta and Cyprus) to the UNFCCC. They have all ratified the Convention and the Kyoto Protocol, as required by Council Decision 2002/358/EC and the EU law procedure for accession. By the same token, they have accepted the obligations established by the international climate regime as recalled by the European Court of Justice in the *Haegeman* case, referring to the effects of an international agreement in the Community legal system. Furthermore, the EU10 are classified under the UNFCCC as countries with economies in transition to a market economy (EITs).

Articles 4(6) of the UNFCCC and 3(6) of the Kyoto Protocol provide for a 'certain degree of flexibility' for EITs in the implementation of their commitments under those treaties. This principle was applied and implemented by several new Member States that were able to negotiate and agree on a base year for the calculation of the reduction targets different from 1990. Due to the different base years and to the economic collapse in the region in the early nineties, the level of greenhouse gas emissions in the new Member States before the accession to the EU was quite low. The extra difference between the level of greenhouse gas emissions in the base year and the projections for 2012 due to the reasons mentioned above is commonly known as greenhouse gas emissions surplus or 'hot air'. New Member States can use this surplus for trading in the flexible mechanisms of the Kyoto Protocol, in particular by providing extra AAUs to Annex I parties which may need to use the flexible mechanisms in order to comply with the reduction and limitation obligations of the Kyoto Protocol. Participation in the flexible mechanisms by the new Member States is likely to provide these countries with several economic and environmental benefits as a result of investments by Annex I parties and private companies in JI projects.

Article 4 of the Kyoto Protocol not only provides for the right of the Community and the Member States to jointly fulfil the greenhouse emission limitation and reduction commitments under the Protocol. Article 4(4) sets both a geographical and temporal limit to this commitment: 'Any alteration in the composition of the organisation after adoption of this Protocol shall not affect existing commitments under this Protocol.' In other words, under international law, the EU joint greenhouse gas emissions reduction obligation (−8%) is valid only for the EU15 until the end of the first commitment period. In Chap. 6 we will see that from the Community law perspective the considerations are different. Finally, Article 4(5) and (6) deals with the issue of responsibility for compliance with the limitation and reduction commitments under the Kyoto Protocol. Article 4(5) states that in the event that the Community is not in compliance with the agreed greenhouse gas emissions reduction target, the Member States are held individually responsible on the basis of their level of emissions indicated in the EU BSA. In Article 4(6) the responsibility of the regional economic integration organisation is introduced and linked to the responsibility of the Member States. The latter leads to several considerations from the perspective of Community law, which are addressed in Chap. 6.

Chapter 5
The Flexible Mechanisms of the Kyoto Protocol

5.1 International Flexibility and Annex I Parties

The flexible mechanisms mentioned in Chap. 4 and introduced by the Kyoto Protocol respond to one major concern expressed by several Annex I parties in the negotiations on the adoption of the Protocol, namely the necessity and importance of ensuring a certain level of international flexibility in the tools provided by the Kyoto Protocol regarding the compliance by Annex I parties with the quantified emission limitation and reduction commitments (QELRC) under Article 3 of the Protocol. The flexible mechanisms have been introduced with the aim of reducing the overall costs of achieving those obligations and have been designed to enable Annex I parties to reduce their greenhouse gas (GHG) emissions in a cost-effective way, in particular through investments in countries where the costs of mitigating climate change are lower.

The long debate and negotiations during the Kyoto Protocol talks ended with the inclusion of three flexible mechanisms into the Protocol—Joint Implementation (Article 6), Clean Development Mechanism (Article 12) and Emissions Trading (Article 17)—and the adoption of the operative rules in the Marrakech Accords of 2001. The need to guarantee the environmental integrity of the Kyoto Protocol was one of the most important concerns behind the international negotiations on the definition of rules and procedures related to these instruments. Historically, the positions of the two main negotiating groups on the international flexibility for Annex I parties diverged. Since the start of the Kyoto Protocol talks, the EU had focused on strong and advanced internal policies and measures aimed at the reduction of greenhouse gas emissions. On the other hand, the US and, more generally, the JUSSCANZ group aimed for an agreement with less focus on domestic actions in order to avoid potential high costs for the national economies in the implementation of the Kyoto Protocol.[1] The end result was a compromise between the two positions. Flexibility in meeting the greenhouse gas emissions

[1] Grubb et al. (1999), p. 87.

L. Massai, *The Kyoto Protocol in the EU*, DOI: 10.1007/978-90-6704-571-1_5,

limitation and reduction commitments under the Kyoto Protocol has been guaranteed in the text of the Protocol as requested by the US, which, in return, agreed to a stringent national GHG emission reduction commitment under Article 3(1).

JI and CDM activities are aimed at the generation of Emissions Reduction Units (ERUs) and Certified Emission Reductions (CERs), respectively. ET concerns the exchange of assigned amount units (AAUs), ERUs, CERs, and removal units (RMUs). RMUs are units generated on the basis of land use, land-use change and forestry (LULUCF) activities such as reforestation. AAUs, ERUs, CERs and RMUs are commonly defined as Kyoto units.

The Marrakech Accords signed in 2001 at COP7[2] stated that Annex I parties[3] are not entitled to any 'right, title or entitlement' to emissions and established that domestic actions to reduce GHG emissions are a 'significant element' of the efforts made by each Annex I party to meet the limitation and reduction commitments under the Kyoto Protocol. In this regard, the international community did not agree on the quantification of the extent of such domestic actions. On the other hand, the decisions relating to Articles 5, 7 and 8 of the Kyoto Protocol, notably the monitoring, reporting and verification rules, required Annex I parties to provide information in their national communications to demonstrate that the implementation of flexible mechanisms is 'supplemental to domestic action'. This information is assessed periodically by the Compliance Committee of the Kyoto Protocol.[4] In particular, as regards the flexible mechanisms, the Marrakech Accords established the following rules:

- 'The use of the mechanisms shall be supplemental do domestic action' and 'domestic action shall thus constitute a significant element of the effort made by each Party included in Annex I';
- Annex I parties 'provide relevant information […] in accordance with Article 7 of the Kyoto Protocol, for review under its Article 8';
- 'The facilitative branch of the Compliance Committee' addresses 'questions of implementation' with respect to the implementation of flexible mechanisms;
- 'The eligibility to participate in the mechanisms by a Party included in Annex I shall be dependent on its compliance with methodological and reporting requirements' under Articles 5 and 7 of the Kyoto Protocol;
- CERs, ERUs and AAUs 'may be used to meet commitments under Article 3(1)' of the Kyoto Protocol.

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[2] Principles, nature and scope of mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol, Decision 14/CMP.1 (formerly Decision 15/CP.7), FCCC/KP/CMP/2005/8/Add.2, 30 March 2006.

[3] Annex I countries are countries which have committed themselves to reducing greenhouse gas emissions to 1990 levels by the year 2000 as prescribed by Article 4.2 of the UNFCCC. They are the OECD countries, excluding Mexico, and the designated Economies in Transition Countries and Turkey.

[4] Procedures and mechanisms relating to compliance under the Kyoto Protocol, Decision 27/CMP.1 (formerly Decision 24/CP.7), FCCC/KP/CMP/2005/8/Add.3, 30 March 2006.

A precondition for the participation of Annex I parties in the flexible mechanisms of the Kyoto Protocol is the calculation of each party's assigned amount pursuant to Article 3, paragraphs 7 and 8, and the capability to keep track of the greenhouse gas emissions and the assigned amount units (AAUs). This is ensured by submission of the initial report to the UNFCCC secretariat in accordance with Article 7(4). The initial reports are assessed by the Compliance Committee. This matter is discussed in Chap. 6.

This chapter focuses on all three flexible mechanisms of the Kyoto Protocol and, contrary to the order in the Protocol, starts by assessing emissions trading since this system may have more relevance as regards the project-based mechanisms for compliance by the Community and the Member States with the Kyoto Protocol obligations.

5.2 Emissions Trading

Emissions trading was already used as an instrument to reduce environmental harm before the Kyoto Protocol was adopted. The idea to establish a new type of market-based mechanism creating a new type of commodity, namely rights to emit a certain amount of greenhouse gases or carbon dioxide equivalent, was included in the general debate on the instruments to combat transboundary environmental pollution. In general, experience with market-based mechanisms was first obtained in the United States, which introduced an Environmental Protection Agency (EPA) emissions trading programme in early 1979, followed by the sulphur cap-and-trade reduction credit mechanism in 1994.[5] In the early nineties, inspired by the US experience, decision makers and politicians in Europe started to rethink, from a political and legal perspective, the approach to tackling problems affecting the environment. The inclusion of market-based instruments, such as emissions trading and project-based mechanisms, in the range of measures designed to fight climate change has been part of the command and control approach based on compulsory fixed standards which has characterised international and European environmental policy and law since the nineties.

One of the main reasons behind the creation of an emissions trading scheme is the concept of abatement costs for the reduction of greenhouse gas emissions. The difference between abatement costs in different installations is the margin on which all market exchanges are based. The value of the outcome related to the implementation of an emissions trading scheme, in terms of both environmental integrity and goals and economic benefit for the participating entities, depends predominantly on the extent of this margin. The more a participating entity is

[5] The latter was created by Title IV of the 1990 Clean Air Act Amendments. For more information about the US policy on climate change and emissions trading, see Gerrard (2008) and Ellerman and Harrison (2003).

committed to the application of an environmentally-friendly policy aimed at the reduction of its levels of greenhouse gas emissions, e.g., through the improvement of the energy efficiency of a combustion plant in the cement industry or the switch from coal to natural gas in a power plant, the more this entity will be able to reduce GHG emissions in respect of the assigned cap and sell allowances on the market accordingly, for instance, to participants which have not invested in emission reductions technologies due to high abatement costs or for other reasons.

The two most relevant emissions trading systems in place at the time of writing, i.e., the European Union Emission Allowance Trading Directive (EATD or EU ETS) 2003/87/EC[6] and International Emissions Trading created under Article 17 of the Kyoto Protocol (IET), are examined in this book. These two instruments present many similarities but also significant differences. While the EU ETS is aimed at private entities (installations) and IET mainly at nation states, both systems offer the participants a viable opportunity to comply with their greenhouse gas emission reduction obligations by exchanging emissions reduction units. Both systems offer the Community and the Member States, though under different modalities and involving different actors, a tool to comply with the greenhouse gas emissions reduction obligations at the international and European level. IET is a mechanism designed to allow Annex I parties—EC and Member States—to benefit directly from GHG emissions reductions achieved elsewhere, while the EU ETS is an indirect instrument at the disposal of the Community and the Member States to achieve their greenhouse gas emission reduction obligations via contributions by national installations.

5.3 International Emissions Trading

The Kyoto Protocol established, under Article 17, the International Emissions Trading (IET) system. IET is a market-based instrument designed to facilitate the compliance by Annex I parties with their greenhouse gas emissions reduction and limitation commitments. IET is open to participation by Annex B parties, which can exchange assigned amount units (AAUs)[7] with other Annex B parties in order to fulfil their reduction and limitation commitments under the Protocol.[8] Annex B parties can also trade ERUs, CERs or RMUs with other Annex B parties. The

[6] See Chap. 2, n. 44.

[7] Assigned amount units are the total assigned amounts calculated pursuant to Article 3(1) and inscribed in Annex B of the Kyoto Protocol. They correspond to the total amount of greenhouse gas emissions in CO_2 equivalent that a country is allowed to emit during the first commitment period.

[8] Annex B parties are states with quantified emission limitation or reduction commitments listed in Annex B of the Kyoto Protocol. They are included in Annex I of the UNFCCC, having assumed legally binding commitments for the period 2008–2012 as indicated in Article 3(1) of the Kyoto Protocol.

trading usually occurs when a party has a surplus of units and these are offered for sale to other parties mainly for reasons of the latter's compliance with the limitation and reduction commitments. Since the Kyoto Protocol created a new commodity, i.e., units of greenhouse gas emission reductions, the market where these units are traded is often called carbon market.

The history of the international negotiations on the text of the Kyoto Protocol in the period between the meetings of the Ad Hoc Group on the Berlin Mandate (AGBM 1995) and COP3 (1997) shows that major support for the inclusion of IET in the flexible mechanisms came from the US, which led the JUSSCANZ negotiating group. The introduction of IET in the Kyoto Protocol was one of the basis conditions for the US to confirm its participation in the international climate regime. The US delegation, supported by the Umbrella group, made the adoption of the text of the Kyoto Protocol in 1997 conditional upon the inclusion of the flexible mechanisms since these instruments would provide developed countries with a more economically viable option to comply with the limitation and reduction commitments. One major issue concerning IET at the time concerned the modalities to keep this mechanism as transparent as possible in order to ensure that big quantities of reduction units would be balanced by adequate investments in concrete activities aimed at reducing greenhouse gas emissions. In this context, it is important to mention that the issue of 'hot air' was part of the discussion on IET. In particular, several times, the EU expressed concerns about the possibility for Annex B parties to acquire past emission reductions in Central and Eastern European countries, which would result in less emission reduction achievements domestically. The final result and the brevity of Article 17 show that the compromise reached at the end of the Kyoto Protocol negotiations at COP3 in Japan was very broad and not very detailed. This is due to the fact that parties disagreed on substantial parts of IET; for instance, the G-77 and China group opposed the system because of its complexity. In this regard, is important to emphasise that consensus is the principle upon which all decisions within the UNFCCC framework are adopted.[9]

Article 17 of the Kyoto Protocol reads as follows:

> 'The Conference of the Parties shall define the relevant principles, modalities, rules and guidelines, in particular for verification, reporting and accountability for emissions trading. The Parties included in Annex B may participate in emissions trading for the purposes of fulfilling their commitments under Article 3. Any such trading shall be supplemental to domestic actions for the purpose of meeting quantified emission limitation and reduction commitments under that Article.'

In the Kyoto Protocol, Article 17 makes reference to Annex B parties rather than to Annex I parties to the UNFCCC. Furthermore, Article 17 refers to the issue of supplementarity, i.e., the obligation for Annex B parties to meet their quantified emission limitation and reduction commitments firstly by domestic actions and only in a supplemental way through participation in the flexible mechanisms.

[9] See UNFCCC (2000), pp. 82–85.

The principles, modalities, rules and guidelines governing Article 17 of the Kyoto Protocol were defined by the Marrakech Accords (2001) and adopted by the COP/MOP1 in Montreal in 2005, which was the first meeting of the Parties to the Kyoto Protocol after its entry into force.[10] IET is a mechanism whereby units are traded between states, thus diverging from other emissions trading systems in the world whereby the obligations lie with installations or other legal entities. Nonetheless, the Marrakech Accords stipulate that parties may also authorise 'legal entities to participate' in the scheme. Similarly, IET, though institutionally separate, also concerns different emission reduction units generated through the implementation of the project-based mechanisms introduced by the Kyoto Protocol. IET is open to the exchange of the following types of reduction units:

- Assigned amount unit (AAU) issued by an Annex I party on the basis of its assigned amount pursuant to Articles 3(7) and 3(8) of the Protocol;
- Removal unit (RMU) issued by an Annex I party on the basis of land use, land-use change and forestry (LULUCF) activities under Articles 3(3) and 3(4) of the Kyoto Protocol;
- Emission reduction unit (ERU) generated by JI projects under Article 6 of the Kyoto Protocol;
- Certified emission reduction (CER) generated by CDM projects under Article 12 of the Kyoto Protocol;
- Temporary certified emission reduction (tCER) generated by CDM projects in the field of LULUCF and which must be re-verified every 5 years;
- Long-term certified emission reduction (lCER) generated by CDM projects in the field of LULUCF and which must be replaced at the end of the project crediting period.

Transfers and acquisitions of the above-mentioned units are to be tracked and recorded in a computerised system of national registries, which must be established and maintained by each Annex I party.

Finally, the Marrakech Accords introduced the obligation for Annex I parties participating in IET to keep a minimum amount of AAUs in their national registry, the so-called commitment period reserve (CPR).[11] The CPR has been introduced to limit the risk of some Annex I parties overselling their AAUs surplus and to facilitate their compliance with the principle of supplementarity. A minimum amount of AAUs must be kept in the registry by each Annex I party in order to ensure that the reduction and limitation commitments are mainly achieved through domestic actions rather than exclusively through the implementation of IET and project-based mechanisms. The international transaction log (ITL) is a database

[10] Modalities, rules and guidelines for emissions trading under Article 17 of the Kyoto Protocol, Decision 11/CMP.1, FCCC/KP/CMP/2005/8/Add.2, 30 March 2006.

[11] The commitment period reserve is calculated as 90% of the party's assigned amount or as the level of national emissions indicated in the party's most emissions inventory (multiplied by five, for the five years of the commitment period), whichever is the lower figure (Articles 3.7 and 3.8 of the Kyoto Protocol).

maintained by the UNFCCC secretariat and manages the transactions of the different units, notably issuance, transfer and acquisition between registries, cancellation, retirement and banking to a subsequent commitment period. The ITL is connected to all national registries and verifies that transactions automatically proposed by the national registries are in conformity with the rules of the Kyoto Protocol. In this regard, the ITL approves or rejects all transaction proposals received by the national registries. The ITL became operational on 14 November 2007, and in June 2008, 38 parties (37 Annex B parties and the CDM registry) had completed initialisation.

As agreed in Marrakech, COP7 decided '(5) that the eligibility to participate in the mechanisms by a Party included in Annex I shall be dependent on its compliance with methodological and reporting requirements under Article 5, paragraphs 1 and 2, and Article 7, paragraphs 1 and 4, of the Kyoto Protocol' and '(6) that certified emission reductions, emission reduction units and assigned amount units under Articles 6, 12 and 17, as well as removal units resulting from activities under Article 3, paragraphs 3 and 4, may be used to meet commitments under Article 3, paragraph 1, of the Parties included in Annex I.'[12] Furthermore and in relation to IET, only 'a Party included in Annex I with a commitment inscribed in Annex B is eligible to transfer and/or acquire ERUs, CERs, AAUs or RMUs issued in accordance with the relevant provisions.'[13] Annex B parties must meet the following eligibility requirements to be able to participate in IET[14]:

- Be party to the Kyoto Protocol;
- Have an assigned amount under Article 3, paragraphs 7 and 8;
- Have 'in place a national system for the estimation of anthropogenic emissions by sources and anthropogenic removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, in accordance with Article 5, paragraph 1';
- Have 'in place a national registry in accordance with Article 7, paragraph 4';
- Have 'submitted annually the most recent required inventory, in accordance with Article 5, paragraph 2, and Article 7, paragraph 1, including the national inventory report and the common reporting format';
- Submit 'the supplementary information on assigned amount in accordance with Article 7, paragraph 1'.

At the time of writing, exchange of AAUs among Annex I parties has been very rare. Early in 2003, the Slovak government signed a pioneer deal of 200,000 tonnes of CO_2 equivalent with the Japanese Sumitomo Corporation. Other similar deals were concluded in December 2008 when Poland signed two agreements concerning the sale of AAUs, namely with the Multilateral Carbon Credit Fund, managed by the European Investment Bank (EIB) and the European Bank for

[12] Decision 15/CP.7: Principles, nature and scope of the mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol, FCCC/CP/2001/13/Add.2, pp. 2–4, 21 January 2002.

[13] See *supra* n. 10.

[14] The eligibility requirements of IET are listed in Decision 11/CMP.1, see *supra* n. 10.

Reconstruction and Development (EBRD), and with the World Bank. In the same month, the latter declared the intention to conclude a similar agreement with the Czech Republic.[15]

5.4 EU Emissions Trading System

The EU Emissions Trading system (EU ETS or EATD)[16] is the first regional emissions trading scheme and the largest in operation at the time of writing. The EU ETS provides for the exchange of greenhouse gas emissions allowances, European Union Allowances (EUAs), between installations in the EU Member States. The EU ETS is one of the major climate policy instruments designed by the European Community and the Member States to contribute to the fulfilment of the limitation and reduction commitments under the Kyoto Protocol.

The EU ETS has been in force since 1 January 2005 and is not directly linked with IET, although it is a measure adopted to reduce GHG emissions at the regional (European Union) and national (Member States) level, in line with the objectives and obligations set by the international climate regime. The EU ETS sets absolute targets and regulates the direct emissions of greenhouse gases, thus avoiding both relative targets—i.e., based on production scenarios—and the coverage of indirect emissions—i.e., emissions calculated on the basis of energy consumption patterns.

The EU ETS is a domestic, mandatory and entity-based system compatible with the international market created under the Kyoto Protocol and potentially with any other national and regional scheme established outside the EU. The EATD established two initial phases: a first learning-by-doing period running from 2005 to 2007 and a second phase from 2008 to 2012 which corresponds with the Kyoto Protocol's first commitment period. However, it is important to stress that the EU ETS is a long-term system: commitment periods will continue in the future on the basis of Article 25 EATD unless the EU will decide otherwise by amending Directive 2003/87/EC. Under the EU ETS, installations on the list of sectors included in Annex I—such as those in key industrial sectors like power generation and heating industries, oil refineries, coke ovens, ore smelters, steel, *cement, glass, tile, ceramics, pulp and paper*—shall receive, for the purpose of operation, a greenhouse gas permit issued by the competent national authority. The GHG permit indicates the installation's yearly cap on GHG emissions, only CO_2 in the first phase and all six GHGs of the Kyoto Protocol in the second period, expressed in EUAs. One allowance is equal to the permit to emit 1 tonne of CO_2 equivalent and the amount allocated must be surrendered by 30 April each year by every operator,

[15] Carbon Finance Website, 19 December 2008, available at: http://www.carbon-financeonline.com/index.cfm?section=global&action=view&id=11751.

[16] See Chap. 2, n. 44.

in correspondence with the verified greenhouse gas emissions that occurred in the previous year. Installations which have surrendered a level of emissions below their assigned amounts may sell their surplus allowances to other entities that are in danger of exceeding their caps. Operators that are not in compliance with the system, namely those unable to surrender sufficient allowances by 30 April each year, shall pay financial penalties accordingly. The distribution of allowances is based on the National Allocation Plans which have to be submitted by the competent national authority to the Commission within the agreed timeframe (Article 9 of the EATD). The NAPs shall be designed in accordance with 'objective and transparent criteria, including those listed in Annex III, taking due account of the comments from the public.' NAPs are assessed and evaluated by the European Commission, which can decide to approve these documents or to propose amendments.

The main features of the EU ETS established by Directive 2003/87/EC are the following:

- 'Cap-and-trade' system;
- Focus on CO_2 emissions in the first phase and on all six greenhouse gases in the second phase;
- Focus on big industrial emitters;
- Periodic review of the rules of the system;
- Procedures for unilateral inclusion of other gases and sectors, *opting-in*, upon Commission approval;
- Temporary exclusion of certain installations, *opting-out*, upon Commission approval;
- National allocation plans for the distribution of EUAs: voluntary auctioning for the two commitments periods, not exceeding 5% and 10%, respectively, of the total allocation, while the rest of the allowances are distributed through grandfathering;
- Compliance system based on penalties: 40€ $tCO_2eq.$ for each allowance not surrendered in the first phase and 100€ $tCO_2eq.$ in the second phase;
- Pooling system: right of installations to group together and to receive a total amount of EUAs to be distributed internally.

Although the EU system has been designed to be as compatible as possible with the international regime and mindful that implementation within the EC is irrelevant for IET in the sense that AAUs cannot be obtained through the EATD, the differences between the two systems are relevant. One important distinction concerns the fact that while the EATD establishes a GHG market among 'installations', IET provides for an exchange of units between states, namely Annex B parties. In this respect, a fundamental role is played by the Central and Eastern European countries which joined the EU in 2004 and 2007. The new Member States can participate in IET and eventually sell part of their emission credits from 2008 onwards. IET therefore goes beyond the scope of the EU scheme and while installations in Central and Eastern Europe are covered by the EU system, no provisions prevent the EU15 Member States from concluding a deal

with some of the new Member States within the framework of IET in order to comply with the reduction and limitation commitments under the Kyoto Protocol. The EATD does not take away the power of the EU15 to implement IET with the new Member States.

Important aspects of the EATD are the possibility to link up with other similar schemes in third countries (Article 25 of the EATD) and the fact that it is open to emission reduction credits generated through the implementation of Joint Implementation—within the EU—and Clean Development Mechanism (CDM)—outside the EU. ERUs and CERs, respectively, are accepted for trading in the EU ETS. All reduction units, i.e., EUAs, ERUs, CERs and AAUs, are fully interchangeable under the EATD since they are all expressed in tonnes of CO_2 equivalent. In particular, Directive 2004/101/EC (Linking Directive)[17] established a direct link between the EATD and ERUs and CERs. In this respect, it also established the following limits:

- National limit on the amount of units from JI/CDM which can be traded under the EATD and which are to be defined by the national authorities on a case-by-case basis;
- Compliance with the supplementarity criteria—JI and CDM projects must be supplemental to domestic actions;
- Prohibition to implement JI and/or CDM projects concerning nuclear power as well as projects involving land use, land-use change and forestry (LULUCF);
- Limits to the implementation of JI and/or CDM projects in the hydro-electric sector;
- Prohibition of double counting of emission reductions;
- Baseline for JI projects in the ten new Member States based on the EU *acquis communautaire*.

Article 19 of the EATD requires the Member States to establish and maintain a registry aimed at ensuring the accounting of the issue, holding, transfer and cancellation of EU allowances. In order to implement the EATD, the European Commission adopted Commission Regulation (EC) No 994/2008 establishing a standardised and secured system of registries at the EU level (Registry Regulation).[18] Each installation covered by the scope of the EU ETS shall put in place an 'operator holding account' in the national registry to be used to issue and track EU allowances. Moreover, Directive 2003/87/EC established the possibility for any individual or organisation to participate in the EU ETS.[19] To this end, the Registry Regulation stipulates that any person may hold allowances and may open a holding account in a registry. The registry records the issue, transfer and cancellation of

[17] See Chap. 4, n. 118.

[18] Commission Regulation (EC) No 994/2008 pursuant to Directive 2003/87/EC of the European Parliament and of the Council and Decision No 280/2004/EC of the European Parliament and of the Council, *OJ* L 271/3, Brussels, 11 October 2008.

[19] Article 12 of the EATD.

allowances to and from EU Member States. All Member States registries are connected to the Community independent transaction log (CITL), a standardised electronic database managed by the European Commission and aimed at tracking information concerning each transaction of carbon units under the EU ETS. The CITL checks the regularity of the transfers of allowances between the registries as well as accounts and verified emissions, and is open for consultation by operators and the public. Account holders in the EU registry system can decide to transfer allowances between holding accounts in a registry or between registries. Transfers may occur only to or from a non-EU registry or the CDM registry and must comply with the Commission's provisions on mutual recognition.

On 23 January 2008, the European Commission presented a proposal for a Directive amending Directive 2003/87/EC so as to improve and extend the EU greenhouse gas emission allowance trading system. The proposal aimed at improving the EU ETS on the basis of the experience of the first two periods and at establishing a new cap for GHG emissions of EU ETS installations at 21% below 2005 levels by 2020.[20] Furthermore, the proposal included the following:

- Substitution of the national allocation plans with an EU-wide plan;
- Extension of the sectors' coverage and gases;
- Opting-out by small emitters;
- Strong focus on the auctioning of EUAs;
- More harmonised system of monitoring and reporting rules;
- More limitations on the use of JI and CDM reduction units.

In accordance with the EU co-decision procedure, agreement on the proposal between the European Parliament and the Council of the EU was reached on 12 December 2008. In respect of the original Commission proposal, the final compromise involved:

- Full auctioning for the power sector;
- Exemption from full auctioning for power stations in some Member States and to industrial sectors exposed to the risk of carbon leakage;
- Distribution of part of the revenues from auctioning to the Member States;
- Funding to finance carbon capture and storage activities.

5.5 Differences Between the EU ETS and IET

Although IET is an international mechanism functioning outside of the EU scheme, there are several links between the two carbon markets. IET and the EU ETS present several similarities in terminology, in the concept of monitoring, reporting and verification of greenhouse gas emissions and in the limits to

[20] Proposal of the Commission for a Directive of the European Parliament and of the Council amending Directive 2003/87/EC so as to improve and extend the EU greenhouse gas emission allowance trading system, COM(2008)16, Brussels, 23 January 2008.

overselling. In particular, the Member States' decisions on the cap on greenhouse gas emissions imposed on installations affect the national level of allowances in the system and therefore the extent to which the EU ETS can be considered a tool to contribute to the EC's and Member States' compliance with the limitation and reduction commitments under the Kyoto Protocol. In the case of the new Member States, the relation between the national decisions on the EU ETS and the implications at the level of IET are relevant considering the big surplus of AAUs in these countries.

The EU Bubble decision created rules and conditions regarding the responsibility of the Community and the Member States in implementing the obligations of the Kyoto Protocol but does not indicate the instruments which can be used by those actors to comply with those obligations. The EATD refers to installations and does not take away the power of the Member States, and the Community, to participate in IET, JI and CDM for reasons of compliance with the Kyoto Protocol reduction and limitation commitments. No provision under EC law precludes a Member State from acquiring AAUs from another Member State[21] or to invest, with some limitations, in JI and CDM projects. An important question arises at this point: under Community law, is there any restriction for the Member States to sell AAUs to third countries? Are the Member States free to sell to the best offer or do they have to give precedence to EU partners? It can be anticipated that from a legal point of view there may be some arguments to limit the power of the Member States to sell AAUs in the global carbon market, which is explained in Chap. 7. Nevertheless, because of the uniqueness of the participation of the Community and the Member States in the international climate regime (EU27 v. EU15) and the new concept of carbon commodities traded in the carbon market, this issue may raise a few doubts from both a political and legal viewpoint. Finally, further considerations are presented in Chap. 7 as regards the potential role which Article 10 TEC can play in this respect.

As regards the EU Member States, a clear distinction can be drawn between sellers and buyers. According to the latest data available at the time of writing regarding the level and estimation of greenhouse gas emissions in the period 2008–2012,[22] the Member States which are most likely to be net sellers are Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and the Slovak Republic. On the other hand, countries which are most likely not to be on track with the Kyoto Protocol reduction obligations in the first commitment period and thus potential buyers of reduction units are France, Italy, Greece, Portugal, Spain and Slovenia. The relationship between these two groups of countries is often based on bilateral agreements where the potential buyers set up a cooperation activity with the seller in respect of the implementation of the Kyoto Protocol, aimed, in the long term, at ensuring a privileged position as to the acquisition of

[21] As stated earlier, only Annex B parties are allowed to participate in IET.

[22] EEA (2009).

reduction units. Usually, this cooperation is based on a Memorandum of Understanding between two states, stipulating the scope and details of the activity.

The implementation of the EATD in the new Member States presents both advantages and challenges for these countries. Advantages are related to the high potential for financial revenue in the carbon market due to the sale of their GHG emission surplus. The main challenges concern the complexity of the issues regarding the implementation of the Directive and the expertise and resources needed to meet the requested deadlines as well as to fulfil the administrative requirements set by the EATD. Some of the more challenging aspects for national administrations are: the elaboration of the national allocation plans (the first due by 31 May 2004 and the second by 30 June 2006), the establishment of the legislative framework for the issuance of greenhouse gas permits and the accreditation and verification procedure, and the compliance with the annual monitoring and reporting obligations.

Another major link between IET and the EU ETS is of a technical nature, namely the electronic connection between the international transaction log established by the UNFCCC secretariat and the Community independent transaction log created by the European Commission which is intended to keep track of national and international transactions of EU allowances and Kyoto units. In accordance with the rules of the Marrakech Accords,[23] as of 1 January 2008, all Annex I parties to the UNFCCC are required to have in place a national registry and the CDM Executive Board is required to have a CDM registry. Under Community law, the Member States were obliged to establish a national registry under Article 19(3) of Directive 2003/87/EC and Article 6(1) of Decision 280/2004/EC, which should also cover the international law requirements. It is fundamental that these two systems of registries are connected in order to allow European installations to use foreign carbon credits for reasons of compliance with the EU ETS and to keep track of transactions at the national level. The link between the two systems of registries should prevent any discrepancy in carbon transaction proposals. The link became active on 14 October 2008 after all EU27 were found to be in compliance with the eligibility requirements designed under the Marrakech Accords. The question of compliance by Annex I parties with the eligibility criteria developed in accordance with Article 17 of the Kyoto Protocol is considered in Chap. 6.

While the ITL is an instrument designed to monitor all activities of Annex I parties related to the Kyoto units and to ensure that transfers and other related activities are in compliance with the rules of emissions trading under the Kyoto Protocol, the CITL is a supplementary transaction log created to monitor transactions under the EU ETS. Entities involved in the transactions of carbon units do not have direct access to the ITL or CITL; they are kept informed by the national

[23] Modalities for accounting of assigned amounts under Article 7, paragraph 4, of the Kyoto Protocol, Decision 19/CP.7, Annex, part II, section A, FCCC/CP/2001/13/Add.2, 21 January 2002.

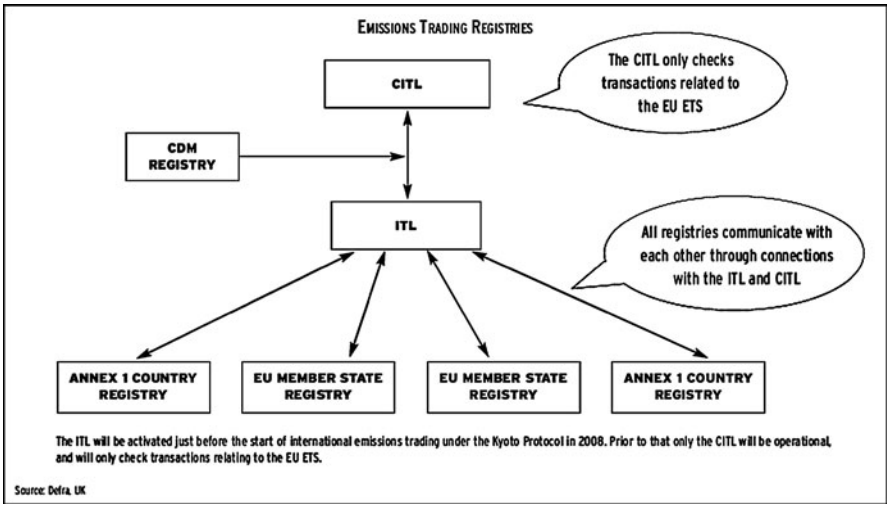

Fig. 5.1 The details of the system of registries established under IET and the EU ETS. *Source* Defra (UK)

registry via an automatic system. The ITL and the CITL check the validity of the proposals for transaction and consequently approve or reject the operation. Both transaction logs are automatically linked to the national registries so that any discrepancy between the systems is avoided. Inconsistencies are automatically communicated by the transaction logs to the administrator of the national registry concerned. All processes concerning the Kyoto units, such as regarding accounts, verified emissions, transactions and external transfers, are checked and approved by the ITL in connection with the CITL.

Figure 5.1 shows the details of the system of registries established under IET and the EU ETS.

5.6 The Other Flexible Mechanisms

Apart from International Emissions Trading (IET), the Kyoto Protocol introduced two other flexible instruments to assist Annex I parties in fulfilling the limitation and reduction commitments: Joint Implementation (JI) and Clean Development Mechanism (CDM). JI and CDM are project-based mechanisms which differ substantially from emissions trading. Emissions trading is a cap-and-trade system whereby the level of emissions is set as a precondition and entities do not invest directly in projects aimed at the reduction of greenhouse gas emissions elsewhere. JI and CDM activities are project-based, that is to say, designed and established to give public and private entities the opportunity to invest in activities directly aimed at the reduction of greenhouse gas emissions in several sectors. Reduction of

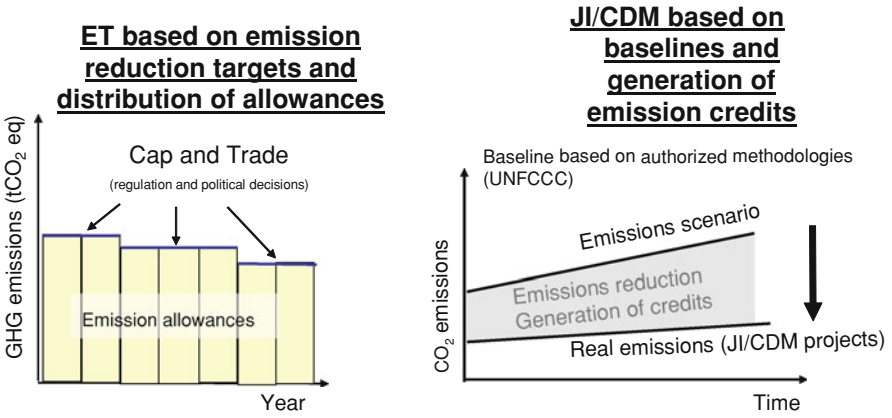

Fig. 5.2 The main differences between emissions trading and the project-based mechanisms

greenhouse gas emissions under the project-based mechanisms is calculated as the difference between a business-as-usual scenario—baseline—and the result of a specific JI or CDM activity.

Figure 5.2 highlights the main differences between emissions trading and the project-based mechanisms.

The Marrakech Accords set the rules allowing the prompt start of the Clean Development Mechanism (CDM)[24] and the progressive start of Joint Implementation (JI).[25] JI and CDM projects are based on the application of two key principles: supplementarity and additionality. Regarding supplementarity, the Kyoto Protocol and the Marrakech Accords clearly state that Annex I parties shall meet their greenhouse gas emission limitation and reduction commitments first at the domestic level and second, only in a supplemental way, via participation in the flexible mechanisms. Supplementarity is applied to both JI and CDM projects, in Article 6(1)d of the Kyoto Protocol and Decision 14/CMP.1, point 1, of the Marrakech Accords, respectively. The concept of additionality was originally introduced at the beginning of the COP negotiations and meant that project emissions below an agreed baseline could be accepted within the framework of the project-based mechanisms. The Executive Board went further than that and acknowledged that a project is eligible under the Kyoto Protocol only if the produced reduction of greenhouse gas emissions would not have taken place in the absence of such a mechanism, introducing *de facto* project additionality.[26]

[24] Modalities and procedures for a clean development mechanism as defined in Article 12 of the Kyoto Protocol, Decision 3/CMP.1, FCCC/KP/CMP/2005/8/Add.1, 30 March 2006.

[25] Guidelines for the implementation of Article 6 of the Kyoto Protocol, Decision 15/CMP.1, FCCC/KP/CMP/2005/8/Add.2, 30 March 2006.

[26] Joint Implementation Quarterly (2004).

Additionality in JI and CDM projects is expressly mentioned in the Kyoto Protocol, in Articles 6(1)b and 12(5)c, respectively.

Both JI and CDM activities can be summarised using project cycle terminology. The project cycle is divided into different phases which in the case of JI and CDM almost coincide. JI and CDM start with the design and identification of the project idea by the project developer. This is followed by the phase of validation or determination of the project design document where the details concerning the methodology used to determine the reduction of greenhouse gases is described together with other relevant details. The next phase involves the monitoring of the project activities and the verification of the achieved reductions of greenhouse gas emissions by an independent entity. Finally, reduction units are issued by the designated body of the UNFCCC (Executive Board or JI Supervisory Committee). The main difference between JI and CDM relates to JI Track 1 project activities, which require neither the involvement of a third independent entity nor that of the Supervisory Committee since verification and determination are ensured by the host Annex I party.

5.6.1 Joint Implementation

Decision 5/CP.1 adopted in 1995 at COP1 launched the pilot phase of activities implemented jointly (AIJ). During the AIJ pilot phase Annex I parties were allowed, on a voluntary basis, to invest in other countries aiming at the reduction of greenhouse gas emissions or the enhancement of greenhouse gas removal by sinks. Activities implemented jointly did not generate any reduction units that parties could validly use to comply with their reduction and limitation commitments.

Similarly to AIJ, the Kyoto Protocol introduced, in Article 6, the right of Annex I parties to meet part of their reduction and limitation commitments under the Protocol by implementing projects 'reducing anthropogenic emissions by sources or enhancing anthropogenic removals by sinks of greenhouse gases in any sector of the economy' in the territory of another Annex I party. Emission units generated through such projects are called emission reduction units (ERUs). While the term 'joint implementation' appears neither in Article 6 of the Protocol nor in the Marrakech Accords, it is often used as convenient shorthand. Regarding joint Implementation projects: (a) they must receive 'the approval of the Parties involved', (b) they must lead to emission reductions or removals that are 'additional to any that would otherwise occur', (c) parties involved in the project shall be in compliance with Articles 5 and 7 of the Protocol, and (d) the acquisition of ERUs 'shall be supplemental to domestic actions' (Article 6).

The importance of the eligibility requirements mentioned above is evident in respect of both JI and CDM procedures. On Joint Implementation, the Kyoto Protocol states in Article 6(1) that 'any Party included in Annex I may transfer to, or acquire from, any other such party emission reduction units resulting from projects aimed at reducing anthropogenic emissions by sources or enhancing anthropogenic

removals by sinks of greenhouse gases in any sector of the economy' and that such party must be 'in compliance with its obligations under Articles 5 and 7'. Furthermore, the Marrakech Accords require that 'a Party included in Annex I with a commitment inscribed in Annex B is eligible to transfer and/or acquire ERUs issued in accordance with the relevant provisions, if it is in compliance' with the eligibility requirements indicated above.[27]

The procedure for the issuance of emission reduction units under JI is different depending on the host party's compliance with the eligibility requirements. In the event that the host party is eligible for JI projects, ERUs can be transferred and issued by the national authorities (JI track 1). On the other hand, if the eligibility requirements are not met, the Marrakech Accords requires a specific procedure for the verification of ERUs before issuance and transfer (JI track 2), such as the verification of accredited independent entities (AIEs) and the approval of a supervisory body. However, in both cases, ERUs can be issued only if the host party is a party to the Kyoto Protocol, it has in place a national registry and its assigned amounts have been calculated and registered.

Joint Implementation projects are most likely to take place in Annex I parties with economies in transition (EITs), where there is room for improving the environmental performance of different sectors and activities and where the costs of reducing greenhouse gas emissions are lower than in other Annex I parties. The Marrakech Accords established the Article 6 Supervisory Committee (JISC)[28] to supervise the verification of GHG emission reductions achieved through JI projects. The JISC is responsible for, amongst others, approving JI projects under track 2, accrediting independent entities, elaborating the project design document, and reviewing and revising reporting guidelines and criteria for baseline setting and monitoring.

Projects on afforestation and reforestation ('sinks') must conform to the Protocol's wider rules on the land use, land-use change and forestry sector under Article 3(3) and (4). Annex I parties are required to refrain from using ERUs generated from nuclear energy to comply with their reduction and limitation commitments. Projects starting from the year 2000 that meet the above rules may be listed as Joint Implementation projects. However, ERUs may only be issued for periods from 2008 onwards.

Figure 5.3 shows the functioning of JI projects.

5.6.2 Clean Development Mechanism

In Article 12, the Kyoto Protocol defines the Clean Development Mechanism as an instrument designed to provide Annex I parties with the possibility to implement GHG emissions reduction projects in the territory of non-Annex I parties and to

[27] See *supra* n. 2, Annex, D, 21.

[28] Ibid., Annex C, 3.

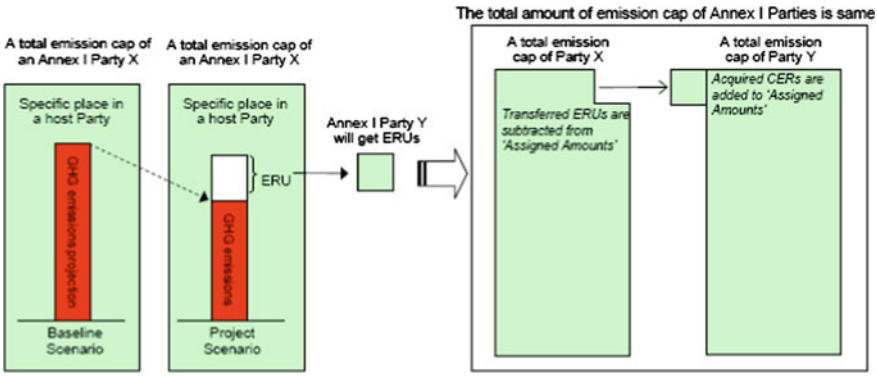

Fig. 5.3 The functioning of JI projects. *Source* IGES (2006)

generate certified reduction units (CERs) which can be used for compliance with the reduction and limitation commitments of the Kyoto Protocol. The other main objectives of the CDM are the enhancement of sustainability and the stabilisation of greenhouse gas concentrations as indicated in Article 2 of the UNFCCC. Article 12 of the Kyoto Protocol is slightly more detailed than Article 6 and refers to operational entities called upon to certify the emission reductions generated by the specific project. Participation in CDM projects is voluntary, and the reduction of GHG emissions must be real and measurable with long-term benefits to mitigate climate change. The principle of additionality is mentioned in Article 12(5)c.

At COP 7 in Marrakech, the parties agreed on the prompt start of CDM projects, as well as on the election of the Executive Board which acts as supervisor and is responsible for the approval of CDM projects and for the accreditation of the designated operational entities (DOEs).[29] Furthermore, the EB must, amongst others, report to COP/MOP, approve the methodologies for calculating CERs, develop simplified procedures for fostering small-scale projects, and develop and maintain the CDM registry. Certified emission reductions can be generated as from the year 2000.

Different from JI, the CDM instrument has been fully developed since 2000. Since the start of the negotiations on the Kyoto Protocol, the parties to the UNFCCC were clearly in support of the introduction of this mechanism, which should contribute to the promotion of sustainable development and the transfer of 'green' investment and technology from the developed world to the developing countries.[30] With the Marrakech Accords, the rules on CDM projects became operational and the Executive Board was put in place.

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[29] Ibid., Section C, 5.

[30] In 1997, Brazil presented a proposal for the creation of a 'clean development fund' financed by the financial penalties to be paid by Annex I parties in non-compliance with the Kyoto Protocol obligations. At COP3, the Brazilian proposal was converted into the current clean development mechanism.

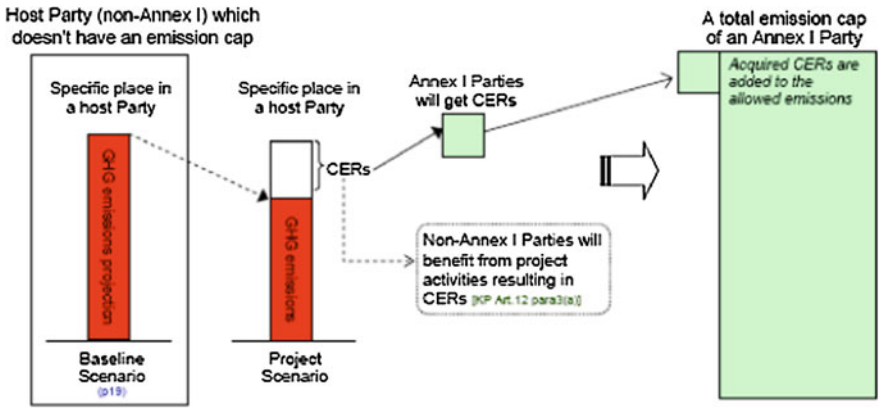

Fig. 5.4 The functioning of CDM projects. *Source* IGES (2006)

Similar to the JI procedure, CDM projects must go through a validation process before CERs can be effectively issued. CDM projects must be approved first by the designated national authority (DNA) in the host country and later by the Executive Board. The designated operational entities (DOEs) validate and verify the project activities.

Figure 5.4 shows the functioning of CDM projects.

5.6.3 JI and CDM Projects in the EU

At the European level, the importance of JI and CDM projects is twofold: on the one hand, reduction credits obtained through the implementation of these project-based mechanisms can be used by the Member States and the Community to comply with the reduction and limitation commitments under the Kyoto Protocol. On the other hand, installations covered by the EU ETS are allowed to use these reduction units in order to comply with the reduction obligations of Directive 2003/87/EC. In this respect, the Kyoto Protocol allows the legal entities to participate in JI and CDM. Article 6(3) the Kyoto Protocol states that an Annex I party 'may authorize legal entities to participate, under its responsibility, in actions leading to the generation, transfer or acquisition' of ERUs. By the same token, under Article 12(9), 'participation under the clean development mechanism […] in the acquisition of certified emission reductions, may involve private and/or public entities, and is to be subject to whatever guidance may be provided by the executive board of the clean development mechanism.' Participation of legal entities in JI and CDM projects is ensured through a Letter of Approval issued by the designated national authority of the host party, certifying the compliance by the proposed project activity with the national rules on environmental protection and the JI/CDM project approval criteria.

As regards the legitimacy of installations using emission reduction units generated by JI and CDM projects within the EU ETS, Directive 2003/87/EC already acknowledged, in Article 30(3), that these reduction units 'will be recognized for their use in this scheme subject to provisions adopted by the European Parliament and the Council on a proposal from the Commission, which should apply in parallel with the Community scheme in 2005.' This provision is the Commission proposal for the Linking Directive[31] whose adoption was delayed because of the major concerns raised by the European institutions, the industrial sector and environmental organisations regarding the need to safeguard the environmental integrity and effectiveness of the EU ETS. Allowing emission reduction units generated in third states would require a specific procedure to ensure that the quality of those GHG emissions reductions is at the same level of the EUAs traded within the EU. Directive 2004/101/EC amending Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community, in respect of the Kyoto Protocol's project mechanisms, was adopted on 27 October 2004 and established a direct link between Emission Reduction Units (ERUs) and Certified Emission Reductions (CERs) and the European emissions trading system.[32]

An indirect link between the EU ETS and the project-based mechanisms existed already before the adoption of Directive 2004/101/EC, since the EATD is based on the decisions of the national authorities which set the cap of GHG emissions for the sectors covered and therefore the quantity of EUAs in the market. The decisions of the Member States also depended on their national programme and actions for the acquisition of ERUs and CERs aimed at compliance with the Kyoto Protocol limitation and reduction commitments. Consequently, the EU ETS was already affected by the trading of those units at Member States' level before the adoption of the Linking Directive.[33] Several reasons justified the adoption of the Linking Directive, among which the need for legal certainty in respect of these innovative instruments and the necessity to create more compliance options for installations covered by the EATD. Finally, the need to increase the liquidity of the carbon market and the demand for JI and CDM projects was also taken into consideration.

Directive 2004/101/EC allowed for the use of CERs (CDM) and ERUs (JI) in the EATD. No formal limitation to the quantity of units to be included in the EATD is stipulated by the Linking Directive but governments were required to consider the issue of supplementarity by 2007 in order to apply new rules in the second phase of the EU ETS.

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[31] Proposal of the Commission for a Directive of the European Parliament and of the Council amending the Directive establishing a scheme for greenhouse gas emission allowance trading within the Community, in respect of the Kyoto Protocol's project mechanisms, COM(2003)403, Brussels, 23 July 2003.

[32] See Chap. 4, n. 118.

[33] Lefevere (2005).

Credits generated by CDM and JI projects could be used by operators under the EU ETS: from 2005 onwards and from the initial five-year period (2008–2012), and for each subsequent five-year period, respectively. The use of CERs and ERUs from project activities is allowed through the 'issue and immediate surrender of one allowance by the Member State in exchange for one CER or ERU held by the operator in the national registry of its Member State.' The quantity of CERs and ERUs to be used by the installations must not exceed 'a percentage of the allocation of allowances to each installation, to be specified by each Member State in its national allocation plan for that period.'[34] These specific provisions on supplementarity shall be included in the NAPs for the second phase of the EU ETS (2008–2012), notably a percentage limit to the use of ERUs and CERs by European installations.

With regard to projects aimed at the reduction of greenhouse gas emissions by nuclear facilities, in line with the decision in the Marrakech Accords,[35] the Linking Directive prohibits the use by the Member States of CERs and ERUs resulting from these types of projects.[36]

Furthermore, Directive 2004/101/EC prohibits the use by the Member States of CERs and ERUs resulting from land use, land-use change and forestry activities (LULUCF) to comply with the EU ETS.[37] The exclusion of LULUCF credits from JI and CDM projects within the EU carbon market is mainly due to the uncertainty at the international level regarding the scope and accounting of GHG emission removals in this sector. Furthermore, on issues such as non-permanence, additionality and leakage of LULUCF projects, no full consensus had been reached at the international level at the time of the adoption of Directive 2004/101/EC.[38]

Directive 2004/101/EC also limits the possibility to use CERs and ERUs generated by hydro-power projects. Projects on hydro-electric power production with a generating capacity exceeding 20 MW shall comply with all 'relevant international criteria and guidelines, including those contained in the World Commission on Dams.'[39]

Furthermore, for projects developed in the EU the Linking Directive introduced an additional burden on the project cycle in order to ensure that JI and CDM project-related activities are in compliance with Community law. While the compliance by JI and CDM projects with the international criteria is ensured by the procedure in the Marrakech Accords, especially the decision of an independent

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[34] Article 1(2) of Directive 2004/101/EC.

[35] See *supra* n. 2, J.2 Guidelines for the implementation of Article 6 of the Kyoto Protocol, and 3. Modalities and procedures for a clean development mechanism as defined in Article 12 of the Kyoto Protocol.

[36] Preamble 8 and Article 1 of Directive 2004/101/EC, new Article 11a(3)(a) of Directive 2003/87/EC.

[37] Article 1(2) of Directive 2004/101/EC, new Article 11a(3)(b) of Directive 2003/87/EC.

[38] Preamble 9 recalling Decisions 15/CP.7 and 19/CP.7 of the Marrakech Accords.

[39] Preamble 14 and Article 1(2) of Directive 2004/101/EC, new Article 11b(6) of Directive 2003/87/EC.

body (with the exception of JI track I where no independent entity is involved in the project cycle), the Linking Directive imposes on the host country the burden of proof as to the compliance by a project implemented in the EU with Community law. Therefore, Member States, 'when approving such project activities', will be responsible for ensuring that the project concerned complies with the rules set by the Linking Directive.[40] This is ensured by the Letter of Approval issued by the national Designated Focal Point (DFP) which certifies the compliance by the project activity with related national legislation.[41]

5.7 JI and CDM in Central and Eastern Europe

Although the main supply of Kyoto units to the EU ETS comes from CDM projects, the role of JI projects in the EU is of particular interest when considering the role of new and old Member States in this context. In the EU, Malta and Cyprus are non-Annex I parties and therefore eligible for CDM projects, although the CDM potential in these two countries is rather low.[42] The other EU Member States, included in Annex I of the Convention and party to the Kyoto Protocol, are eligible for hosting JI projects. Nonetheless, since the introduction of the AIJ pilot phase and the project-based mechanisms, the difference between the EU15 and EU10 has been considerable in terms of attractiveness for hosting JI projects. The EU15 are among those Annex I parties that need to invest in JI and CDM projects in order to meet their limitation and reduction commitments under the Kyoto Protocol. On the other hand, the EU10 offer a potentially suitable environment for hosting projects aimed at the reduction of greenhouse gas emissions. For instance, there is an adequate legislative and institutional framework based on the requirements of the Marrakech Accords, the marginal costs for the abatement of GHG emissions are lower, there is a great deal of potential for innovation and investment, and, finally, favourable historical and diplomatic ties exist with many of the EU15. For years, the attractiveness of the EU10 for hosting JI projects was translated into governmental decisions by the EU15 to invest in and support the

[40] For projects on hydro-power, see Article 1(2) of the Linking Directive, new Article 11b(6) of Directive 2003/87/EC; for compliance with the *acquis communautaire* see Article 1(2) of the Linking Directive, new Article 11b(1) of Directive 2003/87/EC; for nuclear activities see Article 1(2) of the Linking Directive, new Article 11a(3)(a) of Directive 2003/87/EC; for LULUCF activities see Article 1(2) of the Linking Directive, new Article 11a(3)(b) of Directive 2003/87/EC.

[41] In the Netherlands, the project developer is required by the DFP to issue a declaration that the specific requirements are met, i.e., the international rules agreed under the Kyoto Protocol and the Marrakech Accords or the recommendations of the World Commission on Dams. See Decree of 13 April 2006, Netherlands National Guidelines and Procedures for Approving Article 6 Projects, Including the Considerations of Stakeholders, Staatscourant/79, 24 April 2005.

[42] At the time of writing there are 8 projects in the pipeline in Cyprus (wind and agriculture) and 1 in Malta (landfill flaring).

new Member States in the development of JI projects through the exchange of ERUs. By the date of accession to the EU, this favourable situation had changed, and the attractiveness of the new Member States towards JI projects has reduced considerably.

As mentioned above, JI and CDM projects are required to meet a specific set of procedural rules under international law in order to be able to generate ERUs and CERs respectively. Under Community law, the Linking Directive established a number of additional rules and limitations regarding the use of ERUs and CERs by installations in the European carbon market. Firstly, Directive 2004/101/EC fully recognizes the international rules on project eligibility, namely the obligation for Annex I parties to comply with the relevant guidelines, modalities and procedures adopted pursuant to the UNFCCC and the Kyoto Protocol.[43] Furthermore, the Community introduced an additional filter for JI and CDM reduction credits. In other words, the EC decided that emission reduction credits generated by project-based mechanisms had to comply not only with the international rules but also with stricter EU rules aimed at ensuring the effectiveness and environmental integrity of the EU ETS. Furthermore, an additional reason for the stringency of the Linking Directive was the uncertainty around JI project rules and institutions at the international level at the time the Linking Directive was negotiated and adopted.[44]

In particular, the Linking Directive established two major specific requirements for the implementation of JI and CDM projects which have negatively affected the attractiveness of new Member States in this respect. These are the obligations for the new Member States to comply with the *acquis communautaire* and the double-counting rule.

According to preamble 11 and Article 1(2) of Directive 2004/101/EC—new Article 11b(1) of Directive 2003/87/EC—full implementation of the *acquis communautaire* guides the calculation of the baseline emissions of a project. In other words, activities and projects aimed at the reduction of greenhouse gas emissions in the new Member States which would have occurred anyway because of compliance with the EU environmental legislation cannot qualify as JI projects under the international rules. These projects would fail to pass the additionality test. For this reason, the emission reduction potential of JI projects implemented within the EC has declined and therefore the new Member States have become less attractive for hosting JI projects. On the other hand, the EU approximation process has contributed to advancing the quality of environmental legislation, capacity building and financial opportunities in these countries. As regards EU legislation directly and indirectly concerning the fight against climate change, the new Member States negotiated with the EU a few transitional arrangements allowing these countries additional time for the implementation of the following provisions:

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[43] Article 1(2) of Directive 2004/101/EC, new Articles 11a(3) and 11b(5) of Directive 2003/87/EC.

[44] While the Marrakech Accords opened the way to a prompt start of CDM projects, the JISC was elected in late 2005 and JI credits cannot be issued before 2008.

- Directive 96/61/EC concerning integrated pollution prevention and control: Latvia and Poland (2010), Bulgaria, Slovak Republic and Slovenia (2011), Romania (2015);
- Directive 2001/80/EC on the limitation of emissions of certain pollutants into the air from large combustion plants: Hungary (2004), Malta (2005), Czech Republic and Slovak Republic (2007), Romania (2013 and 2016–2017), Bulgaria (2014), Estonia and Lithuania (2015), Poland (2017);
- Directive 94/63/EC on the control of volatile organic compound (VOC) emissions resulting from the storage of petrol and its distribution from terminals to service stations: Malta (2004), Poland (2005), Estonia (2006), Lithuania and Slovak Republic (2007), Latvia (2008), Bulgaria and Romania (2009);
- Directive 2000/76/EC on the incineration of waste: Hungary (2005), Slovak Republic (2006);
- Directive 1999/31/EC on the landfill of waste: Poland (2012), Romania (2017).

The differences in the timeframe for the transposition of the above-mentioned Directives may lead to a certain unbalance among the new Member States in terms of potential for hosting JI projects. This is particularly true of the legislation that directly or indirectly affects the level of greenhouse gas emissions in the Member States, i.e., the IPPC Directive, since in this case a transition period may provide some room for potential JI projects that have passed the additionality test under international rules.

Furthermore, other parts of the *acquis communautaire* may also be of particular relevance for the new Member States in terms of potential reduction of the room for implementation of JI projects in the region. These concern antitrust and state aid legislation, as well as the freedom of establishment (Article 43 TEC) and competition rules. These aspects will have to be considered by the new Member States when implementing JI projects, in particular the Commission guidelines on environmental state aid.[45] On the other hand, compliance by the new Member States with the EU rules could enhance legal and institutional stability in these countries, as well as improve the level of efficiency of the national energy systems.[46]

Finally, Directive 2004/101/EC regulates the issue of double counting when linking the project-based mechanisms with the EU ETS. The Linking Directive ensures that emission reductions generated either by JI or by CDM are not counted and issued twice in the EU: once as a surplus of EUAs and once as ERUs or CERs generated by a single project. The double-counting rule applies to both direct and indirect emission reductions in EU ETS installations, respectively, i.e., project activities undertaken within the Community territory which affect the level of emissions of one or more EU ETS installations (direct) or those which affect the overall level of GHG emissions of the EU ETS installations (indirect).[47] While in

[45] Community guidelines on state aid for environmental protection, (2001/C 37/03), *OJ* C 37/3, Brussels, 3 February 2001.

[46] Fernandez Armenteros and Massai (2005), pp. 426-427.

[47] Article 1(2) of Directive 2004/101/EC, new Article 11b(3)(4) of Directive 2003/87/EC.

the event of direct double counting the project activities reduce the level of emissions of one or more EU ETS installations, e.g., in the case of fuel switching in a district heating plant, and the project is usually implemented anyway because of the financial benefit deriving from the reduction of emissions, the general level of GHG emissions of the country is reduced but it is impossible to identify the EU ETS installations directly affected. This is the case, for instance, with a renewable energy project whose electricity production is connected with the electricity grid. The main part of the potential of JI and CDM projects within the EU is therefore related to sectors and gases not covered by the EU ETS, that is to say, for instance, to projects in the chemical industry (N_2O), agriculture, forestry, and to small-scale projects concerning renewable energy not connected to the grid.

Specific rules to avoid double counting were issued by the European Commission on 13 November 2006 (Decision 2006/780/EC).[48] According to this Decision, in case of direct reduction of greenhouse gas emissions from project activities, the operator of the installation from which the CERs and ERUs originate is responsible for cancelling such units from its account in the national registry. In the event of indirect reduction, the Member States where the project is implemented are required to cancel CERs or ERUs from their national registry. According to Commission Decision 2006/780/EC, each Member State hosting project-based mechanisms shall establish in the NAPs a set-aside table listing existing and planned JI/CDM projects[49] in order be able to issue ERUs and CERs, respectively, in the event that GHG emission reductions are effectively achieved through the JI and CDM.

There are various EU Member States' initiatives to stimulate investments in JI and CDM. These may be national programmes establishing tendering procedures for the implementation of JI and CDM projects, such as the ERUPT and CERUPT programmes in the Netherlands, Denmark, Finland and Sweden. Other Member States have adopted a different strategy, based on the establishment of a carbon fund, often within the framework of the World Bank's Prototype Carbon Fund, through which public and private actors invest financial resources and, in return, obtain emission reduction units, such ERUs and/or CERs. Italy, Spain and Germany, among others, decided to establish a carbon fund.

The participation of the new Member States in IET is strongly related with JI as on the basis of these two key instruments national climate policies are defined. Several new Member States have not disclosed their policy yet in terms of use of AAUs under IET and will probably postpone any decision or deal regarding AAUs to the very last moment, that is to say, to the end of the Kyoto Protocol's first commitment period (2012). In the meantime, a fair number of countries are already considering selling AAUs in the context of a Green Investment Scheme

[48] Decision 2006/780/EC on avoiding double counting of greenhouse gas emission reductions under the Community emissions trading scheme for project activities under the Kyoto Protocol pursuant to Directive 2003/87/EC, *OJ* L 316, 16 November 2006, Brussels, p. 12.

[49] Preambles 8 and 9 and Article 3 of Commission Decision 2006/780/EC.

(GIS), a programme which aims at using profits generated by AAUs trading to finance GHG emission reduction projects. The GIS is an instrument originally created by the Russian Federation and is not mentioned in the Kyoto Protocol, nor in any other source of international law. The GIS usually takes the form of a bilateral agreement (MoU) between two states. So far, the Slovak Republic is the first Annex I party which has concluded a freestanding AAU deal.

Ukraine and Russia play a key role as JI host countries, in terms of both AAU surplus available in the first commitment period and attractiveness for GHG emission reduction projects. These countries are two important competitors for the new EU Member States as regards potential for hosting JI projects. First, Ukraine and Russia have solid economic relationships with both the EU as a regional organisation and the Member States, to which they supply significant amounts of gas. More importantly, Russia and Ukraine are not required to comply with EU legislation and therefore maintain a threshold regarding project baseline and additionality which is different from that of the new Member States. In respect of JI projects, Russia established, in 2006, both a national registry and an inventory system for GHG emissions. The legislative procedure for introducing JI project approval criteria as an amendment to the existing investment legislation was launched in 2006.[50] In Ukraine, JI approval criteria have been established. Ukraine has a great potential for the development of JI projects, in particular regarding coal mine methane, energy efficiency, district heating and cogeneration, as well as biomass. Nevertheless, Romania and Bulgaria remain among the most attractive countries in terms of JI potential.[51] This is mainly due to the structural lagging behind of the national energy system in these countries and therefore to the large potential to attract investments in energy efficiency and renewable energy projects. Another important factor is the timing of the accession of these two countries to the EU, namely 1 January 2007. Since the compliance with the *acquis communautaire* by the new EU Member States contributed to setting the baseline for calculating additionality at a very high level, Romania and Bulgaria benefited from the late accession in comparison with the other new Member States as far as the implementation of JI projects is concerned.

5.8 Conclusions

The Kyoto Protocol has introduced a certain level of international flexibility in the compliance by Annex I parties with the quantified emission limitation and reduction commitments (QELRCs). The flexible mechanisms introduced by the Kyoto Protocol are: emissions trading, joint implementation and clean development mechanism. Emissions trading is a cap-and-trade mechanism while JI and

[50] Already in 2005, 30 JI projects were issued a Letter of Endorsement in Russia. See Point Carbon, JI/AAU Host Country Ratings, Russia, 2006, available at: http://www.pointcarbon.com.

[51] See Point Carbon, JI/AAU Host Country Ratings, 2006, http://www.pointcarbon.com.

CDM are project-based mechanisms. Both sets of instruments are addressed to public and private entities with the aim of offering Annex I parties the possibility to invest resources in order to reduce GHG emissions and acquire emission reduction units abroad. The international flexible mechanisms are interlinked with the EU emissions trading system which covers the major part of industrial installations in Europe and is considered by the European institutions as one of the main tools to contribute to the GHG emission limitation and reduction commitments under the Kyoto Protocol.

The EU Member States and the Community have the right to participate in the flexible mechanisms for reasons of compliance with the limitation and reduction commitments under the Kyoto Protocol. Many EU15 make use of these mechanisms and to this end have already established programmes and funds to promote public and private investments. In respect of emissions trading, these countries can offer a large part of their GHG emissions surplus in competition with other Annex I parties, notably Ukraine and the Russian Federation. Regarding JI and CDM projects, the new Member States are suitable for hosting them since there is wide potential for innovation in the energy and environmental sector. The same applies at the level of installations covered by the EU ETS, though with some limitations.

The accession of the new Member States to the EU has substantially reduced the potential for JI and CDM projects in these countries at the state level and has also limited the possibility for installations in the EU15 to use reduction credits from JI and CDM to comply with Directive 2003/87/EC. JI and CDM GHG emission reduction activities in the new Member States have been reduced mainly as a result of two rules introduced with the EU accession: the obligation for the new Member States to comply with the *acquis communautaire* and the double-counting rule under the Linking Directive (2004/101/EC). JI and CDM activities aimed at the reduction of greenhouse gas emissions in the new Member States which would have occurred anyway due to the compliance with EU environmental legislation cannot qualify as JI projects under the international rules. This is established by the principle of additionality which reduces the emission reduction potential of JI projects implemented in the Community. Finally, the Linking Directive introduced the double-counting rule aimed at preventing that emission reductions generated by JI and CDM projects are counted and issued twice in the EU ETS: once as a surplus of EUAs and once as ERUs or CERs generated by a single project. The double-counting rule excludes the possibility of implementing JI and CDM projects in the EU in the sectors covered by the EU ETS, thus leaving room for JI and CDM activities relating to sectors and gases not covered by Directive 2003/87/EC.

Part II

Chapter 6
EC Compliance with the International Climate Regime

In this chapter, the requirements and obligations of Annex I parties under the international climate regime are considered, with a particular focus on the compliance with those obligations by the European Community as well as by the EU15 and EU10. The status of compliance with the obligations under the Kyoto Protocol by the EC and the Member States and the consequences of non-compliance at both international and European law level are assessed. Furthermore, this chapter focuses on the EC legislation adopted to comply with the international obligations of the international climate regime and on the remedies procedure designed by the EC Treaty.

In particular, the key issue tackled here is the responsibility of the EC and the Member States in the event of non-compliance with the obligations created by the international climate regime. The analysis of the status of the EC and the Member States in the participation in the international climate regime as well as of the nature and implications of the EU's joint commitment is a step necessary to determine the consequences of those parties' failure to comply with the international climate regime. In this regard, this chapter intends to clarify the special nature of the EC's and the Member States' commitment in the Kyoto Protocol and its applicability under international and European Community law. This study will serve as a basis for developing the final conclusions concerning the possibility to apply the EC law infringement procedure as a major remedy against the Member States in the field of climate policy.

6.1 The Non-Compliance Regime of the Kyoto Protocol

In international law, the difference between the terms implementation, compliance and enforcement is not always that clear and distinct. While the Vienna Convention on the Law of Treaties of 1969 is explicit in its definition of the concept of implementation of a treaty by establishing the principle of *pacta sunt*

L. Massai, *The Kyoto Protocol in the EU*, DOI: 10.1007/978-90-6704-571-1_6,

servanda,[1] the terms compliance and enforcement cover a wider concept. According to Wolfrum (1999), compliance with an international agreement implies the adoption of specific domestic legislation, as well as administrative procedures required for the implementation of the treaty at the national level. Enforcement is considered the bulk of measures adopted by a state to comply with the obligations established by an international treaty.

Non-compliance in international law is therefore considered as the situation where a party to an international treaty, in this case a multilateral environmental agreement, is in breach of the obligations and requirements established by that agreement. The question of material breach of a treaty is regulated in Article 60 of the Vienna Convention on the Law of Treaties. Material breach of a treaty consists in repudiation of a treaty or violation of a provision necessary for the achievement of the object or purpose of a treaty. The legal doctrine regarding the non-compliance systems of the most common multilateral environmental agreements (MEA) is quite wide and comprehensive.[2]

In general, there are two main ways in which rules and obligations created by MEAs can be enforced by parties. First of all, the settlement of disputes among parties over the interpretation or application of MEAs is usually addressed directly in the treaty by a specific clause. MEAs include a specific article urging parties to settle the dispute by recourse to a traditional dispute settlement mechanism,[3] that is to say, in accordance with Article 33 of the UN Charter, either through bilateral or multilateral negotiations or by using the dispute settlement system of the International Court of Justice and international arbitration.[4] This 'typical mix' as defined by Bothe (1996) is aimed at matching binding with non-binding decisions, as well as mediation with adjudication.[5] This method is not tailored to specific situations, which also explains why articles about the settlement of disputes are often rather general and adaptable to different MEAs. In practice, in the settlement of their disputes, states usually seek to find a solution first via 'diplomatic' methods, such as negotiation or another peaceful means, and secondly by 'judicial' or 'arbitral' means, namely international adjudication, conciliation and/or arbitration. Articles on the settlement of disputes in MEAs, especially the part concerning

[1] 'Every treaty in force is binding upon the parties to it and must be performed by them in good faith' (Article 26).

[2] For a comprehensive analysis of dispute settlement and enforcement provisions in international environmental law, see Bothe (1996), Beyerlin et al. (2006) and Treves et al. (2009).

[3] This model is not adopted in the same way by all MEAs though. However, the following MEAs include the most comprehensive version of the model: the Vienna Ozone Convention (Article 11), the Convention on Biological Diversity (Article 27), the UNFCCC (Article 14), the LRTAP Convention (4 protocols), the Rotterdam PIC Convention (Article 20) and the Stockholm POPs Convention (Article 18).

[4] 'The parties to any dispute, the continuance of which is likely to endanger the maintenance of international peace and security, shall, first of all, seek a solution by negotiation, enquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or arrangements, or other peaceful means of their own choice' (Article 33).

[5] Bothe (1996), p. 31.

compulsory adjudication, are used only seldom, for various reasons. First of all, in many cases (for instance, under Article 14.2 UNFCCC), with regard to judicial or arbitral means, parties are required to submit a declaration recognising the compulsory effect of that settlement, and practice has shown that states are very hesitant to do so.[6] Secondly, parties to environmental agreements are often reluctant to engage in 'confrontational' disputes with other states. Thirdly, as mentioned by Treves (2009), dispute settlement procedures are often 'inefficient' since they do not include a compulsory mechanism.[7] Finally, in particular in the latest generation of MEAs, parties often prefer specific and more tailored non-compliance mechanisms applying without prejudice to the operation of the settlement of disputes.

The second method to seek enforcement of MEAs consists in establishing an *ad hoc* non-compliance mechanism or procedure, namely a specialised body or committee responsible for addressing cases of non-compliance as a result of the wrongful interpretation and application of a treaty by parties. The reason why the second method has developed to such an extent in the most recent environmental agreements is mainly due to the fact that MEAs have become more and more detailed and complex and the need for parties to rely on efficient and strong enforcement mechanisms has increased. In this respect, the main goal and task of the non-compliance mechanisms is to ensure and restore compliance by parties with the main treaty obligations throughout the years or commitment periods. These systems are tailored to specific treaty regimes and are intended to address cases of non-compliance by parties with the rules and obligations of an MEA. The most discussed and complex non-compliance mechanisms in international environmental law are: the system created by the Montreal Protocol on Substances That Deplete the Ozone Layer (1987), the non-compliance mechanisms of the Kyoto Protocol (1998) and the regime under the Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (1998). All these systems provide for the suspension of specific rights and privileges in the event of non-compliance by parties with the treaty. The system introduced by the Montreal Protocol, in Article 8, was the first *ad hoc* non-compliance regime established within the framework of an MEA. Under Annex V, the Montreal Protocol provides for the suspension of 'specific rights and privileges under the Protocol' as one of the measures that may be adopted by the Meeting of the Parties in the case of non-compliance with the Protocol.[8] In addition, both procedures introduced by the Kyoto Protocol and the Aarhus Convention provide for the suspension of, respectively, the eligibility to participate in specific flexible mechanisms and the special rights and privileges accorded to the party concerned. In particular, the Aarhus Convention for the first time introduced the possibility also for non-state actors, such as public citizens and

[6] Treves (2009), p. 502.

[7] Ibid., p. 517.

[8] Annex V(c) of the Montreal Protocol on Substances That Deplete the Ozone Layer, Protocol to the Vienna Convention for the Protection of the Ozone Layer.

environmental non-governmental organisations (NGOs), to trigger its non-compliance procedure. This function is usually available only to the bodies created by an MEA or to the parties.[9] The proliferation of specialised non-compliance mechanisms within MEAs is accompanied by so-called 'enabling provisions or clauses', i.e., articles included in the text of the treaty that allow the parties to give a mandate to the conference or meeting of the parties (COP or COP/MOP) to design the rules of a non-compliance mechanism as well as the procedure regarding the enforceability of that mechanism.[10] This type of legislative power has been used by the COP and/or MOP in most of the recent MEAs. This power is also provided for by the Montreal Protocol which, in Article 8, invites parties to 'consider and approve procedures and international mechanisms for determining compliance with the provisions of this Protocol and for treatment of Parties found to be in non-compliance'. Another example is the non-compliance procedure of the Kyoto Protocol adopted by the parties through a COP/MOP decision on the basis of Article 18 of the Protocol.[11] According to Fitzmaurice, the Kyoto Protocol is a 'special case' where it concerns the importance and interconnection between 'the legal character of decisions taken' concerning the flexible mechanisms (Articles 6, 12 and 17 of the Protocol or 'enabling clauses') and 'the legal character of decisions' concerning the non-compliance procedure (Article 18 of the Protocol or 'pure enabling clause').[12]

The non-compliance system of the Kyoto Protocol is a mechanism designed to address cases of non-compliance by parties with the obligations established under the international climate regime. The rules and procedures of this mechanism were agreed by the parties in Marrakech (COP7, 2001) and adopted at the first session of COP/MOP in 2005.[13]

Besides by the non-compliance mechanism, the enforcement of the Kyoto Protocol rules is ensured by the international bodies described in Chap. 3, i.e., the secretariat of the UNFCCC located in Bonn, the annual meetings of the Conference of the Parties (COP)—the supreme body of the UNFCCC responsible for the implementation and application of the agreement—together with COP/MOP and the subsidiary bodies (SBI and SBSTA). Furthermore, the complex and efficient monitoring and reporting system established by the UNFCCC and the Kyoto Protocol, and confirmed by the decision of COP7, is an additional tool aimed at

[9] This element is also provided for in the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo 1991), Article 14b.

[10] See, for instance, Article 18 of the Kyoto Protocol and Article 8 of the Montreal Protocol.

[11] 'The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session, approve appropriate and effective procedures and mechanisms to determine and to address cases of non-compliance with the provisions of this Protocol, including through the development of an indicative list of consequences, taking into account the cause, type, degree and frequency of non-compliance. Any procedures and mechanisms under this Article entailing binding consequences shall be adopted by means of an amendment to this Protocol'.

[12] Fitzmaurice (2009), p. 463.

[13] See Chap. 5, n. 4, pp. 92–103.

facilitating the application and implementation of the international requirements set by the Kyoto Protocol.

6.1.1 Legal Basis and Amendment Dilemma

The legal basis for the adoption of Decision 27/CMP.1 is Article 18 of the Kyoto Protocol.[14] Article 18 of the Kyoto Protocol mandates COP/MOP1 to adopt the rules and procedures of this regime in the form of an amendment to the Kyoto Protocol. Furthermore, Article 18 of the Protocol (second part) stipulates that 'any procedures and mechanisms under this Article entailing binding consequences shall be adopted by means of an amendment to this Protocol'. At the time of writing, the Kyoto Protocol has not been amended in this respect and considering the negotiations which contributed to the adoption of the Marrakech Accords and the distance between the positions of the parties regarding this specific item, it is reasonable to assume that by the end of the first commitment period the Kyoto Protocol will not have been amended.[15] Scholars, international lawyers and practitioners dealing with climate change policy refer to this issue as the *amendment dilemma*. In strict legal terms, there is not much to be debated. Article 18 second part is clear and binds the consequences for non-compliance to the amendment of the Protocol. Since the latter has not been amended, consequences for non-compliance under the Kyoto Protocol are not legally binding.[16] Different is the consideration on the effects of those consequences on Parties in non-compliance. Does the procedure for the adoption of the non-compliance regime affect the effective legal force of the consequences of non-compliance by the parties with the Kyoto Protocol obligations? In other words, is it reasonable to imagine a party to the Kyoto Protocol invoking this incongruence as a ground for the inapplicability of a decision of the Compliance Committee? In order to answer this question, it is important to remember that the majority of the non-compliance regimes in the modern MEAs have been adopted by means of a decision of the COP/MOP or a similar body, although the binding force of a COP/MOP decision is questionable according to some scholars.[17] The reason behind this choice is to some extent

[14] 'The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session, approve appropriate and effective procedures and mechanisms to determine and to address cases of non-compliance with the provisions of this Protocol, including through the development of an indicative list of consequences, taking into account the cause, type, degree and frequency of non-compliance. Any procedures and mechanisms under this Article entailing binding consequences shall be adopted by means of an amendment to this Protocol' (Article 14 of the Kyoto Protocol).

[15] On compliance, SBI27, held in Bali from 3 to 14 December 2007, simply agreed to continue discussing the issue of amending the Kyoto Protocol at SBI28. See also Lefeber (2001).

[16] Holtwisch (2006), pp. 109 et seq. and Fitzmaurice (2009).

[17] Sands (1996) and Temple Lang (1986).

related to the fact that for some states the amendment of a treaty would have required a long and complex procedure in accordance with specific constitutional requirements. This could have created a situation where not all parties to the Protocol would have ratified that amendment at the same time and, above all, where not all parties would have ratified it after all. Decisions are adopted by COP and/or COP/MOP by consensus and therefore the non-compliance regime of the Kyoto Protocol adopted by COP/MOP1 is based on the expression of consent to be bound by this decision by all parties that have ratified the Kyoto Protocol. It cannot be denied that the clarity of Article 18 of the Protocol limits the binding effect on parties of decisions about consequences of non-compliance adopted by the enforcement branch. However, the fact that states agree on a COP/MOP decision seems sufficient to conclude that those states are bound by its consequences from a 'political' and 'moral' point of view. In this respect, and also taking into consideration the reality of the negotiations under the international climate regime, it may be concluded that amending the Kyoto Protocol is not necessary to give the non-compliance mechanism its strong political character, unless a party at the level of COP/MOP does not expressly refer to the text of Article 18 of the Protocol in order to invoke the lack of legally binding force of the consequences of the non-compliance regime.[18]

6.1.2 Organisation

The non-compliance regime of the Kyoto Protocol involves a Compliance Committee, a facilitative branch and an enforcement branch.

The Kyoto Protocol's non-compliance mechanism is based on specific procedures which can lead to hearings and eventually to consequences for parties in non-compliance with the international obligations. Consequences of non-compliance entail not only recommendations and suspension of international assistance or of specific rights of the state concerned, as is usually foreseen in many existing international environmental regimes. The non-compliance regime of the Kyoto Protocol also includes decisions which may affect the extent of the international commitments towards the reduction of greenhouse gas emissions by parties in the commitment periods after 2012.

The main task of the Compliance Committee is to consider the 'questions of implementation' regarding the compliance by Annex I parties with the different Kyoto Protocol obligations. The question of implementation can be raised only by a party against another party (party-to-party trigger), by a party in respect of itself (self-trigger) or by an expert review team (ERT) via its reviewing activity in relation to a specific party. The Compliance Committee is assisted by a Bureau which is responsible, after a preliminary examination, for allocating the question of implementation to the appropriate branch. While the facilitative branch has

[18] On this topic, see also Lefeber (2001) and Jacquemont (2005), p. 360.

been designed to provide advice and assistance to the parties regarding issues of compliance with the Kyoto Protocol, the enforcement branch is the body determining the non-compliance by a party with the requirements of the Kyoto Protocol and the applicable consequences of non-compliance.[19]

The facilitative branch is responsible for addressing questions of implementation in two cases: (1) ensuring the compliance of Annex I parties with the principle of supplementarity in the use of the flexible mechanisms; (2) ensuring that Annex I parties strive to implement the greenhouse gas emission limitation and reduction commitments under Article 3(1) 'in such a way as to minimize adverse social, environmental and economic impacts on developing countries' due to climate change.[20] Consequences of non-compliance applied by the facilitative branch consist in provisions and recommendations aimed at the facilitation of financial and technical assistance to the parties concerned.[21] Additionally, the facilitative branch is called upon to give 'early warnings' and recommendations to parties which are in danger of failing to meet the greenhouse gas emission limitation and reduction commitments under Article 3(1) as well as the monitoring, reporting and verification obligations under Articles 5(1)(2) and 7(1)(4).[22]

The enforcement branch is responsible for addressing compliance by Annex I parties with the following requirements:

- Monitoring, reporting and verification obligations under Articles 5(1)(2) and 7(1)(4) of the Kyoto Protocol (MRV obligations);
- Eligibility requirements as defined in Articles 6, 12 and 17 of the Kyoto Protocol and the Marrakech Accords (Eligibility requirements);
- Quantified Emission Limitation and Reduction Commitments (QELRCs) under Article 3(1) of the Kyoto Protocol (Limitation and Reduction commitments).[23]

Moreover, the Enforcement Branch is also responsible for deciding on 'adjustments to inventories under Article 5(2)' in case of a dispute between a party and the expert review team, as well as on 'a correction to the compilation and accounting database' regarding assigned amounts under Article 7(4) in case of a dispute between a party and the expert review team in respect of the validity of a transaction.[24] For reasons of clarity, the latter two cases will be called adjustment

[19] Both branches are composed of ten members representing the five official UN regions (Africa, Asia, Latin America and the Caribbean, Central and Eastern Europe, and Western Europe and Others), the small island developing states, as well as the groups of Annex I and non-Annex I parties. The facilitative branch decides by a three-quarters majority, while decisions by the enforcement branch require a double majority of both Annex I and non-Annex I parties. The work of the Committee which meets in plenary is supported by the Bureau.

[20] Article 3(14) of the Kyoto Protocol and Decision 27/CMP.1, section IV, para. 5.

[21] Decision 27/CMP.1, section XIV.

[22] Decision 27/CMP.1, section IV, para. 6.

[23] Ibid., 27/CMP.1, section V, para. 4.

[24] Decision 27/CMP.1, section V, para. 5.

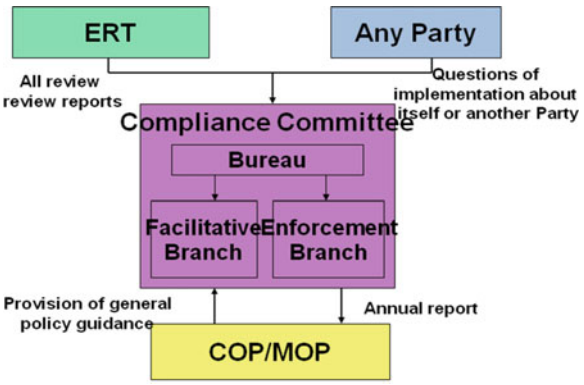

Fig. 6.1 Overview of the functions of the different organs of the non-compliance mechanism of the Kyoto Protocol. *Source*: UNFCCC (2009)

and correction consequences, though it would be more appropriate to consider them as a resolution of a disagreement.

Figure 6.1 provides an overview of the functions of the different organs of the non-compliance mechanism of the Kyoto Protocol.

Table 6.1 provides an overview of the tasks of the enforcement and facilitative branches of the non-compliance mechanism of the Kyoto Protocol.

Figure 6.2 provides an overview of the process behind the functioning of the non-compliance mechanism of the Kyoto Protocol.

6.1.3 Consequences

The enforcement branch is also responsible for determining the consequences of non-compliance by Annex I parties. These consequences are:

- Monitoring, reporting and verification obligations: submission of a plan addressing the reasons for non-compliance as well as detailed measures and a timetable to reinstate compliance[25];
- Eligibility requirements: suspension of eligibility to participate in one or more of the flexible mechanisms[26] (eligibility is suspended whenever the branch determines non-compliance by an Annex I party with the eligibility criteria and can be reinstated at the moment the party demonstrates its compliance with the specific criterion)[27];

[25] Ibid., section XV, paras. 1–3.

[26] The suspension to participate in a flexible mechanism depends on which of the specific eligibility requirements are not met, and, consequently, there may well arise a situation where a party is allowed to participate in one but not all flexible mechanisms. Obviously, the suspension to participate in international emissions trading may affect JI and CDM, namely the exchange of ERUs and/or CERs.

[27] Decision 27/CMP.1, section XV, para. 4. For the expedited procedures for the enforcement branch see Decision 27/CMP.1, section X.

Table 6.1 Tasks of the enforcement and facilitative branches of the non-compliance mechanism of the Kyoto Protocol

Enforcement branch	Facilitative branch
Receipt of 'allocated' question of implementation	Receipt of 'allocated' question of implementation
Preliminary examination	Preliminary examination
Consideration of party's submission(s), if any	Consideration of party's submission(s), if any
Hearing (upon request)	Consideration of Article 3(14) information
Adoption of 'preliminary finding'	
Adoption of 'final decision'	
Decisions on mechanisms eligibility, non-compliance, adjustments, assigned amounts	Provision of advice
	Facilitation of financial/technical assistance
	Formulation of recommendations

Source: UNFCCC (2009)

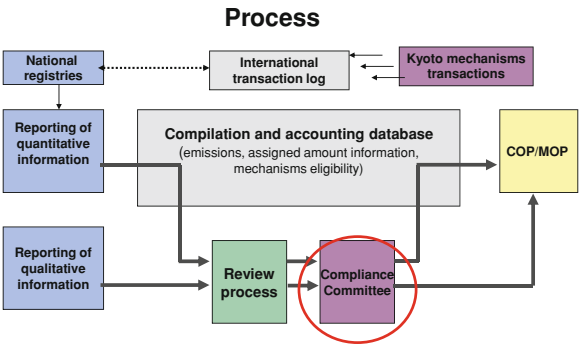

Fig. 6.2 Process behind the functioning of the non-compliance mechanism of the Kyoto Protocol. *Source*: UNFCCC (2009)

- Limitation and reduction commitments[28]:
  - Each ton of emissions in excess multiplied by 1.3 will be deducted from the party's assigned amount for the second commitment period;
  - Preparation of a detailed compliance action plan;
  - Suspension and eventual reinstatement of the party's eligibility to transfer carbon units under Article 17 of the Kyoto Protocol.

The expedited procedure to reinstate eligibility as mentioned above was introduced in the Marrakech Accords at the specific request of Japan and consists in the party's right to request, either through an expert review team or directly to the enforcement branch, the restoration of eligibility in case the problem has been rectified and the relevant criteria are met.

[28] Decision 27/CMP.1, section XV, para. 5.

The linkage between the MRV obligations and the eligibility requirements is clear, since the latter covers nearly all monitoring, reporting and verification obligations established by the Kyoto Protocol. A different type of linkage exists between the eligibility requirements and the limitation and reduction commitments and concerns the consequences of non-compliance. In the event that Annex I parties to the Kyoto Protocol are in non-compliance with the eligibility requirements, participation in the flexible mechanisms is suspended and therefore the possibility to meet the limitation and reduction commitments is substantially reduced. Vice versa, one of the consequences of non-compliance with the limitation and reduction commitments by Annex I parties is the suspension of eligibility to use the flexible mechanisms.

In case of compliance with the limitation and reduction commitments, and once the review and compliance procedures have been completed, i.e., once the ERTs have finished assessing the final annual emissions inventory of Annex I parties, the so-called 'true-up' period lasting 100 days begins. In this period, Annex I parties are granted an additional opportunity to finalise the transactions of carbon units (AAUs, CERs, ERUs or RMUs) through international emissions trading in order to comply with the limitation and reduction commitments under Article 3(1). The starting date of the true-up period has to be decided by COP/MOP prior to 2014, which is the last mandatory year for the submission of GHG inventories by Annex I parties. Annex I parties in non-compliance facing the Compliance Committee may present a formal request to be heard by it and to present testimony. In case of non-compliance with the reduction obligations, parties to the Kyoto Protocol have the right of appeal to the COP/MOP against a decision of the enforcement branch if they believe they have been denied due process. COP/MOP can 'override the decision of the enforcement branch' by a majority of three quarters of the voting parties and 'refer the appeal back to the enforcement branch'.[29]

Figure 6.3 provides an overview of the timeline of the non-compliance mechanism of the Kyoto Protocol.

Figure 6.4 provides an overview of the timeline of the work of the enforcement branch of the Kyoto Protocol.

Compared with the existing non-compliance mechanisms established by other MEAs, the non-compliance regime created by the Kyoto Protocol differs in terms of the size of its composition, the two branches each composed of twenty members (ten permanent and ten alternate), the complexity of its structure (a bureau, a plenary and two branches) and the amount of the costs.

Furthermore, it is important to recall that the non-compliance regime of the Kyoto Protocol as originally proposed by the parties before the adoption of the Protocol was of a rather punitive and unfriendly nature; it was softened by the final decisions agreed under the Marrakech Accords at COP7 and adopted by COP/MOP1, in particular due to the opposition of the Umbrella Group. Thus, the current non-compliance regime is based on a double-stage approach: firstly,

[29] Ibid., 27/CMP.1, section XI, para. 1, p. 101.

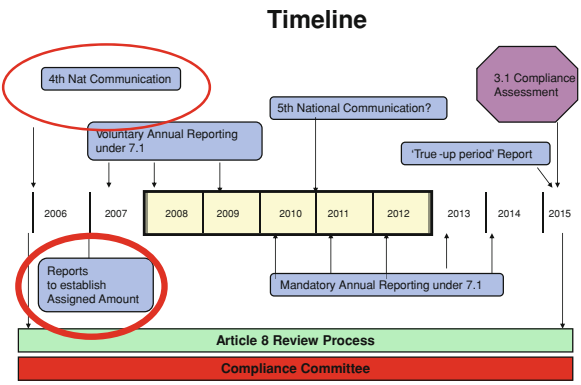

Fig. 6.3 Timeline of the non-compliance mechanism of the Kyoto Protocol. *Source*: UNFCCC (2009)

Timeline enforcement branch

Type of Report	*Type of Review*	*Received by Compliance Committee*
Initial Report - early submission Sept. 2006 - reg. submission Jan 2007	**Initial Review** - end 2006-mid 2007 - throughout 2007	- mid 2007 - end 2007
National Communications 1January 2006	**Periodic Review** - to be determined considering the schedule of the IR, could be 2007-2008	- estimated 2008-2009
Annual Inventory - voluntary 2007 and 2008 - mandatory 2010-2014	**Annual Review** - end 2008-mid 2009 - end 2010-mid 2015	- mid 2009-end 2009 - mid 2011-end 2016

Fig. 6.4 Timeline enforcement branch. *Source*: UNFCCC (2009)

facilitation and assistance for Annex I parties in the compliance with the different obligations, and secondly, at a later stage, a punitive approach. It was regarding the extent and effectiveness of the punitive actions that the negotiating position of the Umbrella Group in the pre-Kyoto period was most successful. In the event of Annex I parties failing to meet the limitation and reduction commitments, the non-compliance regime of the Kyoto Protocol gives these countries an additional possibility to comply during the so-called true-up period—100 extra days after the end of the first commitment period during which a party can still engage in international emissions trading to fulfil its commitments. Furthermore, another weakness of the non-compliance regime of the Kyoto Protocol is related to the fact that the consequences of non-compliance with the limitation and reduction commitments concern the Kyoto Protocol's future commitment period. The deduction of a certain amount of greenhouse gas emissions from the party's assigned amount in the future commitment period represents a potential burden after 2012. It is therefore essential that an agreement on the post-2012 regime should be adopted

by the international community and that binding obligations regarding the reduction of greenhouse gas emissions should be included in the new text. The link between this specific consequence and the negotiations on the post-2012 regime could give parties not on track with the limitation and reduction commitments an implicit extra motivation to delay the adoption of a decision on further commitments. In the case of the eligibility requirements, the expedited procedure for the reinstatement of eligibility is another sign of this soft approach and of the international community's willingness to meet the requests of some parties in this respect. Furthermore, deducting a certain amount of greenhouse gas emission units from the party's assigned amount in the regime after 2012 may have serious economic consequences for parties. For all these reasons and because of the nature of the consequences of non-compliance with the Kyoto Protocol obligations, it can be affirmed without a doubt that those consequences contribute to the non-compliance mechanism of the Protocol being a strong system.[30]

Moreover, the effects of some of the consequences of non-compliance with the Kyoto Protocol obligations, in particular suspension of the eligibility requirements to participate in the flexible mechanisms, may affect not only the party in non-compliance but also other Annex I or non-Annex I parties, for instance those that are party to a bilateral agreement, either in the framework of international emissions trading or in the context of the project-based mechanisms. This is even more evident in the case of the European Community, where the determination of non-compliance with the eligibility requirements by the European Community could potentially affect the position of the Member States in the carbon market and vice versa, for instance, if these consequences suspend the right for the EC or the Member States to participate in the flexible mechanisms, thus jeopardising the efforts to acquire the reduction units needed for compliance.

The assessment of the consequences of non-compliance by the EC and the Member States with the Kyoto Protocol obligations has to be placed within the framework of the general discussion on the post-2012 phase and on the future of the existing legal structure established by the Kyoto Protocol. This is true, in particular, of the first consequence of non-compliance with the limitation and reduction commitments, i.e., the deduction of each tonne of emissions in excess multiplied by 1.3 from the party's assigned amount for the second commitment period. This consequence concerns the future commitment period and it is therefore clear that the first condition to be fulfilled to guarantee enforcement is the international community's agreement on the Kyoto Protocol's future commitment period. In this context, COP13 and COP/MOP13 convened in Bali, Indonesia, from 3 to 14 December 2007, to discuss, among others, the future of the international climate regime. The final agreement reached by the international community in Bali, though it may not represent what the EU was aiming at, namely a

[30] Similar strong mechanisms have been designed under the Montreal Protocol on Substances That Deplete the Ozone Layer (1987) and the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (1989).

precise and concrete commitment to reduce anthropogenic greenhouse gas emissions by 25–40% by 2020, can still be considered significant as it signalled the return of the US in the negotiating process for the first time after its withdrawal from the Kyoto Protocol in March 2001. The Bali Action Plan, adopted as a COP13 Decision, was accompanied by a series of decisions adopted by COP/MOP3 and established a two-track process (Convention and Protocol) aimed at the identification of a post-2012 global climate regime to be adopted by COP15 and COP/MOP5 in Copenhagen in 2009. The Convention track includes the establishment of an Ad Hoc Working Group on Long-Term Cooperative Action (AWG-LCA) which will provide its conclusions on the 'full, effective and sustained implementation of the Convention' by COP15 in 2009. The Kyoto Protocol track marks the continuation of the work of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP) which is required to provide recommendations to COP/MOP5 for the adoption of new commitments for Annex I parties.

6.2 The Monitoring, Reporting and Verification Obligations

The UNFCCC and the Kyoto Protocol set clear and precise monitoring, reporting and verification obligations for Annex I and non-Annex I parties which are mainly twofold: firstly, these requirements oblige parties to the international climate regime to establish an adequate and precise system for the accounting of greenhouse gas emissions at the national level whose methodological approach and technical aspects can also be used to monitor other pollutants falling outside the scope of the climate change system. Secondly, a uniform and well-functioning accounting system is crucial to determine the compliance by Annex I parties with the limitation and reduction commitments and with the eligibility requirements which must be met to be able to participate in the flexible mechanisms.

To these ends, the Kyoto Protocol and the Marrakech Accords set several requirements for Annex I parties as regards the establishment of an accounting system for the estimation of greenhouse gas emissions and the tracking of assigned amounts by Annex I parties. In particular, rules were established for emission monitoring, government reporting and review of information, as well as an accounting system of registries for transactions under the flexible mechanisms and sinks activities. These requirements are:

- Preparation of a national system for the estimation of greenhouse gas emissions by sources and removals by sinks (national GHG inventory) no later than 1 January 2007 (Article 5(1));
- Establishment of a registry for tracking Kyoto Protocol units (Decision 13/CMP.1, Annex, para. 17);
- Submission of an annual GHG inventory (Article 7(1));
- Regular submission of the national communication (Article 7(2));

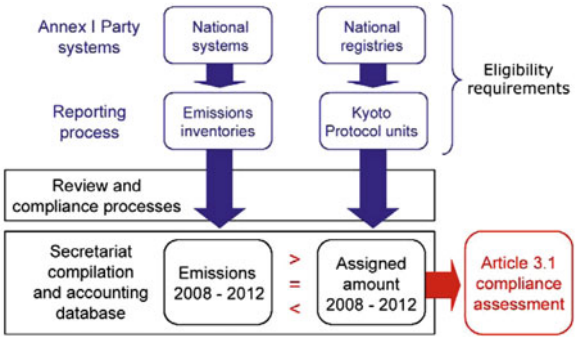

Fig. 6.5 Kyoto Protocol accounting. *Source*: UNFCCC (2007)

- Review of the information submitted under Article 7(1) and 7(2) by expert review teams (Article 8(1)).

The information in the GHG inventory and the national communication are reviewed by the expert review team (ERT) in accordance with the review procedure under Article 8 of the Kyoto Protocol. The ERTs report to the COP/MOP and the secretariat. Furthermore, the Kyoto Protocol and the Marrakech Accords require that Annex I parties have in place additional procedures for accounting assigned amounts before the start of the first commitment period in order to participate in the flexible mechanisms. The Kyoto Protocol's accounting system is summarised in Fig. 6.5.

6.2.1 National System

The national system provides the necessary mechanisms for the annual estimation of greenhouse gas emissions and removals and the compilation of national greenhouse gas inventories and is a fundamental tool to continue the mitigation efforts of Annex I parties. The establishment of national systems is required by the UNFCCC in order to verify the compliance by Annex I parties with the obligations created by the international climate regime, and these systems are also necessary to guarantee the proper functioning of the flexible mechanisms. The preparation of the national system for the estimation of anthropogenic greenhouse gas emissions by sources and removals by LULUCF activities requires specific knowledge and expertise at the national level in order to develop adequate institutional, legal and procedural arrangements necessary for the establishment and maintenance of the GHG inventory system. National systems should meet certain principles, such as transparency, consistency, comparability, completeness and accuracy.[31] Although many parties already had in place systems for monitoring harmful gas emissions before the UNFCCC entered into force in 1994, the quality of the monitoring

[31] FCCC/SBSTA/2004/8, 3 September 2004.

varies among parties according to their national capacity, and this difference is particularly evident in the EU between old and new Member States, at least before the EU enlargement. This is due to the different levels of experience of personnel, to the structure and size of the bureaucracy, to the transparency of data, and to the fragmentation of bodies responsible for monitoring.

The national GHG inventory is subject to a third-party annual technical review. Considering that the credibility of the inventory is directly related to the quality of the methodology used as well as of the reporting and the procedures for data compilation, COP12 developed, in Nairobi in 2006, standardised requirements for reporting national inventories, notably inventory reporting guidelines based on the methodologies and reporting formats of the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories. Furthermore, in 2006, SBSTA adopted the UNFCCC reporting guidelines on annual inventories (following incorporation of the provisions of Decision 14/CP.11) including the guidelines for the preparation of national communications by Annex I parties.[32] The national system for the preparation of the GHG inventory, involving the adoption of all necessary institutional, legal and procedural steps necessary for the preparation of the national GHG inventory, as well as the reporting and archiving of inventory information, had to be established by Annex I parties by 31 December 2006 at the latest. The third-party review process is based on a three-step procedure:

- Brief initial check by the secretariat of the completeness and correctness of the inventory;
- Compilation of a synthesis report by the secretariat comparing data of parties and highlighting issues to be assessed in the individual reviews carried out by the expert review teams (ERTs);
- Individual review by the ERT which can take the form of an in-country review, a review taking place at the secretariat or a desk review.

The aim of the review phase is to monitor and verify the compliance of the report with the available guidelines and instructions and to provide parties with key advice on the improvement of national systems and inventories. The review is also aimed at identifying the need for any adjustment to the greenhouse gas annual inventory.

6.2.2 GHG Annual Inventory

The achievement of the main objectives and targets established by the UNFCCC and the Kyoto Protocol in terms of combating global warming is strictly dependent on the existence of an accurate system for the collection of information about GHG emissions levels, trends and projections in Annex I and non-Annex I parties. Moreover, the reliability and effectiveness of the non-compliance regime of the Kyoto Protocol

[32] Ibid.

is to a certain extent related to the quality of this system. The verification of the information on GHG emissions provided by Annex I and non-Annex I parties is at the foundations of the triggering modality established by the Marrakech Accords. The accuracy of the national system is of vital importance to the collection of this information. In accordance with Articles 4(1) and 12 of the UNFCCC and Article 7 of the Kyoto Protocol, as well as the subsequent decisions of the Conference of the Parties (COP), the international climate regime requires Annex I parties to submit to the secretariat an annual report and a periodic national communication.

The annual report shall contain information on the national greenhouse gas inventories of anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol as well as additional information on the holdings of Kyoto units and emissions and removals from LULUCF. Annual reports must be submitted in the period 2007–2014 and are the main source of information for the verification of compliance by Annex B parties with the Kyoto Protocol limitation and reduction commitments.[33] The annual report shall contain the GHG inventory as well as supplementary information required for assessing Annex I parties' compliance with the Kyoto Protocol limitation and reduction commitments.[34]

The annual GHG emissions and removals inventories contain data on GHG emissions from the base year (usually 1990) to the most recent year. They are subject to an annual technical review and must be prepared in accordance with specific IPCC guidelines. The guidelines are periodically updated and revised by the COPs in order to ensure the maximum level of quality and uniformity of reporting methodologies used by the parties. In accordance with Article 7(4) of the Kyoto Protocol, COP11 has adopted updated UNFCCC reporting guidelines on annual inventories following incorporation of the provisions of Decision 14/CP.11.[35]

In accordance with the updated UNFCCC reporting guidelines on annual inventories, Annex I parties are required, by 15 April each year, to submit annual national GHG inventories covering emissions and removals of greenhouse gases from six sectors (energy, industrial processes, solvents, agriculture, LULUCF and waste).[36] In accordance with the UNFCCC reporting guidelines on annual inventories, information to be submitted annually by Annex I parties is divided into two parts: firstly, the common reporting format (CRF), which is a standardised electronic database including national data on GHG emissions and removals as

[33] The annual report due on 15 April 2010 will include the information on national inventories for the first year of the commitment period. See Decision 14/CMP.1, para. 1, and Decision 15/CMP.1, Annex, part I.

[34] Article 7(1) of the Kyoto Protocol.

[35] FCCC/SBSTA/2006/9, 18 August 2006.

[36] See COP Decisions 9/CP.2, 3/CP.5 and 18/CP.8 and the updated UNFCCC reporting guidelines on annual inventories following incorporation of the provisions of Decision 14/CP.11, document FCCC/SBSTA/2006/9, available at: http://unfccc.int/resource/docs/2006/sbsta/eng/09.pdf.

well as sectoral background data tables for reporting implied emission factors and activity data of all Annex I parties; and secondly, the national inventory report (NIR), including detailed descriptive and numerical information on the methodologies used to compile the inventory and data sources and on quality and control procedures. These data should cover the base year or period up to 2 years before the year of submission, i.e., period 1990–2005 for submissions in 2007. COP8 decided that information included in the GHG annual inventory should be collected and made publicly available by the secretariat on its website.

Pursuant to Decision 19/CP.8, the secretariat shall prepare an annual review of the GHG inventories of all Annex I parties. The reporting on GHG inventory data submitted by Annex I parties shall be prepared in accordance with the UNFCCC inventory review guidelines, adopted in 1999 and revised in 2002.[37] This report shall be considered by the COP and the subsidiary body for implementation (SBI). The process of reviewing GHG inventories is divided into three phases and is consistent with the UNFCCC and IPCC guidelines. At the end of each phase, a review report is finalised and published on the secretariat's website.[38] Since 2008, the status of reporting of national GHG inventories by Annex I parties has been listed in the status report on national greenhouse gas inventory data from Annex I parties.[39] Table 6.2 provides information on GHG inventory submissions from Annex I parties on the basis of the status report of 2008.

As shown in Table 6.1, all Annex I parties provided complete CRF tables for all years from 1990 to 2006.[40] Still, not all Annex I parties met the submission deadline of 15 April 2007 is the first year when all reporting parties submitted data for the LULUCF sector.[41]

6.2.3 National Communication

Articles 4(1) and 12 of the UNFCCC require all parties to prepare and submit to the secretariat a periodical national communication including information and steps taken in respect of the implementation of the Convention. In line

[37] Decisions 6/CP.5 and 19/CP.8, respectively.

[38] The three phases are: the initial check, ensuring that the inventory is complete and prepared in the correct format; the synthesis and assessment stage, for checking the conformity of the basic inventory information across parties and over time and providing a first 'preliminary assessment' of the inventory; the individual review performed by the expert review teams (ERTs), assessing data, methodologies and procedures used in the finalisation of the national inventory.

[39] The Status Report 2008 is the latest report available at the time of writing, see http://unfccc.int/national_reports/annex_i_ghg_inventories/inventory_review_reports/items/4401.php.

[40] In the Status Report 2007, 38 out of 41 Annex I parties provided complete CRF tables for all years from 1990 to 2005.

[41] Two parties (Monaco and Ukraine) were late in submitting their CRF tables by more than 6 weeks and six parties (Hungary, Iceland, Italy, Luxembourg, Monaco and Ukraine) were equally late in submitting their NIR.

Table 6.2 GHG inventory submissions from Annex I parties on the basus of the status report of 2008

Party	Date of original submission of GHG inventory	Format of GHG inventory	Years covered	Status report
Australia	13 June 2008	CRF reporter	1990–2006	Australia
Austria	15 April 2008	CRF reporter	1990–2006	Austria
Belarus	14 May 2008	CRF reporter	1990–2006	Belarus
Belgium	15 April 2008	CRF reporter	1990–2006	Belgium
Bulgaria	15 April 2008	CRF reporter	1990–2006	Bulgaria
Canada	22 May 2008	CRF reporter	1990–2006	Canada
Croatia	24 May 2008	CRF reporter	1990–2006	Croatia
Czech Republic	9 April 2008	CRF reporter	1990–2006	Czech Republic
Denmark	15 April 2008	CRF reporter	1990–2006	Denmark
Estonia	15 April 2008	CRF reporter	1990–2006	Estonia
European Community	15 April 2008	CRF reporter	1990–2006	European Community
Finland	11 April 2008	CRF reporter	1990–2006	Finland
France	10 April 2008	CRF reporter	1990–2006	France
Germany	15 April 2008	CRF reporter	1990–2006	Germany
Greece	7 April 2008	CRF reporter	1990–2006	Greece
Hungary	14 April 2008	CRF reporter	1985–1987, 1985–2006	Hungary
Iceland	28 April 2008	CRF reporter	1990–2006	Iceland
Ireland	11 April 2008	CRF reporter	1990–2006	Ireland
Italy	16 April 2008	CRF reporter	1990–2006	Italy
Japan	16 May 2008	CRF reporter	1990–2006	Japan
Latvia	15 April 2008	CRF reporter	1990–2006	Latvia
Liechtenstein	29 February 2008	CRF reporter	1990–2006	Liechtenstein
Lithuania	11 April 2008	CRF reporter	1990–2006	Lithuania
Luxembourg	23 April 2008	CRF reporter	1990–2006	Luxembourg
Monaco	7 May 2008	CRF reporter	1990–2006	Monaco

(continued)

Table 6.2 (continued)

Party	Date of original submission of GHG inventory	Format of GHG inventory	Years covered	Status report
The Netherlands	15 April 2008	CRF reporter	1990–2006	The Netherlands
New Zealand	14 April 2008	CRF reporter	1990–2006	New Zealand
Norway	15 April 2008	CRF reporter	1990–2006	Norway
Poland	15 April 2008	CRF reporter	1990–2006	Poland
Portugal	15 April 2008	CRF reporter	1990–2006	Portugal
Romania	15 April 2008	CRF reporter	1990–2006	Romania
Russian Federation	19 May 2008	CRF reporter	1990–2006	Russian Federation
Slovakia	15 April 2008	CRF reporter	1990–2006	Slovakia
Slovenia	15 April 2008	CRF reporter	1986, 1990–2006	Slovenia
Spain	16 April 2008	CRF reporter	1990–2006	Spain
Sweden	14 April 2008	CRF reporter	1990–2006	Sweden
Switzerland	15 April 2008	CRF reporter	1990–2006	Switzerland
Turkey	21 August 2008	CRF reporter	1990–2006	Turkey
Ukraine	21 May 2008	CRF reporter	1990–2006	Ukraine
United Kingdom of Great Britain and Northern Ireland	15 April 2008	CRF reporter	1990–2006	United Kingdom of Great Britain and Northern Ireland
United States of America	10 April 2008	CRF reporter	1990–2006	United States of America

Source: UNFCCC (2008)

with the principle of 'common but differentiated responsibilities and respective capabilities', the contents of the national communications and the timetable for their submission differs between Annex I and non-Annex I parties. In particular, non-Annex I parties are required to submit their initial communication within 3 years of the entry into force of the Convention for that party, or at the moment that financial resources have become available. Least developed countries (LDCs) may decide at their discretion when to submit the national communication.

Both Annex I and non-Annex I parties have to follow specific guidelines for the preparation of the national communication. For Annex I parties, the guidelines for the preparation of the national communication were revised twice: at COP 2, in 1996, in view of the preparation of the second national communications, and at COP 5, in 1999, for the preparation of the third round of communications including revised reporting guidelines.[42] These guidelines are also used for the preparation of the fourth national communication by Annex I parties, expected for 1 January 2006.

For non-Annex I parties, guidelines for the preparation of the initial national communication were adopted at COP 2 in Geneva in 1996. At COP 8, in 2002 (New Delhi), the parties adopted revised guidelines for the preparation of national communications from non-Annex I parties.

In accordance with Article 7(2) Kyoto Protocol, the national communication should also include supplementary information demonstrating Annex I parties' compliance with the obligations of the Kyoto Protocol. To this end, progress reports must be submitted by Annex I parties in accordance with Article 3(2) of the Kyoto Protocol and Decisions 22/CP.7 and 25/CP.8. As stated above, since 1996, together with the national communication, Annex I parties also have to submit an annual inventory of their greenhouse gas (GHG) emissions to the secretariat.

In accordance with Decisions 2/CP.1, 9/CP.2, 6/CP.3 and 33/CP.7, national communications of Annex I parties are subject to an 'in-depth' review conducted by the expert review teams (ERTs) of the UNFCCC. The purpose of the review, based on desk research and an in-country visit, is to assess parties' capacity to implement their commitments under the UNFCCC and the Kyoto Protocol. The result of the in-depth review phase is an in-depth review report aimed at facilitating the work of the COP in assessing compliance by Annex I parties with their commitments.

Most Annex I parties presented their first national communications in 1994 or 1995 while the majority submitted their second national communications in 1997. Economies in transition were granted a longer timeframe and most of these countries presented their second national communications in 1998. The third national communication was due by 30 November 2001 and the fourth by 1

[42] Review of the implementation of commitments and of other provisions of the Convention. UNFCCC guidelines on reporting and review, FCCC/CP/1999/7, 16 February 2000.

January 2006. The fifth national communication from Annex I parties has to be submitted to the secretariat by 1 January 2010.[43]

In accordance with Article 3(2) of the Kyoto Protocol 'Each Party included in Annex I shall, by 2005, have made demonstrable progress in achieving its commitments under this Protocol' and Annex I parties which have ratified the Kyoto Protocol are also required to submit a Report Demonstrating Progress (RDP) under the Protocol. For the European Community and the Member States, this obligation is also foreseen in Article 5(4) of Decision 280/2004/EC concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol. According to this Decision, the European Community is required to demonstrate progress achieved in the fulfilment of its objectives under the international climate regime, taking into account updated information submitted by the Member States by 15 June 2005.

The RDP has to include the following information about Annex I parties:

- Policies and measures to mitigate greenhouse gas emissions and programmes for domestic compliance and enforcement; scenarios and projections of greenhouse gas emissions;
- The extent to which domestic policies and measures contribute to meeting the commitments under Article 3 of the Kyoto Protocol;
- Activities, actions and programmes undertaken by parties in fulfilment of the commitments under Articles 10 and 11 of the Protocol.

In accordance with COP Decisions 4/CP.8 and 25/CP.8, Annex I parties were required to submit to the secretariat the fourth national communications (NC4s) and the reports demonstrating progress (RDPs) by 1 January 2006.[44] The status of submissions and review of fourth national communications by Annex I parties are shown in Table 6.3.

Figure 6.6 summarises the reporting requirements for Annex I parties established by the Kyoto Protocol.

6.2.4 Initial and Final Reports

In addition to the two above-mentioned reporting requirements, i.e., the annual report and the national communication, the Kyoto Protocol obliges Annex I parties to submit an initial report and a final report, by 31 December 2006 and 31 December 2012, respectively. The submission of the initial report to the UNFCCC secretariat by Annex I parties with a commitment inscribed in Annex B to the Protocol is required under Article 7(4) of the Kyoto Protocol and Decision 13/

[43] Decision 10/CP.13.

[44] Status of submissions and review of fourth national communications, Note by the secretariat, FCCC/SBI/2007/Inf.8, 14 September 2007.

Table 6.3 Submissions and review of fourth national communications by Annex I parties

Annex I countries	Fourth national communication (due 1 January 2006)	Report demonstrating progress under the KP
Australia	NC 4 Submission date: 12/12/05	
Austria	NC 4 Submission date: 18/10/06	Submission date: 18/10/06
Belarus	NC 2, 3 and 4 Submission date: 02/04/07	Submission date: 29/05/06
Belgium	NC 4 Submission date: 23/12/05	Submission date: 23/12/05
Bulgaria	NC 4 Revised version: 12/12/06 Submission date: 31/08/06	Submission date: 31/08/06
Canada	NC4 Submission date: 15/03/07	Submission date: 15/11/06
Croatia	NC 2, 3 and 4 Submission date: 06/02/07	
Czech Republic	NC 4 Submission date: 03/02/06	Submission date: 03/02/06
Denmark	NC 4 Submission date: 30/12/05	Submission date: 30/12/05
Estonia	NC 4 Submission date: 30/12/05	Submission date: 30/12/05
European Community	NC 4 Submission date: 10/02/06	Submission date: 22/12/05
Finland	NC 4 Submission date: 10/02/06	Submission date: 14/02/06
France	NC 4 (French) Submission date: 07/07/06	Submission date: 27/07/06
Germany	NC 4 Submission date: 19/10/06	Submission date: 01/08/06
Greece	NC 4 Submission date: 10/03/06	Submission date: 10/03/06
Hungary	NC 4 Submission date: 10/03/06	Submission date: 17/01/06
Iceland	NC 4 Submission date: 28/04/06	Submission date: 28/04/06
Ireland	NC 4 Submission date: 30/04/07	Submission date: 16/10/06
Italy	NC 4 Revised version: 12/06/08 Submission date: 29/11/07	Submission date: 11/11/06
Japan	NC 4 Submission date: 06/02/06	Submission date: 06/02/06
Latvia	NC 4 Submission date: 24/05/06	Submission date: 24/05/06

(continued)

Table 6.3 (continued)

Annex I countries	Fourth national communication (due 1 January 2006)	Report demonstrating progress under the KP
Liechtenstein	NC 4 Submission date: 07/04/06	Submission date: 25/09/06
Lithuania	NC 3 and 4 Submission date: 28/12/05	Submission date: 06/02/06
Luxembourg		
Monaco	NC 4 (French) Submission date: 02/03/06	
The Netherlands	NC 4 Submission date: 22/12/05	Submission date: 22/12/05
New Zealand	NC 4 Submission date: 04/05/06	Submission date: 04/05/06
Norway	NC 4 Submission date: 16/02/06	Submission date: 16/02/06
Poland	NC 4 Submission date: 29/12/06	Submission date: 29/12/06
Portugal	NC 4 Submission date: 26/07/06	Submission date: 22/06/2006
Romania	NC 4 Submission date: 04/11/06	Submission date: 31/01/2006
Russian Federation	NC 4 (Russian) Revised version : 02/11/06 Submission date: 12/10/06	Submission date: 13/02/2007
Slovakia	NC 4 Submission date: 30/12/05	Submission date: 30/12/05
Slovenia	NC 4 Submission date: 12/06/06	Submission date: 12/06/06
Spain	NC 4 (Spanish) Submission date: 23/03/06	Submission date: 21/04/06
Sweden	NC 4 Submission date: 30/12/05	Submission date: 30/12/05
Switzerland	NC 4 (English) Submission date: 02/12/05	Submission date: 02/12/05
Turkey	NC 1 Submission date: 20/02/07	
Ukraine	NC 2 Submission date: 27/06/06	Submission date: 03/11/06
United Kingdom	NC 4 Submission date: 15/05/06	Submission date: 08/03/06
United States of America	NC 4 Submission date: 27/07/07	

Source: UNFCCC (2009)

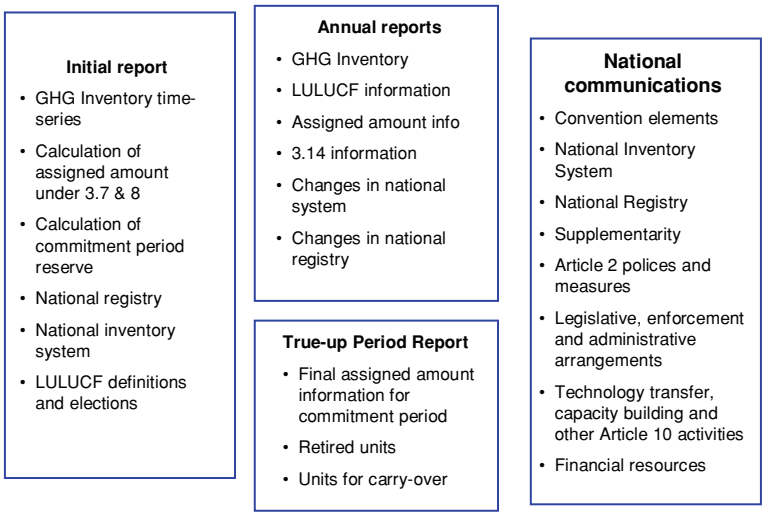

Fig. 6.6 Reporting requirements for Annex I parties established by the Kyoto Protocol. *Source*: UNFCCC (2007)

CMP.1[45] and is necessary for the calculation of Annex I parties' assigned amounts. In particular, by submitting the initial report, Annex I parties contribute to the calculation of their assigned amounts pursuant to Article 3(7) and (8) for the first commitment period and to demonstrating their capacity to account for their emissions and assigned amounts.

The following information must be included in the initial report:

- The national GHG inventory;
- The calculation of the assigned amount and the Commitment Period Reserve (CPR)[46];
- A description of the national registry and the national system.

The timely submission of the initial report is a precondition for the participation of Annex I parties in the flexible mechanisms since this requirement is a fundamental step for the calculation of Annex I parties' assigned amounts under Article 3(1) of the Kyoto Protocol. The review of the initial reports under Article 8 of the Protocol is assigned to ERTs. They have to submit the review report to COP/MOP and the Compliance Committee, which are responsible for determining Annex I parties' eligibility to participate in the flexible mechanisms.

Table 6.4 provides information on the submission of the initial reports by Annex I parties.

[45] Decision 13/CMP.1, para. 2.

[46] Under the Marrakech Accords, Annex I parties are required to hold a minimum level of ERUs, CERs, AAUs and RMUs in order to prevent the overselling of units.

Table 6.4 Submission of the initial reports by Annex I parties

Party	Initial report	GHG inventory submitted with, or referenced in, the initial report	National inventory report submitted with, or referenced in, the initial report	Report of the review of the initial report
Australia	11 March 2008	Original	Original	16 January 2009
Austria	5 December 2006	Original	Original	8 August 2007
Belarus	31 October 2006 Upd. 30 December 2006	Original	Original	–
Belgium	22 December 2006 Corr. 23 July 2007	Original revised	Original	12 December 2007
Bulgaria	25 July 2007	Original revised	Original	08 May 2008
Canada	15 March 2007	Original revised	Original revised	11 April 2008
Croatia	27 August 2008			
Czech Republic	24 October 2006	Original	Original	15 October 2007
Denmark	20 December 2006	Original	Original	2 November 2007
Estonia	15 December 2006 Upd. 5 September 2007	Original revised	Original revised	14 November 2007
European Community	18 December 2006 Summary assigned amount report 18 December 2006 Upd. 2 February 2007	Original revised	Original revised	15 February 2008
Finland	22 December 2006	Original revised	Original	28 November 2007
France	21 December 2006	Original	Original	28 November 2007
Germany	27 December 2006 Upd. 3 July 2007	Original revised	Original	12 December 2007
Greece	29 December 2006 18 May 2007	Original	Original	28 December 2007
Hungary	30 August 2006 Upd. 27 September 2006	Original revised	Original	29 August 2007

(continued)

Table 6.4 (continued)

Party	Initial report	GHG inventory submitted with, or referenced in, the initial report	National inventory report submitted with, or referenced in, the initial report	Report of the review of the initial report
Iceland	11 January 2007	Original revised	Original	10 January 2008
Ireland	19 December 2006	Original	Original	24 September 07
Italy	19 December 2006	Original	Original	10 December 2007
Japan	30 August 2006 Upd. 3 June 2007	Original	Original	8 August 2007
Latvia	29 December 2006	Original	Original	14 December 2007
Liechtenstein	22 December 2006 Corr. 19 September 2007	Original	Original	13 December 2007
Lithuania	22 December 2006 Upd. 2 August 2007	Original revised	Original	31 October 2007
Luxembourg	29 December 2006	Original	Original revised	14 December 2007
Monaco	7 May 2007	Original	Original	22 April 2008
The Netherlands	21 December 2006	Original	Original	2 November 2007
New Zealand	31 August 2006	Original	Original	30 August 2007
Norway	22 December 2006	Original	Original	15 October 2007
Poland	29 December 2006	Original revised	Original 1990–1996/1997–2001 2002–2004	14 December 2007
Portugal	28 December 2006	Original	Original	15 November 2007
Romania	18 May 2007	Original	Original	16 May 2008
Russian Federation	20 February 2007	Original	Original	18 February 2008
Slovakia	4 October 2006 Upd. 24 May 2007	Original revised	Original	19 September 2007
Slovenia	22 December 2006 Upd. 3 July 2007	Original revised	Original	15 November 2007

(continued)

Table 6.4 (continued)

Party	Initial report	GHG inventory submitted with, or referenced in, the initial report	National inventory report submitted with, or referenced in, the initial report	Report of the review of the initial report
Spain	19 December 2006 Upd. 8 June 2007	Original	Original	8 November 2007
Sweden	19 December 2006	Original	Original	19 November 2007
Switzerland	10 November 2006 Upd. 20 December 2007	Original revised	Original supplement	17 August 2007
Ukraine	29 December 2006	Original	Original	13 December 2007
United Kingdom of Great Britain and Northern Ireland	11 December 2006	Original	Original	2 October 2007

Source: UNFCCC (2009)

The information shown in Table 6.4 is relevant for assessing Annex I parties' compliance with the monitoring, reporting and verification obligations under the Kyoto Protocol. All Annex B parties, although not all in compliance, submitted the required initial reports by the due date of 31 December 2007. Croatia and Monaco became parties to the Kyoto Protocol on 28 August 2007 and 28 May 2006, respectively, and therefore their initial report was due 1 year after those dates. Within the EU, Bulgaria and Romania did not comply with the established deadline. The European Community's initial report under the Kyoto Protocol prepared by the European Environment Agency was submitted on 18 December 2006, followed by an update on 2 February 2007.

The final report is to be submitted at the end of the true-up period report, a 100-day period during which parties have the opportunity to finalise the Kyoto units transactions necessary to meet the reduction obligations under Article 3(1) of the Kyoto Protocol. The final report includes the final information on the party's level of AAUs and serves to determine the compliance by Annex B parties with the Kyoto Protocol commitments under Article 3(1). All reports submitted by Annex I parties are assessed by ERTs, which, in the event of non-compliance, have to contact the national experts of the country under consideration and provide them with recommendations and/or request them to make modifications (Article 8 of the Kyoto Protocol). Should a problem of implementation not be resolved in the review phase, the ERT can refer a question of implementation to the enforcement branch of the Compliance Committee. The enforcement branch has 16 months from the submission of the question of implementation to determine the compliance by Annex I parties with the monitoring, reporting and verification obligations.

6.2.5 Registries

The registry system designed under the Kyoto Protocol has three different components: the national registry, the CDM registry and the international transaction log (ITL).

The national registry is established by Annex I parties to ensure the accounting of the issuance, holding, transfer, acquisition, cancellation and retirement of Kyoto Protocol reduction units. These concern Emission Reduction Units (ERUs) and Certified Emission Reductions (CERs) generated through the implementation of Joint Implementation (JI) and Clean Development Mechanism (CDM) projects, respectively, as well as Assigned Amount Units (AAUs) and Removal Units (RMUs), in accordance with the modalities adopted under Article 7(4) of the Kyoto Protocol.[47] They can also be defined as Kyoto units. National registries have

[47] Decision 12/CMP.1 Guidance relating to registry systems under Article 7, para. 4, of the Kyoto Protocol and Decision 13/CMP.1 Modalities for the accounting of assigned amounts under Article 7, para. 4, of the Kyoto Protocol.

the form of a standardised electronic database and also ensure the carry-over of ERUs, CERs and AAUs.

Annex I parties were required to put in place a national registry at least before 31 December 2006 and to this end had to designate a registry administrator responsible for its management. The establishment of a national registry is one of the criteria which Annex I parties have to meet to be able to participate in the flexible mechanisms, since the registry is used for tracking and recording transfers of emissions reduction units.

National registries keep track of the assigned amounts of Annex I parties and any movements of Kyoto units resulting from transactions under International Emissions Trading. National registries are a key monitoring and recording instrument used by the Compliance Committee to assess the compliance by Annex I parties with the Kyoto Protocol limitation and reduction commitments. National registries include the total assigned amount in the first year,[48] all unit transactions and transfers, the units retired during the year, and the total assigned amount at the end of the commitment period.

Each national registry consists of different accounts which contain information on the Kyoto Protocol reduction units. There are two main types of accounts, namely the holding account of the party and the holding account of each legal entity authorised by the party to hold units under its responsibility.[49] Additional accounts are:

- A cancellation account for each commitment period;
- LULUCF activities: to cancel Kyoto units in case such activities result in a net source of GHG emissions;
- Non-compliance: to cancel Kyoto units equal to 1.3 times the amount of excess emissions if a party is not in compliance with the Kyoto Protocol obligations;
- Other cancellations by the party: to cancel Kyoto units for purposes other than the previous two;
- tCER and lCER replacement accounts: to cancel Kyoto units for the purposes of replacing tCERs prior to expiry and of replacing lCERs, respectively;
- Retirement account for each commitment period, necessary for setting units aside for compliance purposes.

Transfer and acquisition between account holders or between parties takes place through the connection of national registries with the international transaction log and electronic platforms. Each unit is labelled and includes information on the country of origin and the date of emission and a serial number. The registries also cover GHG removals by LULUCF activities through the issuance and/or cancellation of RMUs. At COP 8, the parties agreed to create technical standards in order to enable an accurate, transparent and efficient exchange of data between

[48] Article 3(7) of the Kyoto Protocol and Buchman et al. (2001), p. 35.

[49] Decision 13/CMP.1 Modalities for the accounting of assigned amounts under Article 7, para. 4, of the Kyoto Protocol, Annex II, A., p. 28.

Serial Number Identifiers

1	2	3	4	5	6	7	8	9	10	11
XX	1		000,000,000,000,001	999,999,999,999,999	01	01	1	0000001	1	XX/YY/ZZ

	Identifier	Range or Codes
1	Originating Registry	Two-letter country codes in ISO3166, as of 01 January 2005
2	Unit Type	1 = AAU, 2 = RMU, 3 = ERU converted from AAU, 4 = ERU converted from RMU, 5 = CER, 6 = tCER, 7 = ICER
3	Supplementary Unit Type	Blank for Kyoto-only Units, or as defined by STL (supplementary transaction log)
4	Unit Serial Block Start	Unique numeric values assigned by registry from 1 - 999,999,999,999,999
5	Unit Serial Block End	Unique numeric values assigned by registry from 1 - 999,999,999,999,999
6	Original Commitment Period	1 - 99
7	Applicable Commitment Period	1 - 99
8	LULUCF Activity	1 = Afforestation and reforestation, 2 = Deforestation, 3 = Forest management, 4 = Cropland management, 5 = Grazing land management, 6 = Revegetation
9	Project Identifier	Numeric value assigned by registry for Project, unique per originating registry. The Project Number is the combination of the Originating Registry and the Project Identifier.
10	Track	1 or 2
11	Expiry Date	Expiry Date for tCERs or lCERs

Fig. 6.7 Serial number identifiers. *Source*: IGES (2006)

national registries, the Clean Development Mechanisms and the transaction log. These standards were adopted by COP/MOP1.[50] All the details of the national registries are available in electronic format and include the list of units and the serial numbers. Each Kyoto unit has a unique serial number and can be held only in one account in one registry at a given time. Figure 6.7 provides an explanation of the identifiers of the different types of units.

The CDM registry has been established and is maintained by the Executive Board of the CDM in order to ensure the accounting of the issuance, holding, transfer and acquisition of CERs by non-Annex I parties participating in the CDM. The Executive Board is required to initiate any transfer of CERs held in the CDM registry to a specific account within that registry or another registry (national registry or international transaction log). The CDM registry contains several accounts, namely:

[50] Decision 19/CP.8 on the UNFCCC guidelines for the technical review of greenhouse gas inventories from Parties included in Annex I to the Convention, FCCC/CP/2002/7/Add.2, p. 15; Decision 24/CP.8 on the technical standards for data exchange between registry systems under the Kyoto Protocol, FCCC/CP/2002/7/Add.3, p. 45; Decision 22/CP.8 on the additional sections to be incorporated in the guidelines for the preparation of the information required under Article 7 and in the guidelines for the review of information under Article 8, of the Kyoto Protocol, FCCC/CP/2002/7/Add.3, p. 28.

- Pending account of the EB into which CERs are issued before being transferred to any other account;
- Holding accounts for non-Annex I parties that host a CDM project or request the opening of an account;
- Temporary accounts for Annex I parties and project participants are included until national registries for these parties and entities are operational and can receive CERs transferred to them;
- Cancellation account for CERs in excess to cancel Kyoto units in exchange for CERs issued;
- Cancellation account for tCERs and lCERs that have expired and for lCERs that are ineligible;
- Account for the share of proceeds.

The international transaction log (ITL) is essential to ensure the correct implementation of the flexible mechanisms and has been established and is maintained by the UNFCCC secretariat to support the national registries in the verification of Annex I parties' compliance with the limitation and reduction commitments at the end of the 2008–2012 period. The ITL is a standardised electronic database and has been designed to verify the following movements of Kyoto units:

- All transactions: units already retired or cancelled, units appearing in one or more registries, units which still show an unresolved discrepancy, units issued or carried over improperly, authorisation of legal entities;
- Transfers between the different registries: compliance by parties involved with the eligibility obligations and compliance by the transferring party with the CPR;
- Acquisition of CERs from afforestation/reforestation CDM projects: compliance with the limits on net acquisitions of tCERs and lCERs;
- Retirement of CERs: eligibility of the parties involved to use CERs for compliance with the reduction obligations.

If a unit transaction is not carried out correctly, the registry automatically stops it. When the commitment period expires, the verification whether Annex I parties are in compliance with their limitation and reduction commitments is ensured by comparing Annex I parties' emissions in the commitment period with their holdings of Kyoto units (ERUs, CERs, AAUs and RMUs).

6.3 Eligibility Requirements to Participate in the Flexible Mechanisms

The flexible mechanisms established by the Kyoto Protocol under Articles 17, 6 and 12 are IET, JI and CDM, respectively.[51] The operational rules for the implementation of these mechanisms by Annex I parties were defined in

[51] See Chap. 5.

Marrakech in 2001 at COP7. On the basis of Articles 5(1)(2) and 7(1)(4) of the Kyoto Protocol, the Marrakech Accords defined the following eligibility requirements as exclusive preconditions for the participation of Annex I parties in the flexible mechanisms:

- Ratification of the Kyoto Protocol;
- Calculation of the initial assigned amount in terms of CO_2 equivalent necessary for the determination of Annex I parties' level of AAUs;
- Establishment of a national system for the estimation of GHG emissions and removals as required under Article 5(1) of the Kyoto Protocol;
- Establishment of a national registry for the management of Kyoto units as required under Article 7(4) of the Kyoto Protocol;
- Submission of the GHG inventory for the most recent year as required under Article 7(1) of the Kyoto Protocol;
- Submission of information on assigned amount as required under Article 7(1) of the Kyoto Protocol.

Most of these criteria reflect the monitoring, reporting and verification obligations mentioned above. Any question regarding an Annex I party's eligibility is addressed by the enforcement branch of the Compliance Committee, through the expedited procedure.

Once eligibility to participate in the flexibility mechanisms is established, Annex I parties must ensure that this is maintained during the first commitment period. To this end, Annex I parties are required to submit, every year, a report on GHG emissions and removals and their national registries to the secretariat of the Convention. The eligibility criteria must have been satisfied when the Kyoto units are transferred among Annex I parties. An Annex I party remains eligible unless the enforcement branch declares that it is in non-compliance with at least one of the eligibility criteria. The enforcement branch is the only entity authorised to suspend a party's eligibility. The question of implementation regarding the failure to fulfil the eligibility requirements can be raised either by an ERT or by another party.

6.4 The Quantified Emission Limitation and Reduction Commitments (QELRCs)

The key objective of the Kyoto Protocol is the reduction of global greenhouse gas emissions from sources listed in Annex A to an average of 5% against 1990 levels over the 5-year period 2008–2012. The determination of the compliance by Annex I parties listed in Annex B of the Kyoto Protocol with the limitation and reduction commitments under Article 3(1) of the Protocol is based on a comparison between total Annex A emissions and the available assigned amounts at the end of the first commitment period (2008–2012). The latter correspond to the initial assigned amounts for the first commitment period (5 years), namely the quantity of units

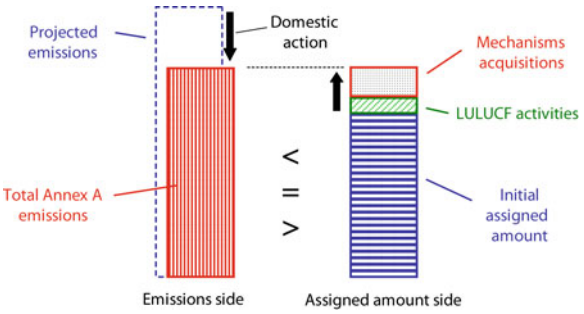

Fig. 6.8 Determination of compliance with Article 3(1). *Source*: UNFCCC (2007)

calculated by comparing the Annex B target to the party's GHG emissions in the base year together with any addition to and subtraction from the assigned amount through LULUCF activities and the Kyoto Protocol's flexible mechanisms.[52] The assigned amount is counted in assigned amount units (AAUs), expressed in allowances to emit one metric tonne of carbon dioxide equivalent. In order to comply with the QELRCs, total Annex A emissions must be less than or equal to the available assigned amounts at the end of the period 2008–2012, as shown in Fig. 6.8.

The initial informal text on the QELRCs for Annex I parties presented at COP3 was based on a uniform target, with two alternative proposals regarding its timing, namely a target year of 2010 or a target period of 2008–2012. The initial draft of Article 3(1) also provided for future reduction commitments up to 2025 or the period 2023–2027 to be included in annexes to the Protocol. From the beginning of the negotiations there was a clear assumption that developed countries should undertake binding GHG emission limitation and reduction commitments. Agreement on Article 3 was reached during the final night of the negotiations. However, the first paragraph reflected a compromise between three different positions: those of the EU, JUSSCANNZ, and G-77 and China. One important aspect that needs to be stressed in reference to Article 3(1) of the Kyoto Protocol is the inclusion of the terms 'individually or jointly' in respect of the possibility for Annex I parties to ensure the fulfilment of the reduction obligations. As the negotiations on the adoption of the Kyoto Protocol have shown, the term 'jointly' was inserted under pressure of the EU and the Member States. Furthermore, Article 3(1) of the Protocol includes the agreement on the basket approach, namely the coverage of all gases so as to achieve the target on the basis of their carbon dioxide (or carbon) equivalence, as well as the multi-year target, the baseline (1990) and the differentiated commitments.

[52] According to Decision 13/CMP.1 of the Marrakech Accords, each Annex I party with a commitment inscribed in Annex B to the Protocol is required to facilitate the calculation of its assigned amount pursuant to Article 3(7) and (8) for the first commitment period and demonstrate its capacity to account for its emissions and assigned amount. To this end, each party is required to submit the initial report containing all information required for this purpose, as defined in the Annex to Decision 13/CMP.1, by 1 January 2007 or 1 year after the entry into force of the Kyoto Protocol for that party.

Annex I Parties	Emissions target (expressed in relation to emissions in the base year or period*)
Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, European Community, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Monaco, Netherlands, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland	–8%
United States of America**	–7%
Canada, Hungary, Japan, Poland	–6%
Croatia	–5%
New Zealand, Russian Federation, Ukraine	0
Norway	+1%
Australia**	+8%
Iceland	+10%

* This base year is flexible in the case of countries with economies in transition.
** Countries which have declared their intention not to ratify the Protocol.

Fig. 6.9 Annex B emission targets. *Source*: UNFCCC (2007)

The Kyoto Protocol has assigned an important role to LULUCF activities and the flexible mechanisms as regards assigned amounts over the first commitment period (Article 3(3) and (4)). Emission allowances may be generated, cancelled, purchased or transferred through both LULUCF activities and the use of flexible mechanism.

The list of Annex B parties with specific emission reduction targets which refer to the historical GHG emissions in the base year is shown in Fig. 6.9.

Although the US and Australia have not ratified the Kyoto Protocol, they are on the list of Annex B parties, which was negotiated by Annex I parties. Obviously, the targets indicated above for these two countries do not have any legal value since they cannot be enforced on parties which have not ratified the Kyoto Protocol.

6.5 Supplementarity

In order to ensure that the major part of greenhouse gas emissions reductions is achieved by Annex I parties through domestic actions and not via international cooperation, the Marrakech Accords[53] clarify that national policies and measures aimed at fighting global warming shall constitute a ‘significant element’ of Annex

[53] FCCC/KP/CMP/2005/L.2.

I parties' climate policies. Furthermore, the Marrakech Accords emphasise that the Kyoto Protocol does not create any 'right, title or entitlement' to emit and urges Annex I parties to implement domestic action to reduce GHG emissions in order to reduce the gap between developed and developing countries in terms of per capita emissions of greenhouse gases. After complex negotiations at COP7, it was decided that the Marrakech Accords should not provide for any specific and numeric limit on the extent to which the flexibility mechanisms may be used to meet the reduction obligations. The Marrakech Accords do not quantify the value of the term 'significant', but require that Annex I parties shall demonstrate that the mechanisms used to meet the targets are 'supplemental to domestic action' in accordance with Articles 5, 7 and 8 of the Kyoto Protocol. This information has to be included in the national communications to be periodically submitted to the secretariat[54] and is monitored by the facilitative branch of the Compliance Committee which is responsible for ensuring compliance by Annex I parties with the principle of supplementarity. In particular, under Decision 2/CMP.1, the Marrakech Accords decided that 'the use of the mechanisms shall be supplemental to domestic action'; request Annex I parties 'to provide relevant information' accordingly; state that such information 'shall take into account reporting on demonstrable progress'; and request 'the facilitative branch of the Compliance Committee to address questions of implementation' with respect to the issue of supplementarity.

Since the Marrakech Accords have not been able to set a quantitative and precise limit on the use of the flexible mechanisms by Annex I parties, EC law and action on climate change may contribute to shedding some light on the details of supplementarity, at least from the point of view of the EC and the Member States. In this respect, it is worth looking at how the EC and the Member States have implemented and interpreted the flexible mechanisms and the principle of supplementarity. In this regard, the two main pieces of legislation to be addressed are Directive 2003/87/EC establishing the European Allowance Trading system and Directive 2004/101/EC linking JI and CDM projects to the EU Emissions Trading system. These Directives provide the Member States with the possibility to exchange European Union Allowances (EUAs) as well as reduction units from JI and CDM projects, i.e., Emission Reduction Units (ERUs) and Certified Emission Reductions (CERs), respectively. In line with Articles 6(1)d and 17 of the Kyoto Protocol and with the Marrakech Accords, Member States shall ensure that the principle of supplementarity is respected when flexible mechanism are used. Directive 2003/87/EC requires Member States to submit a National Allocation Plan (NAP) including the limit on the quantity of greenhouse gas emissions that the national installations are allowed to emit and the details of the distribution of EUAs to them. Useful information on how the European Commission and the

[54] Marrakech Accords, Decision 2/CMP.1, para. 5, Principles, nature and scope of the mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol, FCCC/KP/CMP/2005/8/Add.1.

Member States have interpreted the issue of supplementarity can be drawn from the decisions of the Commission on the approval of the NAPs. In particular, a close look at the National Allocation Plan regarding the allocation of greenhouse gas emission allowances notified by Italy in accordance with Directive 2003/87/EC may help to clarify this point. Commission Decision of 15 May 2007 concerning the Italian NAP includes relevant information on supplementarity. The European Commission applied the notion of supplementarity to the implementation of Directive 2003/87/EC, in particular in respect of operators' efforts to comply with the EU Emissions Trading scheme. According to the Commission,[55] the 'notion of supplementarity implies in any event that use by operators may not lead to a situation where more than half of the effort undertaken by a Member State, taking into account government purchase, is made through Kyoto flexible mechanisms'. From this statement it seems quite clear that the European Commission interpreted the notion of supplementarity in the sense that at least 50% of the effort undertaken by a Member State to comply with the Kyoto Protocol limitation and reduction commitments shall be ensured through domestic action. Is this interpretation also valid for the units resulting from the implementation of International Emissions Trading (IET) under Article 17 of the Kyoto Protocol? In other words, can the 50% implicit boundary set by the European Commission for operators be applied at the national level to limit the use of the flexible mechanisms under the Kyoto Protocol? As stressed earlier, in international law, the notion of supplementarity included in the Kyoto Protocol and in the Marrakech Accords does not provide for any numeric and specific limitation. The only limitation on the use of emission reduction credits generated by the flexible mechanisms is provided by the rules on reporting and information under Articles 7 and 8 of the Kyoto Protocol and the compliance system established by the Marrakech Accords, as specified in Decision 2/CMP.1 mentioned above. In other words, Annex I parties are required to provide relevant information on the application of the principle of supplementarity, notably by providing information on the extent to which the reduction of greenhouse gas emissions is achieved through mitigation policies and measures implemented domestically. EC law, however, is more precise than international law regarding the limits on the use of the flexibility mechanisms as prescribed by the principle of supplementarity, at least in respect of the Member States. The interpretation of this principle provided by the European Commission combines the international law component with the implementation of EC law, namely Directive 2003/87/EC establishing the EU ETS. In other words, by applying the notion of supplementarity to the implementation of the EU ETS by operators, the Commission considered that in order to comply with the notion of supplementarity a Member State shall not be brought by operators in a 'situation where more than half of the effort undertaken [taking into account government purchase and operators under EU ETS] is made through Kyoto flexible mechanisms'. Based on this interpretation, the Commission determined 'the maximum absolute amount for operators' use

[55] Point 25 of Commission Decision of 15 May 2007.

[of JI and CDM] per year permitted for Italy' and defined the limit proposed by Italy on the use of JI and CDM (25%) as 'inconsistent with Italy's supplementarity obligations under the Kyoto Protocol and decisions adopted pursuant to the UNFCCC or the Kyoto Protocol'. Although the Commission referred to the Kyoto Protocol's flexible mechanisms, making no distinction between the project-based mechanisms (JI and CDM) and international emissions trading (IET) in point 25 of the Decision 15 May 2007, and specifically referred to the use of credits from JI and CDM only in point 26, it appears clear that the Commission's considerations over the notion of supplementarity are to be applied to operators using JI and CDM credits. The assumption that the principle of supplementarity is to be considered equal to a limit of 50% in the use of flexible mechanisms is used by the Commission to define a limit in the use of JI and CDM credits by operators under the EU ETS. Thus, the numbers and percentages set by the Commission to comply with the principle of supplementarity refer only to the implementation of Directive 2003/87/EC and since no other official document of the Commission establishes a clear limit on the use of the flexible mechanisms by the Member States, it is fair to conclude that from a legal perspective, the Commission leaves a certain degree of flexibility to the Member States in their decisions to fulfil part of the obligations under Article 3(1) of the Kyoto Protocol by using the flexible mechanisms.

6.6 EC Legislation for Compliance with the Kyoto Protocol Obligations

Since the beginning of 2000, the EU has tried to take the lead in the fight against climate change at the regional and international level. In November 2001, at COP7 in Marrakech, the European Commission presented three legislative proposals designed to shape EU climate policy. These documents are the proposal for the ratification of the Kyoto Protocol by the EC and the Member States, COM(2001)579; the foundations of the European Climate Change Programme (ECCP) aimed at the development of policies and measures to combat climate change, COM(2001)580; and the proposal for the establishment of a EU-wide system for the exchange of greenhouse gas emission allowances, COM(2001)581. The ratification of the Kyoto Protocol by the EC and the Member States was ensured by the adoption of Council Decision 2002/358/EC and the necessary constitutional steps at the national level. Through Decision 2002/358/EC, the implementation of the Kyoto Protocol is part of the EU *acquis communautaire*, thus representing the main legal basis for the adoption by the EC and the Member States of secondary legislation aimed at the fulfilment of the obligations arising from the international climate regime. In respect of the monitoring, reporting and verification obligations as well as of the eligibility requirements, the EU has adopted clear and specific legislation directly aimed at compliance with the international obligations and directly translating the international requirements into Community acts. The same can be said of the limitation and reduction commitments, although in this

case a few considerations should be made. Some Community legislation has been designed with the aim to reduce GHG emissions in the EU as well as to promote energy efficiency and renewable energy, in particular the legislative package on integrated climate and energy policy adopted by the Council and the Parliament in 2009, setting the so-called 20–20–20 targets by 2020. The Community's and Member States' commitments under Article 3(1) of the Kyoto Protocol have been translated into Community law via Annex II to Council Decision 2002/358/EC. In this respect, one may regret that a specific Community act including the GHG emission reduction obligations of the Member States under the Kyoto Protocol and the modalities to implement them was not adopted in 2002, as, for instance, was the case with the Council and European Parliament Decision on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitment up to 2020. For the sectors outside of the EU ETS, such as transport and agriculture, the 'Effort-Sharing' Decision sets binding emission reduction targets for each Member State in order to reach an overall greenhouse gas emissions cut of 10% by 2020.

The distinction between legislation directly addressing and translating the international obligations established under the Kyoto Protocol and legislation indirectly addressing the greenhouse gas emission limitation and reduction commitments is important when considering the issue of responsibility of the EC and the Member States for the compliance with the obligations of the Protocol, as is done later in this chapter (Sect. 6.8). In particular, the 'missing' act on the codification of the EU's and Member States' reduction commitments under the Kyoto Protocol assumes relevance insofar as the potential applicability of Article 10 of the TEC within the Community in the field of climate policy is investigated (Chap. 7).

6.6.1 EU Legislation on Monitoring, Reporting and Verification Obligations

The EU has adopted a comprehensive set of legislation for the establishment and maintenance of a coherent and coordinate system of national registries, as well as a harmonised system for monitoring, reporting and verification obligations.

This legislation has been designed in response to the international requirements for the monitoring, reporting, accounting and verification of greenhouse gas emissions, and in order to provide for an adequate monitoring and reporting system for greenhouse gas emissions by companies falling under the EU Emissions Trading system.

6.6.1.1 Council Decision 280/2004/EC

The EU provisions on the collection of information on the greenhouse gas emissions of the Community and the Member States were initially designed in response

to the UNFCCC monitoring, reporting and verification obligations laid down in Articles 4(1) and 12 of the UNFCCC. The first provision introducing greenhouse gas emission reporting obligations for the Member States with regard to all 'anthropogenic CO_2 and other greenhouse gas emissions not controlled by the Montreal Protocol' in the Member States as required under the UNFCCC and the Kyoto Protocol was Council Decision 93/389/EEC for a monitoring mechanism of Community CO_2 and other greenhouse gas emissions,[56] later amended by Council Decision 99/296/EC.[57] In accordance with this Decision, EU Member States are required to:

- Prepare national programmes for the limitation and/or reduction of their greenhouse gas emissions (Article 2) aimed at: 'the stabilisation of CO_2 emissions by 2000 at 1990 levels in the Community as a whole'; the fulfilment of the EC's GHG emission reduction commitments under the UNFCCC and the Kyoto Protocol; and the monitoring of the actual and projected progress of Member States towards the commitments under the UNFCCC and the Kyoto Protocol;
- Prepare and submit to the Commission each year, not later than 31 December, data on the 'anthropogenic CO_2 emissions and CO_2 removal by sinks for the previous calendar year' and 'national inventory data on emissions by sources and removals by sinks of the other greenhouse gases […] for the previous year but one, and provisional data for the previous year'.

The documentation required and collected in accordance with Council Decision 99/296/EC is necessary for the European Commission to prepare and submit to the UNFCCC the Community greenhouse gas inventory report and the progress evaluation report.

Council Decision 99/296/EC for a monitoring mechanism of Community CO_2 and other greenhouse gas emissions not only obliged the EU Member States to set up national programmes in order to implement climate change policies. It also required them to set up an adequate monitoring mechanism for preparing the inventory of greenhouse gas emissions.

In early 2004, Council Decision 280/2004/EC concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol was adopted.[58] The main objectives of this Decision, listed under Article 1, are:

- Monitoring of all anthropogenic GHG emissions covered by the Kyoto Protocol in the Member States;

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[56] Council Decision 93/389/EEC of 24 June 1993 for a monitoring mechanism of Community CO_2 and other greenhouse gas emissions, *OJ* L 167, 9 July 1993, pp. 31–33.

[57] Council Decision 99/296/EC amending Council Decision 93/389/EEC for a monitoring mechanism of Community CO_2 and other greenhouse gas emissions, *OJ* L 117, 5 May 1999, pp. 35–38.

[58] Decision 280/2004/EC of the European Parliament and of the Council of 11 February 2004 concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol, *OJ* L 49, 19 February 2004, pp. 1–8.

- Evaluation of progress towards the compliance by the EC and its Member States with the reduction commitments under the UNFCCC and the Kyoto Protocol;
- Implementation of the monitoring, reporting and verification obligations of the Kyoto Protocol and the UNFCCC in the European Community and its Member States;
- Ensuring the timeliness, completeness, accuracy, consistency, comparability and transparency of reporting by the EC and its Member States to the UNFCCC.

The new reporting system introduced by Decision 280/2004/EC includes:

- New reporting obligations and guidelines for the implementation of the UNFCCC and the Kyoto Protocol, reflecting the rules included in the Marrakech Accords (flexible mechanisms and registries);
- Additional instructions for further harmonisation of emission forecasts at Member State and Community level;
- Reporting and implementation requirements related to the ratification of the Kyoto Protocol and the Burden Sharing Agreement between the Community and its Member States under Council Decision 2002/358/EC.

Decision 280/2004/EC contributed to codifying, under Community law, the monitoring, reporting and verification obligations of the Kyoto Protocol. The limitation and reduction commitments were already binding in 2004 as a result of Council Decision 2002/358/EC. Following Decision 280/2004/EC, the Commission issued Decision 2005/166/EC in 2005, laying down the rules for the implementation of Decision 280/2004/EC[59] which identified parameters for projecting future emissions as well as indicators for the measurement of progress towards GHG emission commitments. The reporting requirements in Decisions 280/2004/EC and 2005/166/EC are in line with the UNFCCC requirements, contents and formats.

In sum, Council Decision 280/2004/EC defines the rules for the compilation and submission by the EC and the Member States of the following information:

- Annual GHG inventory report;
- Report demonstrating the progress towards fulfilment of the Kyoto Protocol obligations;
- National registry;
- Report determining the assigned amounts.

Under Article 3(1) of Decision 280/2004/EC, Member States are required to determine and provide the European Commission, by 15 January each year, with the national GHG inventory, including data on:

[59] Commission Decision 2005/166/EC of 10 February 2005 laying down rules implementing Decision 280/2004/EC of the European Parliament and of the Council concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol, *OJ* L 55, 1 March 2005, pp. 57–91.

- Anthropogenic emissions of greenhouse gases listed in Annex A of the Kyoto Protocol;
- Emissions of carbon monoxide, sulphur dioxide and nitrogen oxides;
- Anthropogenic GHG emissions by sources and removals of carbon dioxide by sinks;
- Accounting of emissions and removals from land use, land-use change and forestry (LULUCF) in accordance with Article 3(3) and (4) of the Kyoto Protocol;
- Elements of the national inventory report needed for the preparation of the Community GHG inventory report.

The GHG inventory of the EC is drawn up in accordance with the UNFCCC guidelines for the preparation of national communications by Annex I parties, the revised 1996 guidelines for national GHG inventories, the IPCC Good Practice Guidance and Uncertainty Management in National GHG Inventories (2000) and the IPCC Good Practice Guidance for LULUCF (2003).

Under Community law, the annual process of compiling the EC GHG inventory is as follows:

- By 15 January, Member States submit their annual GHG inventories to Directorate General Environment (DG Environment) of the European Commission;
- Initial checks of the submitted data by the EEA (European Topic Centre on Air and Climate Change—ETC/ACC), Eurostat and JRC;
- By 28 February, the draft EC GHG inventory and inventory report are circulated to the Member States for review and comments;
- By 15 March, Member States check their national data and information in the EC GHG inventory report and, if necessary, send updates and review the EC inventory report;
- By 15 April, the final EC GHG inventory and inventory report are prepared by the ETC/ACC for submission by the European Commission to the secretariat;
- By 27 May, resubmission takes place, if needed.

The annual process of the finalisation of the EC GHG inventory report is summarised in Fig. 6.10.

In accordance with Article 3(2) of the Kyoto Protocol and COP Decision 25/CP.8, Annex I parties are also required to submit a Report Demonstrating Progress (RDP) towards the achievement of the different obligations of the international climate regime. For the European Community and the Member States this obligation is laid down in Article 5 of Decision 280/2004/EC. Data submitted on the basis of the above indications are used by the Commission, to prepare, with the support of the European Environment Agency (EEA), the annual report on the Community's progress towards the greenhouse gas reduction commitments.

In particular, in order to evaluate the progress and the projected progress of the Community and the Member States towards the achievement of the limitation and reduction commitments under the international climate regime enshrined in Council Decision 2002/358/EC, Article 5(2) of Decision 280/2004/EC requires the European

Table 18 Annual process of submission and review of Member States inventories and compilation of the European Community inventory

Element	Who	When	What
1. Submission of annual greenhouse gas inventories (complete common reporting format (CRF) submission and elements of the national inventory report) by Member States under Council Decision No 280/2004/EC	Member States	15 January	Elements listed in Article 3(1) of Decision 280/2004/EC as elaborated in Articles 2 to7 in particular: • Greenhouse gas emissions by sources and removals by sinks, for the year n –2; • And updated time series 1990- year n –3, depending on recalculations; • Core elements of the NIR. Steps taken to improve estimates in areas that were previously adjusted under Article 5.2 of the Kyoto Protocol (for reporting under the Kyoto Protocol).
2. 'Initial check' of Member States' submissions	Commission (incl. Eurostat, the JRC), assisted by the EEA	As soon as possible after receipt of Member State data, at the latest by 1 April	Initial checks and consistency checks (by EEA). Comparison of energy data provided by Member States on the basis of the IPCC Reference Approach with Eurostat energy data (by Eurostat and Member States) and check of Member States' agriculture and land use, land-use change and forestry (LULUCF) inventories by DG JRC (in consultation with Member States).
3. Compilation of draft EC inventory	Commission (incl. Eurostat, the JRC), assisted by the EEA	Up to 28 February	Draft EC inventory (by EEA), based on Member States' inventories and additional information where needed.
4. Circulation of draft EC inventory	Commission (DG Environment) assisted by the EEA	28 February	Circulation of the draft EC inventory on 28 February to Member States. Member States check data.
5. Submission of updated or additional inventory data and complete national inventory reports by Member States	Member States	15 March	Updated or additional inventory data submitted by Member States (to remove inconsistencies and fill gaps) and complete final national inventory reports.
6. Estimates for data missing from a national inventory	Commission (DG Environment) assisted by EEA	31 March	The Commission prepares estimates for missing data by 31 March of the reporting year, following consultation with the Member State concerned, and communicate these to the Member States.
7. Comments from Member States regarding the Commission estimates for missing data	Member States	8 April	Member States provide comments on the Commission estimates for missing data, for consideration by the Commission.
8. Final annual EC inventory (incl. Community inventory report)	Commission (DG Environment) assisted by EEA	15 April	Submission to UNFCCC of the final annual EC inventory. This inventory will also be used to evaluate progress as part of the monitoring mechanism.
9. Circulation of initial check results of the EC submission to Member States	Commission (DG Environment) assisted by EEA	As soon as possible after receipt of initial check results	Commission circulates the initial check results of the EC submission as soon as possible after their receipt to those Member States, which are affected by the initial checks.
10. Response of relevant Member States to initial check results of the EC submission	Member States	Within one week from receipt of the findings	The Member States, for which the initial check indicated problems or inconsistencies provide their responses to the initial check to the Commission.
11. Any resubmissions by Member States in response to the UNFCCC initial checks	Member States	For each Member State, same as under the UNFCCC initial checks phase Under the Kyoto Protocol: the resubmission should be provided to the Commission within five weeks of the submission due date.	Member States provide to the Commission the resubmissions which they submit to the UNFCCC Secretariat in response to the UNFCCC initial checks. The Member States should clearly specify which parts have been revised in order to facilitate the use for the EC resubmission. As the EC resubmission also has to comply with the deadlines specified in the guidelines under Article 8 of the Kyoto Protocol, the resubmission has to be sent to the Commission earlier than the period foreseen in the guidelines under Article 8 of the Kyoto Protocol, provided that the resubmission correct data or information that is used for the compilation of the EC inventory.
12. Submission of any other resubmission after the initial check phase	Member States	When additional resubmissions occur	Member States provide to the Commission any other resubmission (CRF or national inventory report) which they provide to the UNFCCC Secretariat after the initial check phase.

Fig. 6.10 Annual process of submission and review of Member States inventories and compilation of the European Community inventory. *Source*: EEA (2006a)

Commission to submit an annual report to the European Parliament and the Council including information from the Member States on policies and measures aimed at the reduction of greenhouse gas emissions, as well as on projected progress.

In accordance with Article 6(1) of Decision 280/2004/EC, the Community and the Member States are required to establish and maintain national registries

ensuring the 'accurate accounting of the issue, holding, transfer, acquisition, cancellation and withdrawal of assigned amount units, removal units, emission reduction units and certified emission reductions and the carryover of assigned amount units, emission reduction units and certified emission reductions'.

Finally, Article 7(1) of Decision 280/2004/EC requires the Community and its Member States to submit, by 31 December 2006, to the UNFCCC secretariat a report determining the assigned amount as equal to the emission levels determined in the EU Burden Sharing Agreement included in Council Decision 2002/358/EC.

6.6.1.2 Registries

In order to comply with the obligations under international and European law—Article 7(4) of the Kyoto Protocol, Article 19 of Directive 2003/87/EC and Article 6 of Decision 280/2004/EC, respectively—the European Community has adopted specific legislation establishing a standardised system of national registries aimed at the management of Kyoto units.

Commission Regulation (EC) 2216/2004 on the establishment of a standardised and secured system of registries pursuant to Directive 2003/87/EC[60] defines a Kyoto unit as an Assigned Amount Unit (AAU), a Removal Unit (RMU), an Emission Reduction Unit (ERU) or a Certified Emission Reduction (CER). Regulation 2216/2004 includes the general provisions, technical specifications and operational and maintenance requirements for the registry system. The EU registry system is a standardised electronic database containing common elements and the Community independent transaction log (CITL). This system is designed to communicate with the international transaction log (ITL) of the UNFCCC.

On 31 July 2007, the Commission adopted Regulation 916/2007 amending Regulation 2216/2004 and introducing, among others, a few more technical details related to the connection of the CITL with the international transaction log (ITL).[61]

The EU registry is designed to support and manage a range of 3,000–5,000 accounts with possibility of extension if necessary. The formats used in the EC registry for account numbers and serial numbers of ERUs, CERs, AAUs and RMUs, including project identifiers and transaction numbers, adhere to the standards for registry systems under the Kyoto Protocol.

The EU registry is an integrated system of registries which incorporates the Community and Member States' registries established under Article 6 of Council

[60] Commission Regulation (EC) No 2216/2004 of 21 December 2004 for a standardised and secured system of registries pursuant to Directive 2003/87/EC of the European Parliament and of the Council and Decision 280/2004/EC of the European Parliament and of the Council.

[61] Commission Regulation (EC) No 916/2007 of 31 July 2007 amending Regulation (EC) No 2216/2004 for a standardised and secured system of registries pursuant to Directive 2003/87/EC of the European Parliament and of the Council and Decision 280/2004/EC of the European Parliament and of the Council, *OJ* L 200, 1 August 2007, pp. 5–39.

Decision 280/2004/EC with the registries created under Article 19 of Directive 2003/87/EC (EU ETS). It is designed to ensure that the issuance, transfer and cancellation of Kyoto units and EU allowances are in compliance with the obligations arising from the UNFCCC and the Kyoto Protocol.

Each registry established under Article 6 of Decision 280/2004/EC should contain one party holding account and the cancellation and replacement accounts required pursuant to Decision 19/CP.7 for each commitment period, and each registry established within the framework of Article 19 of Directive 2003/87/EC should contain holding accounts for operators and other persons.[62]

On 8 October 2008, the European Commission adopted Regulation 994/2008 for a standardised and secured system of registries pursuant to Directive 2003/87/EC[63] of the European Parliament and of the Council and Decision 280/2004/EC of the European Parliament and of the Council. Commission Regulation 994/2008 provides for a comprehensive revision of the system of EU registries in the EU ETS from 1 January 2012 onwards. This Regulation contains 'general as well as operational and maintenance requirements' to ensure the independence of the EU ETS and therefore facilitate the inclusion of the aviation sector into the EU ETS from 2012 and the linking of the EU ETS with other emissions trading systems.

6.6.2 EU Legislation and Eligibility Requirements

A substantial part of the eligibility requirements established by the Kyoto Protocol for allowing Annex I parties to participate in the flexible mechanisms is covered by the EU legislation on monitoring, reporting and verification. This has already been described above, as have the details of the European rules for the functioning of Emissions Trading, Joint Implementation and Clean Development Mechanism.

In this context, in respect of EC legislation adopted to meet the eligibility requirements of the Kyoto Protocol, it is worth mentioning Council Decision 2002/358/EC concerning the approval of the Kyoto Protocol by the European Community and its Member States. This is the instrument which transposes the obligations established by the Kyoto Protocol into EC legislation, and requires the Member States to ratify and implement the Kyoto Protocol in accordance with the obligations of the international climate regime. Article 6(2) of Decision 2002/358/EC is particularly relevant for the compliance by the Community and the Member States with the eligibility requirements, notably the ratification of the Kyoto Protocol: 'Member States shall endeavour to take the necessary steps with a view

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[62] Recital 4 of Commission Regulation 2216/2004.

[63] Commission Regulation (EC) No 994/2008 for a standardised and secured system of registries pursuant to Directive 2003/87/EC of the European Parliament and of the Council and Decision No 280/2004/EC of the European Parliament and of the Council, *OJ* L 271, 11 October 2008, pp. 3–40.

to depositing their instruments of ratification or approval simultaneously with those of the European Community and the other Member States and as far as possible not later than 1 June 2002'. This obligation is part of the EU *acquis communautaire*, and the ratification of the Kyoto Protocol is therefore compulsory for the new Member States that joined the EU after the adoption of Decision 2002/358/EC.

6.6.3 EU Legislation on the Reduction of Greenhouse Gas Emissions

Since the early 1990s, the European Community has conducted an advanced environmental policy, and the fight against climate change is one of its key priorities. To this end, a wide variety of legislative measures have been adopted at the Community level obliging the Member States to follow specific policies and measures aimed at the reduction of greenhouse gas emissions as well as setting standards and limits which directly and indirectly affect global warming. In particular, EU climate policy is centred around the following three main objectives:

- Direct reduction of greenhouse gas emissions;
- Increase of the share of renewable energy;
- Promotion and increase of energy efficiency and energy-saving measures.

It is outside the scope of this book to analyse the details of all direct and indirect EU legislation adopted by the EU institutions to fulfil the three above-mentioned objectives. We will therefore merely discuss the main policy and strategy instrument adopted within the framework of EU climate policy, i.e., the European Climate Change Programme (ECCP).

The ECCP is divided into two phases: ECCP I (2000–2003) and ECCP II (2005).

According to recital 12 of the preamble of Decision 2002/358/EC, the Community and the Member States are obliged 'to take measures in order to enable the Community to fulfil its obligations under the [Kyoto] Protocol'.

The European Climate Change Programme (ECCP) was launched in 2000 with the adoption by the European Commission of Communication COM(2000)88 'EU policies and measures to reduce greenhouse gas emissions: Towards a European Climate Change Programme (ECCP)'.[64]

The ECCP is at the foundation of the European climate and energy policy and strategy towards the fight against global warming and is one of best examples of the application of the principle of integration of environmental concerns into other

[64] Communication from the Commission to the Council and the European Parliament on EU policies and measures to reduce greenhouse gas emissions: Towards a European Climate Change Programme (ECCP), COM(2000)88, Brussels, 8 March 2000.

Community policies (Article 6 TEC).[65] The ECCP aims at the identification of adequate policies and measures to reduce GHG emissions throughout the Community. The work of the ECCP is divided between thematic working groups composed of representatives of the European Commission, interested DGs, and representatives of the Member States, private sector, NGOs and stakeholders.

The first phase of the European Climate Change Programme I (2000–2001) focused on cost-effective policies and measures to be introduced in the energy, transport and industry sectors. The six working groups established within the ECCP were: flexible mechanisms, energy supply, energy consumption, transport, industry and research. A range of 40 EU-wide common and coordinated policies and measures (CCPMs) were identified in the ECCP Report released by the European Commission in June 2001.[66] Most of them have been effectively implemented.

Some of the provisions of the first ECCP report were integrated into the legislation package (2001–2003) included in the Communication of the Commission on the implementation of the first phase of the European Climate Change Programme, which identified four different areas for intervention[67]:

- Cross-cutting issues: correct and effective implementation of the IPPC Directive, proposal for a directive on linking project-based mechanisms including JI and CDM to the EC Emissions Trading scheme, proposal for a review of the EC greenhouse gas monitoring mechanism;
- Energy sector: proposal for a framework directive for minimum efficiency requirements for end-use equipment, proposal for a directive on energy demand management, proposal for a directive on the promotion of combined heat and power (CHP), additional non-legislative proposals;
- Transport sector: measures in line with the White Paper 'European Transport Policy for 2010: Time to Decide'[68] on the shift of the balance between modes of transport, proposal for improvements in infrastructure use and charging, proposal for the promotion of the use of biofuels;
- Industry sector: proposal for a regulation on fluorinated gases.

In the second phase of ECCP I (2001–2003), eleven working groups were established, namely on linking JI and CDM with the EU ETS, agriculture, forest-related sinks, sinks in agricultural soils, fluorinated gases, energy supply, energy demand, transport, industry, waste and research.

In April 2003, the European Commission released its second ECCP Progress Report 'Can we meet our Kyoto targets?' which provided an overview of the

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[65] 'Environmental protection requirements must be integrated into the definition and implementation of the Community policies and activities referred to in Article 3, in particular with a view to promoting sustainable development' (Article 6 TEC).

[66] European Climate Change Programme, Long Report, June 2001, available at: http://ec.europa.eu/environment/climat/pdf/eccp_longreport_0106.pdf.

[67] See Chap. 1, n. 2.

[68] White Paper on European transport policy for 2010: Time to decide, COM(2001)370, Brussels, 12 September 2001.

activities of the ECCP working groups and of the follow-up work in terms of implementation of measures that had been identified in the first phase of the ECCP.[69]

During the second phase of ECCP I, the following policies and measures were identified:

- Flexible mechanisms: revision of the monitoring mechanism for GHG emissions, Directive establishing a European Union Emissions Trading system and the Directive on linking project-based mechanisms including JI and CDM to the EC Emissions Trading scheme.
- Energy supply:
  - Directive 2001/77/EC on the promotion of electricity produced from renewable energy sources in the internal electricity market, which includes an indicative target to increase the proportion of electricity supplied by renewable sources to 21% in 2010 (14% in 1997), with specific indicative targets for each Member State[70];
  - Communication from the Commission on alternative fuels for road transportation and on a set of measures to promote the use of biofuels[71];
  - Directive 2003/30/EC on the promotion of the use of biofuels or other renewable fuels for transport, which includes an indicative target of 5.75% biofuels.[72]
- Combined heat and power (CHP):
  - Communication from the Commission on a Community strategy to promote combined heat and power (CHP) and to dismantle barriers to its development[73];
  - European Commission Proposal for a Directive on the promotion of cogeneration based on a useful heat demand in the internal energy market[74];

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[69] Second ECCP Progress Report—Can we meet our Kyoto targets?, April 2003, available at: http://ec.europa.eu/environment/climat/pdf/second_eccp_report.pdf.

[70] Directive 2001/77/EC of the European Parliament and of the Council of 27 September 2001 on the promotion of electricity produced from renewable energy sources in the internal electricity market, *OJ* L 283, 27 October 2001, pp. 33–40.

[71] Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions on alternative fuels for road transportation and on a set of measures to promote the use of biofuels, COM(2001)547, Brussels, 7 November 2001.

[72] Directive 2003/30/EC of the European Parliament and of the Council of 8 May 2003 on the promotion of the use of biofuels or other renewable fuels for transport, *OJ* L 123, 17 May 2003, pp. 42–46.

[73] Communication from the Commission on a Community strategy to promote combined heat and power (CHP) and to dismantle barriers to its development, COM(1997)514, Brussels, 15 October 1997.

[74] European Commission Proposal for a Directive of the European Parliament and of the Council on the promotion of cogeneration based on a useful heat demand in the internal energy market, COM(2002)415, Brussels, 22 July 2002.

  - Common Position (EC) No 52/2003 adopted with a view to adopting a directive on the cogeneration based on a useful heat demand in the internal energy market and amending Directive 92/42/EEC[75];
  - Directive 2004/8/EC on the promotion of cogeneration based on a useful heat demand in the internal energy market and amending Directive 92/42/EEC.[76]

- Internal market in electricity and gas:
  - Directive 2003/54/EC concerning common rules for the internal market in electricity and repealing Directive 96/92/EC[77];
  - Directive 2003/55/EC concerning common rules for the internal market in natural gas and repealing Directive 98/30/EC.[78]

- Renewable energy: the second phase of the ECCP focused on the promotion of energy from renewable sources in heating applications ('RES-H'). The Commission assessed the potential for increased uptake and the ways in which both existing (Directive on energy performance of buildings or the Proposal for a Directive on CHP) and new measures could contribute to the promotion of RES-H:
  - Common Position (EC) No 5/2003 with a view to adopting a Directive concerning common rules for the internal market in electricity and repealing Directive 96/92/EC[79];
  - Common Position (EC) No 6/2003 with a view to adopting a Directive concerning common rules for the internal market in natural gas and repealing Directive 98/30/EC.[80]

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[75] Common Position (EC) No 52/2003 of 8 September 2003 adopted by the Council, acting in accordance with the procedure referred to in Article 251 of the Treaty establishing the European Community, with a view to adopting a Directive of the European Parliament and of the Council on the cogeneration based on a useful heat demand in the internal energy market and amending Directive 92/42/EEC, *OJ* C 258 E, 28 October 2003, pp. 1–17.

[76] Directive 2004/8/EC of the European Parliament and of the Council of 11 February 2004 on the promotion of cogeneration based on a useful heat demand in the internal energy market and amending Directive 92/42/EEC, *OJ* L 52, pp. 50–60.

[77] Directive 2003/54/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in electricity and repealing Directive 96/92/EC, *OJ* L 176, 15 July 2003, pp. 37–56.

[78] Directive 2003/55/EC of the European Parliament and of the Council of 16 June 2003 concerning common rules for the internal market in natural gas and repealing Directive 98/30/EC, *OJ* L 176, 15 July 2003, pp. 57–78.

[79] Common Position (EC) No 5/2003 of 3 February 2003 adopted by the Council, acting in accordance with the procedure referred to in Article 251 of the Treaty establishing the European Community, with a view to adopting a Directive of the European Parliament and of the Council concerning common rules for the internal market in electricity and repealing Directive 96/92/EC, *OJ* C 050 E, 4 March 2003, pp. 15–35.

[80] Common Position (EC) No 6/2003 of 3 February 2003 adopted by the Council, acting in accordance with the procedure referred to in Article 251 of the Treaty establishing the European Community, with a view to adopting a Directive of the European Parliament and of the Council

Energy demand:

- Directive 2002/91/EC on the energy performance of buildings, which requires Member States to adopt energy performance standards, introduces energy labelling of buildings across the EU, along with a requirement to evaluate the opportunities for installing renewable energy systems in buildings above a certain size.[81]
- Labelling equipment:
  - Commission Directive 2002/40/EC implementing Council Directive 92/75/EEC with regard to energy labelling of household electric ovens[82];
  - Commission Directive 2002/31/EC implementing Council Directive 92/75/EEC with regard to energy labelling of household air-conditioners[83];
  - Regulation (EC) No 2422/2001 on a Community energy-efficiency labelling programme for office equipment[84];
  - Proposal for a Directive on establishing a framework for the setting of eco-design requirements for energy-using products and amending Council Directive 92/42/EEC.[85]
- Fluorinated gases: proposal of the European Commission for a Regulation on certain fluorinated gases.[86]

In respect of the Working Groups on Sinks—Sub-Group on Agricultural Soils and Sub-Group on Forest-Related Sinks—progress was reported on the mitigation potential of improved use and management of agricultural soils and on the potential for carbon sequestration in EU forests. The second ECCP Progress Report confirmed that additional and more effective policies and measures were required in the EC to meet the limitation and reduction commitments of the Kyoto Protocol.

Of the CCPMs identified by ECCP-I, the EU Emissions Trading system including the use of project-based mechanisms (Linking Directive 2004/101/EC) made the biggest contribution to the achievement of the greenhouse gas reduction commitments of the Kyoto Protocol by the EC. As mentioned above, additional

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[81] Directive 2002/91/EC of the European Parliament and of the Council of 16 December 2002 on the energy performance of buildings, *OJ* L 1, 4 January 2003, pp. 65–71.

[82] Commission Directive 2002/40/EC of 8 May 2002 implementing Council Directive 92/75/EEC with regard to energy labelling of household electric ovens, *OJ* L 128, 15 May 2002, pp. 45–56.

[83] Commission Directive 2002/31/EC of 22 March 2002 implementing Council Directive 92/75/EEC with regard to energy labelling of household air-conditioners, *OJ* L 86, 3 April 2002, pp. 26–41.

[84] Regulation (EC) No 2422/2001 of the European Parliament and of the Council of 6 November 2001 on a Community energy efficiency labelling programme for office equipment, *OJ* L 332, 15 December 2001, pp. 1–6.

[85] Proposal of the European Commission for a Directive of the European Parliament and of the Council on establishing a framework for the setting of eco-design requirements for energy-using products and amending Council Directive 92/42/EEC, COM(2003)453, Brussels, 3 November 2003.

[86] Proposal of the European Commission for a Regulation of the European Parliament and of the Council on certain fluorinated gases, COM(2003)492, Brussels, 11 August 2003.

significant GHG emission savings were ensured by the RES-E Directive (promotion of electricity produced from renewable energy sources), the Directives on the energy performance of buildings, biofuels, the promotion of cogeneration (combined heat and power—CHP) and energy taxation. Other key policies and measures are the IPPC Directive, the efficiency requirements for new hot-water boilers, the F-Gases Regulation, the Directive on HFC emissions from air-conditioning systems in motor vehicles, and the Landfill Directive. According to Communication COM(2007)757 of the European Commission on the progress towards achieving the Kyoto objectives, the above-mentioned measures accounted for 89% of the total GHG emission savings for EU27.[87]

The second phase of the European Climate Change Programme (ECCP II), launched by the European Commission on 24 October 2005, was based upon the Communication 'Winning the battle against climate change'.[88] Like ECCP I, the second phase of the ECCP (2006–2007) aimed at the identification of policies and measures aimed at the reduction of GHG emissions in the Community. The first recommendations on the adoption of specific Community legislation concerned:

- ECCP I review;
- Geological carbon capture and storage: proposal on carbon capture and geological sequestration (January 2008);
- Adaptation to climate change: Green Paper on Adaptation (June 2007);
- Aviation: Legislative proposal integrating aviation into the EU ETS (December 2006);
- Integrated approach to reduce CO_2 emissions from light-duty vehicles: proposal for a Fuel Quality Directive (January 2007) and proposal for limitation of CO_2 from cars (end 2007 to early 2008);
- EU ETS Review;
- Energy efficiency;
- Renewable energy;
- Technology policy.

Independently from the process related to the ECCP, the European Commission tabled, in January 2008, the legislative package for an integrated climate and energy policy which prepared the way for the future EU climate and energy policy.[89] The package of measures included the following provisions:

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[87] Communication from the Commission: Progress towards achieving the Kyoto objectives (required under Decision 280/2004/EC of the European Parliament and of the Council concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol), COM(2007)757, Brussels, 27 November 2007, p. 13.

[88] Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions: Winning the battle against climate change, COM(2005)35, Brussels, 9 February 2005.

[89] Communication from the European Commission: 20 20 by 2020, Europe's climate change opportunity, COM(2008)30, Brussels, 23 January 2008.

- Proposal for a Decision on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020 (COM(2008)17—Effort Sharing);
- Proposal for a Directive amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading system of the Community (COM(2008)16—EU ETS Review);
- Proposal for a Directive on the promotion of the use of energy from renewable sources (COM(2008)19);
- Proposal for a Directive on the geological storage of carbon dioxide and amending Council Directives 85/337/EEC, 96/61/EC, Directives 2000/60/EC, 2001/80/EC, 2004/35/EC and 2006/12/EC and Regulation (EC) No 1013/2006 (COM(2008)18);
- Communication on a first assessment of national energy efficiency action plans as required by Directive 2006/32/EC on energy end-use efficiency and energy services (COM(2008)11);
- Communication on supporting early demonstration of sustainable power generation from fossil fuels (COM(2008)13) (CO_2 carbon and capture storage);
- Community Guidelines on State Aid for Environmental Protection.

On 6 April 2009, the proposals of the European Commission were adopted by the EU Council of Justice and Home Affairs with the inclusion of the amendments and changes tabled by the Council and the European Parliament. On 5 June 2009 the following provisions were published in the Official Journal of the EU:

- Directive 2009/28/EC of the European Union and of the Council on the promotion of the use of energy from renewable sources[90];
- Directive 2009/29/EC of the European Parliament and of the Council amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community[91];
- Directive 2009/30/EC of the European Parliament and of the Council amending Directive 98/70/EC as regards the specification of petrol, diesel and gas-oil and introducing a mechanism to monitor and reduce greenhouse gas emissions and amending Council Directive 1999/32/EC as regards the specification of fuel used by inland waterway vessels and repealing Directive 93/12/EEC[92];

[90] Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC, *OJ* L 140, 5 June 2009, 16–62.

[91] Directive 2009/29/EC of the European Parliament and of the Council of 23 April 2009, amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community, *OJ* L 140, 5 June 2009, 63–87.

[92] Directive 2009/30/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 98/70/EC as regards the specification of petrol, diesel and gas-oil and introducing a mechanism to monitor and reduce greenhouse gas emissions and amending Council

- Directive 2009/31/EC of the European Parliament and of the Council on the geological storage of carbon dioxide and amending Council Directive 85/337/EEC, Directives 2000/60/EC, 2001/80/EC, 2004/35/EC, 2006/12/EC and 2008/1/EC and Regulation (EC) No 1013/2006[93];
- Decision 406/2009/EC of the European Parliament and of the Council on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitment up to 2020[94];
- Regulation 443/2009/EC of the European Parliament and of the Council setting emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO_2 emissions from light-duty vehicles.[95]

Finally, it should be pointed out that all the above-mentioned EC legislation adopted to fulfil the Community's and Member States' obligations under the Kyoto Protocol—monitoring, reporting and verification obligations, eligibility requirements and greenhouse gas emission reduction commitments—are indistinctly applicable to all the EU Member States, and the distinction between new and old Member States is irrelevant in this respect.

6.7 Compliance of the EC and Member States with the Kyoto Protocol Obligations

An exhaustive picture of the different types of obligations established by the international climate regime has been provided and now the issue of compliance with those obligations by the Community and the Member States should be addressed. In this respect, one of the peculiarities of the Kyoto Protocol, i.e., the different status of the EU15 and the EU10/12, has already been emphasised. As stated in Chap. 4, as far as international law and the quantified emission limitation and reduction commitments are concerned, Article 4 of the Kyoto Protocol regulates the EC's participation in the international climate regime and binds the EU15 at least until the end of the first commitment period (2012). Article 4 is clear

[93] Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide and amending Council Directive 85/337/EEC, European Parliament and Council Directives 2000/60/EC, 2001/80/EC, 2004/35/EC, 2006/12/EC, 2008/1/EC and Regulation (EC) No 1013/2006, *OJ* L 140, 5 June 2009, pp. 114–135.

[94] Decision 406/2009/EC of the European Parliament and of the Council of 23 April 2009 on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020, *OJ* L 140, 5 June 2009, pp. 136–148.

[95] Regulation (EC) No 443/2009 of the European Parliament and of the Council of 23 April 2009 setting emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO_2 emissions from light-duty vehicles, *OJ* L 140, 5 June 2009, pp. 1–15.

in establishing a temporal and a geographical limit to the joint commitment of the Member States. The situation is different where it concerns the monitoring, reporting and verification obligations and the eligibility requirements. On both of these sets of obligations, the Kyoto Protocol is less clear and it is reasonable to say that the EU's joint commitment based on Article 4 of the Protocol applies to the EU15 clearly and explicitly only in reference to the limitation and reduction commitments. A similar restriction cannot be compared with the MRV obligations and the eligibility requirements and it is argued below why the EU's joint commitment is valid and applicable exclusively as regards the QELRCs.

New Member States joining the EU on 1 May 2004 and 1 January 2007 encountered more difficulties than the other Member States in the compliance with the obligations established by the international climate regime. The reasons behind this statement can be found in Chap. 2: a structural lagging behind in terms of technical and personnel expertise in the field of environmental protection and the monitoring of pollution; and lack of prioritisation of this issue in the choices of national policy makers in consideration of the impressive amount of work these countries were facing in trying to meet the *acquis communautaire* requirements. The complexity and specific nature of the requirements established by the international climate regime definitively play a role in this respect. The requirement to adopt adequate policies and measures to fight climate change is an outstanding example in this respect. According to the principle of common but differentiated responsibilities enshrined in Article 3(1) of the UNFCCC, the new Member States, with the exception of Malta and Cyprus, are required, like all Annex I parties, to adopt adequate mitigation policies and measures in order to limit the anthropogenic greenhouse gas emissions and to enhance sinks and reservoirs.[96] The principle referred to in Article 3(1) invites all Parties 'to implement its provisions' in order 'to achieve the objective of the Convention' and is confirmed by the Kyoto Protocol in Article 2(a) where Annex I parties are urged to 'implement and/or further elaborate policies and measures in accordance with [their] national circumstances'.[97] The UNFCCC and the Kyoto Protocol set three main conditions to be met by Annex I parties in shaping adequate policies and measures: to aim at the reduction of greenhouse gas emissions and the achievement of the UNFCCC's goals; to promote sustainable development; and to minimise the adverse effects of climate change.[98] Despite the availability of 'hot air' and the rather low level of greenhouse gas emissions compared with other developed countries, the new

[96] Article 4(2)(a) of the UNFCCC. According to the UNFCCC, policies and measures have to be adopted in different sectors: energy, transport, industry, agriculture, forestry and waste management. To this end, the list of policy and economic instruments is extensive: fiscal instruments, voluntary agreements, regulations, information, education and public awareness, and research.

[97] Activities suggested by Article 2(1)(a) of the Kyoto Protocol include energy efficiency, greenhouse gas sinks, sustainable agriculture, renewable energy, carbon sequestration, no subsidies or market imperfections, reforms in relevant sectors, transport policies, and waste management.

[98] Article 3(3) and (4) of the UNFCCC and Article 2(1) and (3) of the Kyoto Protocol.

Member States are therefore required to adopt policies and measures aimed at the reduction of greenhouse gas emissions as agreed under the UNFCCC and the Kyoto Protocol and for this purpose have, since early 2000, launched some initiatives aimed at mitigating climate change.

The accession to the EU was a key step for the EU10 to boost strategies to curb global warming. In fact, the EU accession requirements have contributed to the development of the new Member States' policies and measures regarding climate change more than the international obligations under the UNFCCC and the Kyoto Protocol. Greenhouse gas emissions within the new Member States decreased, among others, simply by joining the EU rather than as a result of business-as-usual policies. The reason is that the *acquis communautaire* requirements have forced these countries to develop new environmental protection measures which have helped to shape adequate national strategies aimed at curbing global warming in line with the rest of the EU. Thus, many EU legal instruments, such as the IPPC Directive and the energy efficiency standards introduced by different directives, as well as changes to the Common Agricultural Policy (CAP), have contributed to reducing the level of GHG emissions in the new Member States. As a consequence, it may indeed be affirmed that the definition by the new Member States of policies and measures to mitigate climate change has been strongly related to the EU accession requirements, which form an integral part of the EU *acquis communautaire*.

The representatives of the new Member States are now fully integrated into the EU legislative process as regards the definition of European climate policy and legislation as well as the shaping of the post-2012 strategy. However, though with a different role, those Member States were represented in the EU institutions also before the accession date, for instance, when they participated in the working groups aimed at designing the second phase of the European Climate Change Programme or in the discussions on the adoption of legislative measures within the framework of the European climate policy, such as the Proposal for a Directive on the promotion of biofuels,[99] the Proposal for a Directive to promote combined heat and power (CHP) biofuels,[100] the Communication on vehicle taxation[101] and the Proposal for a Directive linking JI/CDM with ET.[102] In terms of financial support and capacity building for the new EU Member States in the field of environmental protection, European institutions have made use of several instruments and

[99] Proposal for a Directive on alternative fuels for road transportation and on a set of measures to promote the use of biofuels, European Commission, COM(2001)547, Brussels, 7 November 2001.

[100] Proposal of the European Commission for a Directive to promote cogeneration of heat and power, European Commission, COM(2002)415, Brussels, 22 July 2002.

[101] Communication from the Commission to the Council and the European Parliament: Taxation of passengers cars in the EU, European Commission, COM(2002)431, Brussels, 6 September 2002.

[102] Proposal for a Directive amending the Directive establishing a scheme for greenhouse gas emission allowance trading within the Community, in respect of the Kyoto Protocol's project mechanisms, COM(2003)403, Brussels, 23 July 2003.

programmes, e.g., PHARE, SAPARD or ISPA, to provide financial and methodological support to these countries with a view to facilitating a rapid and successful implementation of EU legislation and the corresponding environmental monitoring systems. Nevertheless, since the beginning of the accession process, the objective was not harmonisation of environmental protection standards *tout court* but rather adaptation of the European model to the national conditions and structures of the new EU Member States.

As Annex I parties to the UNFCCC, the EU10 have worked hard to improve and reorganise their national systems and structures to implement the Kyoto Protocol. As stated above, participation in the flexible mechanisms requires fulfilment of a wide range of specific eligibility criteria. The issue of capacity building in countries with economies in transition (EITs) has been addressed by the international community with the adoption of Decision 11/CP.5[103] through which the Conference of the Parties identified capacity building as an issue that could undermine 'the effective participation of countries with Economies in Transition' in both the UNFCCC and the Kyoto Protocol. Following Decision 11/CP.5, the UNFCCC secretariat drew up a report which was based on the information submitted by countries with economies in transition and aimed at the identification of their needs and priorities in terms of capacity building.[104] COP7 reconsidered the issue and agreed on the adoption of specific capacity building guidelines under Decision 3/CP.7.[105] These guidelines recognise 'the need to enhance their ability to address climate change issues' as well as the mutual responsibilities of EITs and developed countries. Under these guidelines Annex II parties to the UNFCCC are indeed urged to provide financial and technical support to EITs through multilateral and bilateral agencies or through the involvement of the private sector. Country teams on climate policy and national focal points have been established. The subsidiary bodies of the UNFCCC monitor the developments of the capacity building process.

As already stated above, the EU10 were part of the EU accession process, and compliance with the *acquis communautaire* represented an additional test for their national systems which had to be harmonised in accordance with Community law. Although on the date of the first accession wave in 2004, EU legislation on climate change had not been completely defined yet, the EU12 were called upon to raise efforts and resources aimed at internal capacity building[106] as a vital condition for meeting the EU accession requirements. Nevertheless, EITs' governments did

[103] Capacity building in countries with economies in transition, see UNFCCC document FCCC/CP/1999/6/Add.1.

[104] Capacity building in countries with economies in transition—Compilation and synthesis of information on capacity-building needs and priorities of Parties included in Annex I to the Convention but not included in Annex II, see UNFCCC document FCCC/SB/2000/INF.2, 19 May 2000.

[105] Decision 3/CP.7, Capacity building in countries with economies in transition, see FCCC/CP/2001/13/Add.1.

[106] Levina (2002), p. 13.

make a few efforts in the field of capacity building, often in collaboration with other Annex I parties or international organisations and NGOs. International projects on capacity building in the field of climate policy were either activities aimed at providing general assistance or specific actions focused on Central and Eastern Europe or even bilateral initiatives.[107]

Support for the new Member States is also provided by some NGOs and business associations such as the Regional Environmental Centre (REC) and the World Resources Institute (WRI) through their Capacity for Climate Protection Project which concerns institutional frameworks; the REC, which is sponsored by several Annex I government-related institutions, has also set up a Climate Change Programme to provide capacity-building activities in the region; the International Energy Agency's (IEA) assistance for ET for entities in Estonia, Latvia, Lithuania, Poland and Russia; and the Centre for Clean Air and Policy (CCAP) has supported Slovakia, Poland and the Czech Republic in the development of climate change strategies and in the clarification of IET through its Economies in Transition Programme. Bilateral assistance to the new Member States has so far been provided by several Annex I parties and in particular by those EU15 which need to use the flexible mechanisms JI and IET in order to comply with the Kyoto Protocol limitation and reduction commitments (such as the Netherlands, Denmark, Italy and Spain).

[107] Capacity-building projects implemented in the new EU Member States include: the Energy Standards and Labelling Programme aimed at fostering the developments of energy standards in 2000 and 2001, established by the United Nations Department of Economic and Social Affairs (DESA) and intended for Poland as well as Asia, the Middle East and Central America; the ad hoc Interdepartmental Working Group on Climate established by the FAO, a project focusing on the role of LULUCF activities in curbing global warming; the UNITAR (United Nations Institute for Training and Research) Programme of Training for the Application of International Environmental Law, which involves the training of CG11 government officials in order to respond to the UNFCCC guidelines on inventory systems; the Environmental Energy Agency's assistance in drawing up GHG national inventories by offering training activities or software tools; the Intergovernmental Panel on Climate Change (IPCC), which provides workshops and seminars on the IPCC approach and methodology in order to offer capacity assistance; the Global Environmental Facility (GEF) of UNDP, which provides assistance either as regards capacity building issues such as national inventories and national communications, or in the project activity sector, e.g., energy efficiency and renewable energy; the National CDM/JI Strategy Studies Programme of the World Bank, a project involving activities in the Czech Republic and Slovakia aimed at training local experts in estimating, promoting and establishing initiatives to reduce greenhouse gas emissions, such as JI projects; the PCFplus of the World Bank, which concerns the promotion of training and research and the development of activities and projects to combat global warming (Latvia, Poland, Romania, etc.); the Annex I Expert Group of the OECD/IEA, a group composed of government officials from Annex I countries which supports the CEEC mainly through the organisation of workshops and the exchange of information in several fields of the climate regime, such as monitoring and compliance as well as the development of policies and measures and ET and JI projects; the US initiative, implemented through the Environmental Protection Agency (EPA), which aims to support and enhance greenhouse gas markets in Poland, Slovakia and the Czech Republic; several projects sponsored by the European Commission.

Although these assistance activities have produced very positive effects for the development of national systems with a view to implementing the Kyoto Protocol in EITs, experience has shown that country-driven activities involving local officials and stakeholders are more effective. Unfortunately, the international community's attention has so far focused on providing assistance mainly in the development of JI projects, ignoring other relevant issues such as the preparation of national inventories and registries or the future participation in emissions trading.[108]

6.7.1 Compliance with the Monitoring, Reporting and Verification Obligations

In order to comply with the monitoring, reporting and verification obligations of the Kyoto Protocol, the European Community and the Member States have provided the secretariat of the UNFCCC with the following documentation[109]:

- Fourth National Communication from the European Community required under Article 12 of the UNFCCC, 10 February 2006[110];
- EC inventory system pursuant to Article 5(1) of the Kyoto Protocol;
- EC greenhouse gas inventory and inventory report required under Articles 4 and 12 of the UNFCCC, 29 May 2009[111];
- Annual report on demonstrable progress of the European Community required under Article 5 of Decision 280/2004/EC[112];
- Member States' and Community registries required under Article 7 of the Kyoto Protocol[113];
- EC initial report under the Kyoto Protocol required under Article 3(7) and (8) of the Protocol, 2 February 2007.[114]

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[108] See *supra* n. 106, pp. 6–14.

[109] The list presents the documentation submitted as of 30 September 2009.

[110] European Commission, Communication on the fourth national communication from the European Community under the UNFCCC, COM(2006)40, Brussels, 8 February 2006.

[111] European Environment Agency, Annual European Community Greenhouse Gas Inventory 1990–2007 and Inventory Report 2009, Technical Report No 4/2009, 29 May 2009.

[112] Communication from the Commission: Progress towards achieving the Kyoto objectives (required under Article 5 of Decision 280/2004/EC of the European Parliament and of the Council concerning a mechanism for monitoring community greenhouse gas emissions and for implementing the Kyoto Protocol), COM(2008)651, Brussels, 16 October 2008, available at: http://ec.europa.eu/environment/climat/gge_progress.htm.

[113] Available at: http://ec.europa.eu/environment/climat/gge.htm.

[114] European Environment Agency, The European Community's initial report under the Kyoto Protocol: Report to facilitate the calculation of the assigned amount of the European Community pursuant to Article 3, paras. 7 and 8 of the Kyoto Protocol, Technical Report No 10/2006, 2 February 2007.

Apart from the national communication, the obligation to prepare and compile the rest of the above-mentioned documentation (inventory report, report on demonstrable progress, national registry and initial report) in accordance with European Community law is an obligation which rests upon all the Member States. The new Member States are therefore required to provide the requested information on their greenhouse gas emissions in the same way as the EU15 and in accordance with the same prescriptions. The EU Bubble agreement does not apply to the MRV obligations in the sense that, under both European Community and international law, the EU Member States are treated in an equal manner and have the same status.

The fourth national communications were due on 1 January 2006 and the European Community had submitted its communication under the UNFCCC by 10 February 2006.[115] Annex I parties are required to submit a fifth national communication to the secretariat by 1 January 2010. At the time of writing, Luxembourg is the only Member State which has not submitted its fourth national communication yet, together with Cyprus—non-Annex I party—which has not even submitted its initial communication yet.[116] The preparation and submission of the national communication by the European Community and the Member States is a separate process since this document mainly includes information about policies and measures aimed at fighting global warming as well as on the level of GHG emissions at the national level. The submission of the national communication to the UNFCCC is not mentioned in the list of the monitoring, reporting and verification obligations for non-Annex I parties. However, since the national communication also includes information about the inventory of greenhouse gas emissions and removals, failure by parties to submit the national communication may be a warning sign in respect of the ability of these parties to meet the MRV obligations.

Table 6.5 shows the status of submissions of national communications by the Member States.[117]

The inventory system of the European Community is designed in accordance with the guidelines for national systems adopted by COP/MOP1.[118] The EC inventory system is prepared by DG Environment, supported by the European Environment Agency (EEA), the European Topic Centre on Air and Climate Change (ETC/ACC), the Statistical Office of the European Communities (EUROSTAT) and the Joint Research Centre (JRC).[119] Overall responsibility for submission of the EC inventory report to the secretariat lies with the European Commission (DG Environment). The Member States are responsible for their own inventories, which serve as basic input for the compilation of the EC inventory.

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[115] Communication from the Commission on the fourth national communication from the European Community under the UNFCCC, COM(2006)40, Brussels, 8 February 2006.

[116] Malta and Cyprus are not listed in Annex I to the UNFCCC.

[117] The data refer to the day on which the secretariat received the document, and are updated to 15 October 2002 on the UNFCCC website.

[118] Decision 15/CMP.1 Guidelines for the preparation of the information required under Article 7 of the Kyoto Protocol, in particular para. 30.

[119] EEA (2006), p. 21.

Table 6.5 Submissions of national communications by the Member States

Country	First national communication	Second national communication[a]	Third national communication[b]	Fourth national communication	Fifth national communication
Austria	23/09/1994	31/07/1997	29/11/2001	18/10/2006	
Belgium	21/03/1997	21/08/1997	29/04/2002	23/12/2005	
Bulgaria	11/03/1996	30/06/1998	31/07/2002	12/12/2006	
Cyprus	–	–	–	–	
Czech Republic	17/10/1994	06/08/1998	28/12/2001	03/02/2006	
Denmark	01/09/1994	05/12/1997	02/06/2003	30/12/2005	
Estonia	06/05/1995	31/03/1998	30/11/2001	30/12/2005	
Finland	30/01/1995	15/04/1997	20/11/2001	10/02/2006	
France	06/02/1995	12/06/1997	30/11/2001	07/07/2006	
Germany	28/09/1994	16/04/1997	18/10/2002	19/10/2006	
Greece	01/02/1995	01/06/1997	14/02/2003	01/03/2006	
Hungary	22/11/1994	01/12/1997	02/07/2002	10/03/2006	
Ireland	15/11/1994	08/07/1997	03/12/2003	30/04/2007	
Italy	04/04/1995	27/05/1999	20/01/2003	12/06/2008	
Latvia	20/09/1995	02/06/1998	30/11/2001	24/05/2006	
Lithuania	18/05/1998	21/01/2003	28/12/2005		
Luxembourg	25/03/1996	–	–	–	
Malta	16/06/2004	–	–	–	
The Netherlands	20/09/1994	14/04/1997	23/11/2001	22/12/2005	
Poland	02/02/1995	29/04/1998	30/11/2001	29/12/2006	
Portugal	25/01/1995	26/11/1997	23/06/2003	26/07/2006	
Romania	14/03/1995	01/02/1999	17/06/2005	04/11/2006	
Slovakia	11/10/1995	06/08/1997	24/10/2001	30/12/2005	
Slovenia	28/08/2002	15/10/2004		12/06/2006	
Spain	28/09/1994	22/11/1997	01/04/2002	23/03/2006	
Sweden	20/09/1994	05/05/1997	30/11/2001	30/12/2005	
UK	07/02/1994	13/02/1997	30/10/2001	15/05/2006	12/06/2009

Source: UNFCCC (2009)

[a] See UNFCCC document FCCC/SBI/2000/INF.14

[b] Status of submission as of 14 October 2002, FCCC/SBI/2002/INF.7

The annual greenhouse gas inventory of the Community is the only inventory covering a regional economic integration organisation since it comprises the direct sum of the national inventories prepared by the Member States.[120] Since the Community's GHG inventory is the sum of the EU27 inventories, the quality and

[120] The emissions compiled in the EC GHG inventory are the sum of the GHG emissions reported in the respective 27 national inventories, except for the IPCC reference approach regarding CO_2 from fossil fuels. Data on GHG emissions in the EC are revised and updated every year.

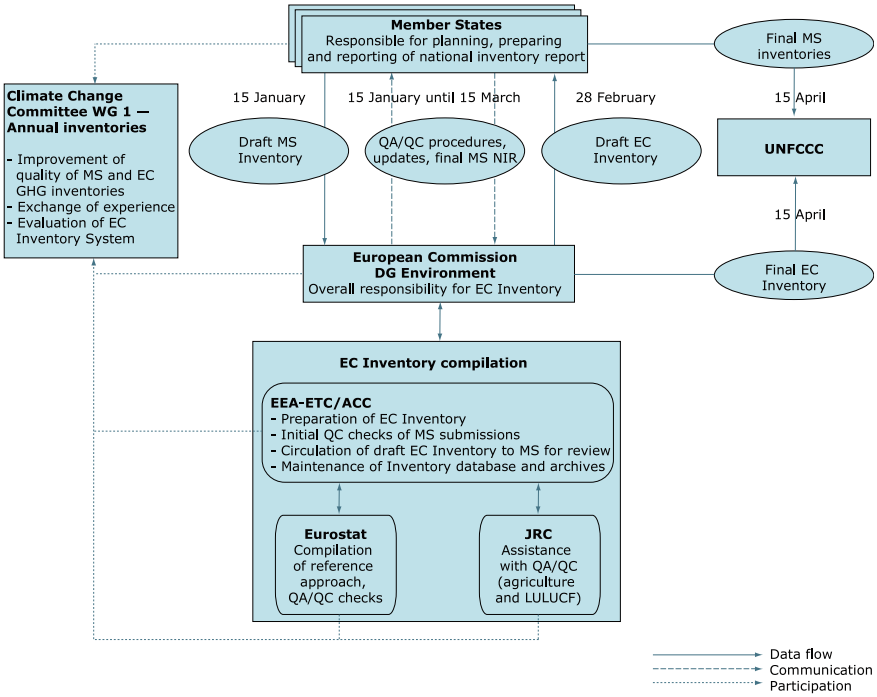

Fig. 6.11 Inventory system of the European Community. *Source*: EEA (2006)

completeness of the EC GHG inventory report are subject to the fulfilment by the Member States of the requirements for the preparation of the inventory reports.

Figure 6.11 provides an overview of the Community system for preparing the greenhouse gas inventory.

Table 6.6 provides an overview of the process of compiling the EC GHG inventory.

The inventory of greenhouse gas emissions to be submitted annually by Annex I parties must be prepared in accordance with specific and detailed methodologies and reporting formats of the IPCC. The importance that all Member States fulfil the European and international requirements for the preparation of the national inventories has been mentioned above. Despite the fact that in nearly all countries the data are collected by national institutions or organisations,[121] as prescribed by the UNFCCC guidelines,[122] information on greenhouse gas emissions and removals

[121] Some examples are the Czech Hydro-Meteorological Institute (CHMI) in the Czech Republic, the Institute for Environmental Management (KGI) in Hungary, the National Statistical Institute (NSI) in Bulgaria and the Research and Engineering Institute for Environment (ICIM) in Romania, while in Poland several different entities contribute to the data collection.

[122] See *supra* n. 120.

Table 6.6 The process of compiling the EC GHG inventory

Deadline	Task
15 January each year	Member States submit their annual GHG inventories to the European Commission
EEA, Eurostat and JRC perform initial checks on the submitted data	
28 February each year	Draft EC GHG inventory and inventory report circulated to Member States for review and comments
15 March each year	Member States review, check and comment on draft EC GHG inventory and their national data
EEA prepares final EC GHG inventory and inventory report	
15 April each year	Submission of the EC GHG inventory and inventory report by the European Commission to the UNFCCC secretariat

Source: EEA (2009)

is often of bad quality and lacks data. Often, Member States also have problems updating the national inventories mainly because of the demanding timeframe and difficulties in the estimation of uncertainty. Many factors and actors are involved in the preparation of national emission inventories, and deficiencies within some of the Member States, in particular the EU12, primarily concern a lack of internal structures such as national focal points, staff, agencies or institutions specialised in preparing these documents.[123] A main challenge is also represented by the difficulties in collecting and using data, given that there is still too much secrecy regarding access to information and data are not actually circulating. By the same token, legal barriers and obstacles prevent effective access to emissions data.[124]

In accordance with Article 5(2) of Council Decision 280/2004/EC, the European Commission shall monitor annually the actual and projected progress of Member States in respect of the EC GHG reduction commitments under the UNFCCC and the Kyoto Protocol. To this end, the Commission is required to prepare a progress evaluation report for the European Parliament and the Council. The annual EC greenhouse gas inventory is the basis of the progress evaluation. Finally, on the basis of Article 3(2) of the Kyoto Protocol and the requirements of the Seventh and Eighth Conference of the Parties (Decisions 22/CP.7 and 25/CP.8) Annex I parties are required to prepare, by 2005, a report demonstrating progress in the fulfilment of the Kyoto Protocol obligations. At the Community level, this is regulated in Article 5(3) of Council Decision 280/2004/EC, which requires the European Commission to prepare a report on demonstrable progress (RDP) achieved by the EC by 2005, on the basis of information from the Member States to be submitted by 15 June 2005. As of 2005, the inventory report and the report on demonstrable progress have coincided and are prepared by the European Commission, the corresponding authorities in the Member States and the European Environment Agency.

[123] Ellis et al. (2001), p. 6.

[124] Levina (2002), p. 8.

The latest annual greenhouse gas inventory and inventory report available at the time of writing is the annual European Community greenhouse gas inventory 1990–2007 and inventory report 2009 submitted to the secretariat of the UNFCCC on 29 May 2009.[125]

The latest annual report on demonstrable progress available at the time of writing is the Communication of the European Commission on the progress towards achieving the Kyoto objectives, required under Decision 280/2004/EC.[126] According to the projections in the report, the European Commission is confident that the EC will meet its targets provided that all Member States implement the additional policies and measures indicated. An important tool used by the EC to meet the reduction obligations under the Kyoto Protocol is the EU Emissions Trading system, and the decisions of the Commission on the National Allocation Plan (NAP) for the period 2008–2012 were taken in line with this strategy, thus requiring that many Member States make substantial cuts in the national level of CO_2 emissions falling under the EU ETS.

In addition to the fulfilment of the monitoring, reporting and verification obligations and the submission of the GHG inventory report and the national communication highlighted above, the Kyoto Protocol obliges Annex I parties to submit an initial report and a final report by 31 December 2006 and 31 December 2012, respectively. Submission of the initial report to the UNFCCC secretariat by Annex I parties with a commitment inscribed in Annex B to the Protocol is required under Article 7(4) of the Kyoto Protocol and Decision 13/CMP.1[127] and is necessary for the calculation of their assigned amount. In particular, with the initial report, Annex I parties contribute to the calculation of their assigned amount pursuant to Article 3(7) and (8) for the first commitment period and to demonstrating their capacity to account for their greenhouse gas emissions and assigned amounts.

The initial report is required under Article 7 of Decision 280/2004/EC, which implements Decision 13/CMP.1 of the Kyoto Protocol.[128] The Community's initial report is based on the same rationale applied so far and contains information for all the Member States, including Cyprus and Malta (EU27),[129] since all the Member States are required, under Decision 280/2004/EC, to submit to the

[125] EEA (2009).

[126] Communication from the European Commission: Progress towards achieving the Kyoto objectives (required under Article 5 of Decision 280/2004/EC of the European Parliament and of the Council concerning a mechanism for monitoring community greenhouse gas emissions and for implementing the Kyoto Protocol), COM(2008)651, Brussels, 16 October 2008, available at: http://ec.europa.eu/environment/climat/gge_progress.htm.

[127] Decision 13/CMP.1, para. 2.

[128] Annex to Decision 13/CMP.1 Modalities for the accounting of assigned amounts under Article 7, para. 4, of the Kyoto Protocol, paras. 5–8.

[129] In accordance with EC law, the greenhouse gas inventory information presented in Annex I and Annex II of the initial report also includes information about Cyprus and Malta since the GHG inventory information requested in Decision 13/CMP.1 under the Kyoto Protocol refers to the greenhouse gas inventory information under the Convention.

Commission by 15 January each year, their individual greenhouse gas inventories prepared in accordance with the UNFCCC reporting guidelines. However, different from the Community inventory report, the EC initial report concerns the calculation of the assigned amount pursuant to Article 3(7) and (8) under the Kyoto Protocol and therefore focuses primarily on the EU 15. The report refers to Article 4(4) of the Protocol and the fact that the change in the composition of the EU after the adoption of the Kyoto Protocol does not affect the Community's commitments under the Protocol. In this respect, the calculation of the EC's assigned amount refers to the EU15 members prior to May 2004.

As shown in Table 6.4 the Member States have complied with the submission requirements concerning the initial reports. At the time of writing, on the basis of the submitted initial reports, adjustments to inventories under Article 5(2) of the Kyoto Protocol were requested by the expert review teams for Greece and the Netherlands. For Greece, the ERT recommended six adjustments in the energy sector for the base year. Since Greece failed to notify to the secretariat its intention to accept or reject the calculated adjustments within the agreed deadline, the ERT applied the calculated adjustments to the emission estimates of the energy sector for Greece.[130] For the Netherlands, the ERT identified the need for one adjustment in the LULUCF sector for the base year, in particular regarding the estimate of net CO_2 emissions from deforestation. In response to the ERT's suggestion, the Netherlands provided, within the required 6-week period, a revision of its estimate of net CO_2 emissions from deforestation used for the calculation of the assigned amount.[131] Deficiencies in the GHG inventory reports of the Member States may have direct consequences for the EC inventory. However, the adjustments required by the ERT to the estimations provided by Greece and the Netherlands were only minor and did therefore not affect the quality of the EC inventory report.

Information about the national registry system of the EC is contained in the initial report of the European Community. In particular, although the initial report did not provide (a) the name of the registry administrator; (b) a full list of publicly accessible information; (c) a description of measures to safeguard, maintain and recover data in the event of a disaster; and (d) a description of the database structure and capacity, the ERT acknowledged the efforts undertaken by the Community to establish the registry system and did not identify any question of implementation in this regard. The EC registry system is composed of the registries of the EU27. Besides the registries of Malta and Cyprus, in 2009, the registry of Bulgaria was still not operational. The delay of Bulgaria has had negative consequences for the EC registry system, since as a result, the CITL could not be connected to the ITL, thus reducing the possibility for the EC, the Member States and European private entities to trade Kyoto units under IET, the EU ETS or the

[130] Report of the review of the initial report of Greece, UNFCCC FCCC/IRR/2007/GRC, 28 December 2007.

[131] Report of the review of the initial report of the Netherlands, UNFCCC FCCC/IRR/2007/NLD, 2 November 2007.

project-based mechanisms, at least through the EC registry.[132] No legal action has been taken against Bulgaria for failure to comply with EC legislation, namely Article 6 of Council Decision 280/2004/EC and Commission Regulation 994/2008.[133] One of the reasons, one may suppose, relates to the guarantee that the inactivity of the Bulgarian national registry is only temporary.

The information on the EC national registry included in the EC initial report is summarised in Fig. 6.12.

6.7.2 Compliance with the Eligibility Requirements

Firstly, it must be emphasised again that the European Community is an Annex I party to the UNFCCC and therefore, like the Member States, eligible to participate in the flexible mechanisms. The EC and the Member States share not only the greenhouse gas reduction commitment of 8% under the Kyoto Protocol, but, as Annex I parties, also the right to participate in the flexible mechanisms of the Kyoto Protocol.

Both the UNFCCC and the Kyoto Protocol touch upon the relationship between the regional economic integration organisation and its Member States. Article 22(2) of the UNFCCC and Article 4(2) of the Kyoto Protocol, respectively, state that 'the organization and the Member States shall not be entitled to exercise rights under this Protocol concurrently'. In this respect, can Article 22(2) of the UNFCCC and Article 24(2) of the Kyoto Protocol represent a limit to the possibility for the EC and the Member States to participate concurrently in the flexible mechanisms? What meaning do the UNFCCC and the Kyoto Protocol assign to the word 'rights'? Is this simply a reference to the voting rights or, more generally, to procedural rights? Or should we interpret this term as referring indirectly to the responsibilities of the EC and the Member States in the fulfilment of the obligations created by those international treaties? Temple Lang[134] considers the term 'rights' as the alternate voting rights assigned to a REIO and its Member States by an international treaty. In the Kyoto Protocol, this is indicated in Article 22(2).[135] Lacasta and others refer to procedural rights under the UNFCCC, such as voting rights in general.[136] Jacquemont interprets Articles 22(2) UNFCCC and 24(2) of the Kyoto Protocol as satisfying the request of Australia, which, during the negotiations on the Kyoto Protocol claimed several times that it was necessary to clarify the division of competences between the EC and the Member States as well as the division of responsibilities in the fulfilment of the Kyoto Protocol

[132] Indeed, to circumnavigate this problem some private entities opened an account in a registry which was already connected to the ITL, e.g., that of Switzerland.

[133] See *supra* Sect. 6.6.1.

[134] Temple Lang (1986), p. 170.

[135] According to Article 22(2) of the Kyoto Protocol, the EC 'shall not exercise its right to vote if any of its Member States exercises its right, and vice versa'.

[136] Lacasta et al. (2001).

Reporting element	Provided in the initial report	Comments
Registry administrator		
Name and contact information	No	Provided during the ICR
Cooperation with other Parties in a consolidated system		
Names of other Parties with which the EC cooperates, or clarification that no such cooperation exists.	Yes	EC-NR not operated in a consolidated system with any other Party's registry
Database structure and capacity of the national registry		
Description of the database structure	No	Provided during the ICR and Covered in the Independent Assessment Report (IAR)[a]
Description of the capacity of the national registry	No	Provided on a qualitative basis during the ICR
Conformity with data exchange standards (DES)		
Description of how the national registry conforms to the technical DES between registry systems	Yes	Software adheres to the standards (UN DES Draft 7) and to the functionality (UN DES Draft 7)
Procedures for minimizing and handling of discrepancies		
Description of the procedures employed in the national registry to minimize discrepancies in the transaction of Kyoto Protocol units	Yes	Additional information provided during the ICR. Same approach as for the EU ETS will be adopted
Description of the steps taken to terminate transactions where a discrepancy is notified and to correct problems in the event of a failure to terminate the transaction	Yes	Additional information provided during the ICR
Prevention of unauthorized manipulations and operator error		
An overview of security measures employed in the national registry to prevent unauthorized manipulations and to prevent operator error	Yes	Additional information provided during the ICR and covered in the IAR
An overview of how these measures are kept up to date	No	Information provided during the ICR
User interface of the national registry		
A list of the information publicly accessible by means of the user interface to the national registry	Partially	A list of documents has still to be developed. Information completed during the ICR and covered in the IAR
The Internet address of the interface to EC's national registry	Yes	<http://ec.europa-eu/environment/ets/>
Integrity of data storage and recovery		
A description of measures taken to safeguard, maintain and recover data in order to ensure the integrity of data storage and the recovery of registry services in the event of a disaster	No	Provided during the ICR and covered in the IAR
Test results		
The results of any test procedures that might be available or developed with the aim of testing the performance, procedures and security measures of the national registry undertaken pursuant to the provisions of decision 19/CP.7 relating to the technical standards for data exchange between registry systems	No	Software was tested and passed initialisation testing with the ITL. Covered in the IAR

[a] Pursuant to decision 16/CP.10, once registry systems become operational, the administrator of the international transaction log (ITL) is requested to facilitate an interactive exercise, including with experts from Parties to the Kyoto Protocol not included in Annex I to the Convention, demonstrating the functioning of the ITL with other registry systems. The results of this exercise will be included in an independent assessment report (IAR). They will be also included in its annual report to the Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol.

Fig. 6.12 Information on the EC national registry, included in the EC initial report. *Source*: EEA (2006a)

obligations.[137] Jacquemont also mentions that a broader interpretation of the Kyoto Protocol's prohibition for the EC and the Member States to exercise rights under the Protocol concurrently[138] has to be considered carefully since it could establish a sort of competition between the Community and the Member States in the ways of achieving compliance with the Kyoto Protocol obligations. First of all, we should look at the instrument through which the EC and the Member States laid down the extent of the exercise of their competences under the Protocol, namely Annex III of Council Decision 2002/358/EC. In this instrument, the exercise of concurrent rights is not mentioned, nor is there a reference to participation in the flexible mechanisms. This can be explained by the fact that the EC and the Member States wanted to exclude any reference to the UNFCCC and the Kyoto Protocol which could jeopardise the right to participate in some key instruments necessary to meet the reduction obligations under the Kyoto Protocol. Could it be said that this was exactly the intention of some negotiating parties during the drafting of the Kyoto Protocol which somehow wanted to reduce the level of flexibility created by the EC joint agreement? Again, the text of Article 24(2) of the Protocol seems too vague to justify such an interpretation. Had the prohibition to exercise concurrently rights created by the Kyoto Protocol referred to the right to participate in the flexible mechanisms, it should have been mentioned at least in the articles relating to these instruments or it should have been included in the Marrakech Accords. However, the Kyoto Protocol and the Marrakech Accords clearly state that Annex I parties are entitled to participate in the flexible mechanisms, and therefore, since the EC is included in the Annex I list, it seems fair to conclude that there is no limitation to the extent to which the EC and the Member States can exercise these rights.

Compliance with the eligibility requirements of the Marrakech Accords is the condition which Annex I parties must fulfil to be able to participate in the flexible mechanisms. Thus, failure to meet these requirements will deny Annex I parties one of the key instruments for achieving the Kyoto Protocol limitation and reduction commitments. In other words, given the nature of the flexible mechanisms, ineligibility to use these instruments would complicate the achievement of the Kyoto Protocol greenhouse gas emission limitation and reduction commitments by Annex I parties. For this reason, it is important to monitor the performance of the EC and the Member States in the fulfilment of the eligibility requirements, as well as to consider the potential consequences of Member States' failure to fulfil these obligations.

The eligibility requirements established by the Kyoto Protocol and the Marrakech Accords should be recalled briefly:

(a) Ratification of the Kyoto Protocol;
(b) Calculation of the initial assigned amount in terms of CO_2 equivalent necessary for the determination of Annex I parties' level of AAUs;

[137] Jacquemont (2005), p. 374.
[138] Ibid., p. 375.

(c) Establishment of a national system for the estimation of GHG emissions and removals as required under Article 5(1) of the Kyoto Protocol;
(d) Establishment of a national registry for the management of Kyoto units as required under Article 7(4) of the Kyoto Protocol;
(e) Submission of the GHG inventory for the most recent year as required under Article 7(1) of the Kyoto Protocol;
(f) Submission of information on assigned amounts as required under Article 7(1) of the Kyoto Protocol.

(a) Ratification of the Kyoto Protocol

Since the adoption of Council Decision 2002/358/EC, the ratification of the Kyoto Protocol is part of the *acquis communautaire*, and the Member States that joined the EU in 2004 and 2007 were required to ratify the Kyoto Protocol as part of their obligations under the EU legal system. In accordance with Article 4(2) of the Kyoto Protocol, the European Community and the Member States deposited their instruments of ratification, approval or accession to the secretariat on 31 May 2002. On that same day, Austria, Belgium, Denmark, the European Community, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom of Great Britain and Northern Ireland notified the secretariat of the decision to fulfil their commitments jointly in accordance with Article 4 of the Kyoto Protocol. Consequently, the new Member States also submitted the instrument of ratification, approval or accession to the secretariat. Table 6.7 provides information on the ratification of the Kyoto Protocol by the EU27.

(b) Calculation of the initial assigned amounts and (f) information on assigned amounts

Once the GHG inventories have been established, Annex I parties are required to submit to the UNFCCC secretariat documentation on the initial level of assigned amounts pursuant to Article 7(1) of the Kyoto Protocol and necessary for the determination of Annex I parties' level of AAUs as required under Article 3(7) and (8) as well as Decision 19/CP.7. The assigned amounts are expressed in terms of CO_2 equivalent and represent the level of emissions relevant to monitor and measure the achievement of the limitation and reduction commitments of the Kyoto Protocol by Annex I parties in the first commitment period.

Article 7(1) of Decision 280/2004/EC requires the Community and the Member States to submit to the UNFCCC secretariat, by 31 December 2006, a report determining the assigned amount which must correspond to the emission levels determined pursuant to Article 3(1) of Decision 2002/358/EC. Article 3(1) of Decision 2002/358/EC requires the Commission to, by 31 December 2006 at the latest, 'determine the respective levels allocated to the European Community and to each Member States in terms of carbon dioxide equivalent'.

The Assigned Amount Report of the European Union was adopted on 15 December 2006 by the European Commission,[139] while the Commission Decision

[139] Report from the Commission: Assigned Amount Report of the European Union, COM(2006)799, Brussels, 15 December 2006.

Table 6.7 Ratification of the Kyoto Protocol by the EU27

Country	Signature	Ratification, acceptance, accession, approval	Entry into force	% of emissions
Austria	29/04/98	31/05/02 (R)	16/02/05	0.4
Belgium	29/04/98	31/05/02 (R)	16/02/05	0.8
Bulgaria	18/09/08	15/08/02 (R)	16/02/05	0.6
Cyprus	–	16/07/99 (Ac)	16/02/05	
Czech Republic	23/11/08	15/11/01 (Ap)	16/02/05	1.2
Denmark	29/04/98	31/05/02 (R)	16/02/05	0.4
EC	29/04/98	31/05/02 (Ap)	16/02/05	
Estonia	03/12/98	14/10/02 (R)	16/02/05	0.3
Finland	29/04/98	31/05/02 (R)	16/02/05	0.4
France	29/04/98	31/05/02 (R)	16/02/05	2.7
Germany	29/04/98	31/05/02 (R)	16/02/05	7.4
Greece	29/04/98	31/05/02 (R)	16/02/05	0.6
Hungary	–	21/08/02 (R)	16/02/05	0.5
Ireland	29/04/98	31/05/02 (R)	16/02/05	0.2
Italy	29/04/98	31/05/02 (R)	16/02/05	3.1
Latvia	14/12/98	05/07/02 (R)	16/02/05	0.2
Lithuania	21/09/98	03/01/03 (R)	16/02/05	
Luxembourg	29/04/98	31/05/02 (R)	16/02/05	0.1
Malta	17/04/98	11/11/01 (R)	16/02/05	–
The Netherlands	29/04/98	31/05/02 (At)	16/02/05	1.2
Poland	15/07/98	13/12/02 (R)	16/02/05	3.0
Portugal	29/04/98	31/05/02 (Ap)	16/02/05	0.3
Romania	05/01/99	19/03/01 (R)	16/02/05	1.2
Slovakia	26/02/99	31/05/02 (R)	16/02/05	0.4
Slovenia	21/10/98	02/08/02 (R)	16/02/05	
Spain	29/04/98	31/05/02 (R)	16/02/05	1.9
Sweden	29/04/98	31/05/02 (R)	16/02/05	0.4
UK	29/04/98	31/05/02 (R)	16/02/05	4.3

of 14 December 2006 determined the respective emission levels allocated to the Community and each of its Member States under the Kyoto Protocol pursuant to Council Decision 2002/358/EC.[140] The Commission Decision of 14 December 2006 fixed, in 11.393.397 tonnes of carbon dioxide equivalent, the amount of emission levels allocated to the Community and the Member States for the first commitment period, to be converted into assigned amount units under the Kyoto Protocol.[141] This amount corresponds to the difference between the emission levels of the Community and the sum of emission levels of the Member States set in

[140] Commission Decision of 14 December 2006 determining the respective emission levels allocated to the Community and each of its Member States under the Kyoto Protocol pursuant to Council Decision 2002/358/EC, *OJ* L 358, 16 December 2006, pp. 87–89.

[141] For the details of the calculation of the assigned amounts for the EC and its Member States see preamble, point 2, Commission Decision of 14 December 2006.

Annex II of Decision 2002/358/EC (Article 2 of Commission Decision 2006/944/EC). The amounts set in the Commission Decision of 14 December 2006 may be changed only as a consequence of a review procedure pursuant to Article 8 of the Kyoto Protocol and the adoption of an amendment to this Decision. The Commission Decision of 14 December 2006 concerns the EU Member States, with the exception of Bulgaria and Romania, as it was issued before the enlargement on 1 January 2007, as well as Malta and Cyprus which are non-Annex I parties to the UNFCCC.

The calculation of the assigned amounts of the Community refers to the EU15 since the EU enlargements of 2004 and 2007 did not affect the joint commitment of the EU towards the reduction of greenhouse gas emissions under the Kyoto Protocol (Article 4).

(c) National system, (d) National registry and (e) GHG inventory

Extensive information on compliance by the EC and the Member States with the requirements for national systems, the national registry and the GHG inventory has been provided above.[142] All Member States are required to comply with: (1) the MRV obligations under the Kyoto Protocol; and (2) the MRV obligations established under European Community law. Although the MRV obligations of the Kyoto Protocol do not restrict the EU15 as in the case of the GHG reduction and limitation commitments, failure by the Member States to fulfil these obligations may compromise the compliance by the European Community as a whole with the Kyoto Protocol. This issue is dealt in detail in Sect. 6.8.2 of this chapter.

Regarding the fulfilment of the eligibility requirements by Annex I parties, the UNFCCC provides regular and updated information on the status of compliance with those requirements which is necessary to determine the initial eligibility or the expected initial eligibility. At the time of writing, within the EU25, only Bulgaria and Romania have not set a date for the start of their eligibility to participate in the flexible mechanisms.

6.7.3 Compliance with the Limitation and Reduction Commitments

Finally, we will take a closer look at the major obligation of the EC and the Member States under the Kyoto Protocol: the quantified emission limitation and reduction commitments (QELRCs) under Article 3(1) of the Protocol.

As explained in Chap. 3, the EU and the EU15 have agreed to fulfil their commitments under Article 3(1) jointly in accordance with the procedure under Article 4 of the Kyoto Protocol. The EU Bubble agreed in the Council Conclusions of 16 June 1998 and included in Council Decision 2002/358/EC is

[142] See *supra* Sect. 6.7.1.

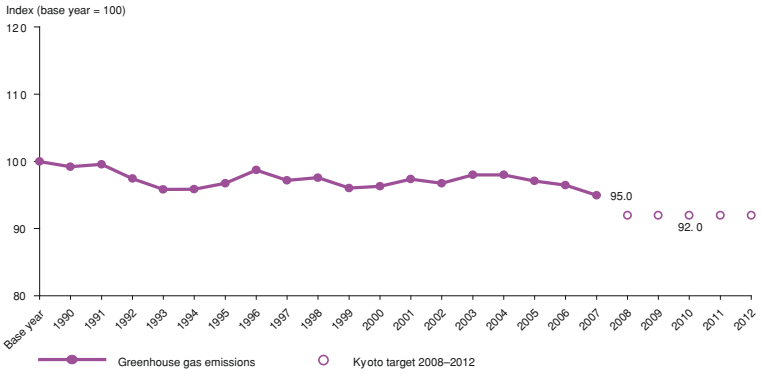

Fig. 6.13 EU 15 greenhouse gas emissions and 2008–2012 projections. *Source*: EEA (2009)

based on a general EU-wide obligation to reduce greenhouse gas emissions by 8% below 1990 levels by 2008–2012, as well as on the allocation to the EU15 of their respective emission levels for the same commitment period. The decision on the 15 national caps on greenhouse gas emissions under the EU BSA was mainly the result of a political compromise among the Member States on the internal distribution of the 8% obligation. Negotiations on the distribution of this target concerned, among others, economic and environmental conditions as well as the future scenario of industrial and economic growth. The results of these negotiations were GHG emission national reduction targets which vary, for instance, from an increase of greenhouse gas emissions by 27% (Portugal) and 25% (Greece) to a reduction by 28% (Luxembourg) and 21% (Germany and Denmark).

In accordance with the latest annual greenhouse gas inventory and inventory report of the European Environment Agency (EEA) available at the time of writing,[143] EU GHG emissions continued to fall in 2007 for the second year in a row. The main outcomes of the EEA report of 2009 were:

- GHG emissions EU15 2006–2007: −1.6%;
- GHG emissions EU15 1990–2007: −4.3%;
- GHG emissions EU27 2006–2007: −1.2%;
- GHG emissions EU27 1990–2007: −9.3%.

Figure 6.13 shows the EU15 greenhouse gas emissions and projections up to 2008–2012.

Figure 6.14 shows the EU27 greenhouse gas emissions in 1990–2007 compared with the Kyoto Protocol targets.

Sectors which contributed the most to the reduction in GHG emissions in 2006 were households and offices, which registered a lower consumption of gas and oil

[143] EEA (2009).

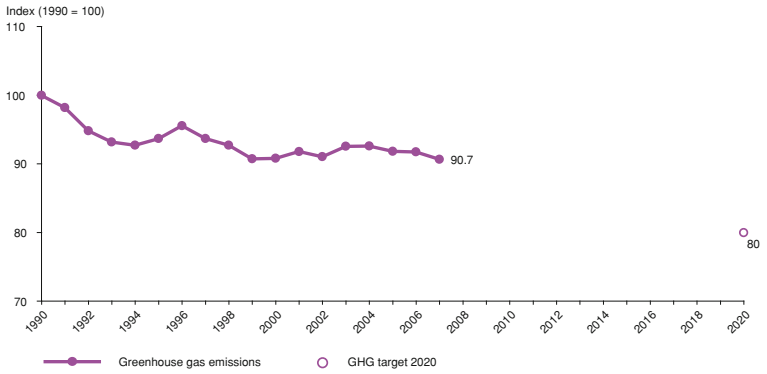

Fig. 6.14 EU 27 greenhouse gas emissions in 1990-2006 compared with the Kyoto Protocol targets. *Source*: EEA (2009)

in 2006; the countries that performed best were France, Italy and the UK, thanks to a warmer winter and higher gas prices. Carbon dioxide emissions from electricity, heat production and transport increased in 2006.

The EEA reports containing information on the EU27 GHG emissions clearly showed that by 2008 the EC and the Member States were not on track with the limitation and reduction commitments under the Kyoto Protocol and that, among others, the implementation of the flexible mechanisms by the EC and the Member States is absolutely necessary to meet those commitments. In this sense, compliance by the EC and the Member States with the monitoring, reporting and verification obligations as well as with the eligibility requirements allows these parties to participate in the flexible mechanisms and therefore represents a fundamental condition for avoiding breaches of international law in this respect.

Finally, as to the limitation and reduction commitments of the EC and the Member States, the following can be stated:

- The EC and the EU15 are required to undertake additional efforts to achieve the 8% GHG emission reduction commitment;
- The EC and the EU15 shall implement additional policies and measures in order to meet the limitation and reduction commitments;
- The EC and the EU15 shall implement the flexible mechanisms in order to meet the limitation and reduction commitments;
- The new Member States as a group are on track in meeting their limitation and reduction commitments.

6.7.4 Cases Before the Compliance Committee

The Compliance Committee held its first meeting on 1–3 March 2006 and has been dealing with Annex I parties' compliance with the requirement to submit national communications as well as reports demonstrating progress. During the first commitment period, a question of implementation may only concern the MRV obligations and the eligibility requirements. Until the end of the first commitment period (2012), questions of implementation may not refer to a party's non-compliance with the limitation and reduction commitments.

At the time of writing the Compliance Committee had dealt with one case of non-compliance by an EU Member State with the Kyoto Protocol obligations, namely Greece.[144]

On 28 December 2007, the secretariat received the report of the review of the initial report of Greece prepared by the expert review team and containing a question of implementation.[145] On 7 January 2008, the Compliance Committee referred the question of implementation to the enforcement branch. The question of implementation concerned the compliance by Greece with the monitoring, reporting and verification obligations and in particular its compliance with the guidelines for national systems under Article 5(1) of the Kyoto Protocol (Decision 19/CMP.1) and the guidelines for the preparation of the information required under Article 7 of the Kyoto Protocol (Decision 15/CMP.1). The national system is required in order to account for the greenhouse gas emissions and to demonstrate compliance. Furthermore, the obligation regarding a national system is included in the list of eligibility requirements for participation in the flexible mechanisms. In this respect, the expedited procedure applies. The expert review team concluded from 'the information contained in the initial report and the additional information received during and after the in-country review that the national system of Greece does not fully comply with the guidelines for national systems under Article 5, para. 1, of the Kyoto Protocol (decision 19/CMP.1) and the guidelines for the preparation of the information required under Article 7 of the Kyoto Protocol (decision 15/CMP.1)'. The ERT concluded that 'the maintenance of the institutional and procedural arrangements; the arrangements for the technical competence of the staff; and the capacity for timely performance of Greece's national system is an unresolved problem, and therefore lists it as a question of implementation'.[146]

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[144] At the time of writing, cases before the Compliance Committee concern Greece and Canada regarding which an expert review team submitted a question of implementation dated 28 December 2007 and 14 April 2008, respectively.

[145] FCCC/IRR/2007/GRC, UNFCCC, 28 December 2007.

[146] Note by the UNFCCC secretariat on the report of the review of the initial report of Greece, CC-2007-1-1/Greece/EB, 8 January 2008.

In the case concerning Greece, the enforcement branch considered the following documentation in order to adopt a preliminary finding or a decision not to proceed:

- The report of the expert review team related to Greece;
- The comments of Greece on the report of the expert review team;
- The written submission of Greece;
- Information presented by Greece during the hearing of 6–8 March 2008.

The issues of concern as to Greece's ability to comply with the above-mentioned requirements were:

- A lack of clarity about the nature of the institutional and procedural arrangements for ensuring the continuity of the inventory preparation process (including the division of responsibilities between actors involved in the implementation of the national system);
- A lack of information about the transfer of knowledge from the sub-contracted entity with technical responsibility for the inventory preparation to the new team;
- No possibility for the expert review team to meet with the staff with technical responsibility for the inventory preparation in order to assess the arrangements for technical competence of that staff.

On 6 March 2008, the enforcement branch determined 'that Greece is not in compliance with the guidelines for national systems under Article 5, para. 1, of the Kyoto Protocol (decision 19/CMP.1) and the guidelines for the preparation of the information required under Article 7 of the Kyoto Protocol (decision 15/CMP.1). Hence, Greece does not yet meet the eligibility requirement under Articles 6, 12 and 17 of the Kyoto Protocol to have in place a national system in accordance with Article 5, para. 1, of the Kyoto Protocol and the requirements in the guidelines decided thereunder'.[147]

On 16 and 17 April 2008, the enforcement branch held its fourth meeting and confirmed its preliminary finding of non-compliance by Greece. For the first time, an Annex I party was found in non-compliance with the Kyoto Protocol obligations.

The consequences for Greece arising from the final decision of the enforcement branch were as follows:

- Declaration of non-compliance;
- Obligation to submit a plan to address its non-compliance within 3 months;
- Ineligibility to participate in the flexible mechanisms.

Concretely, the main consequence for Greece in this case was the ineligibility to sell and transfer Kyoto units under IET.

[147] Enforcement branch of the Compliance Committee, Preliminary finding, CC-2007-1-6/Greece/EB, 6 March 2008.

The consequences under international and European law of non-compliance by the Member States and the EC with the eligibility requirements is addressed further down in this chapter, in Sect. 6.8.2.

6.8 EC and Member States Responsibility for Failure to Comply with the Obligations of the Kyoto Protocol

One of the main tasks of this book is to study the EC's and Member States' responsibility for failure to comply with the obligations created by the international climate regime. Key in this respect is the discussion on the distribution of responsibility between the Community and the Member States in the event of non-compliance by the Community and the Member States with the three sets of obligations established by the Kyoto Protocol. In this sense, the uniqueness of the legal analysis regarding the participation of the EC and the Member States in the international climate regime lies in two main aspects. First of all, like many other multilateral environmental agreements, the Kyoto Protocol is a mixed agreement to which the Community and the Member States are parties. Secondly, the nature and rules of the Community's and Member States' commitments under the Kyoto Protocol, namely a set of parallel obligations, address the Community and the Member States in a different manner. In particular, the Kyoto Protocol sets, on the one hand, the joint commitment of the Community and the EU15 to reduce their levels of greenhouse gas emissions and, on the other, additional obligations to which the Community and the Member States are individually committed (i.e., monitoring, reporting and verification obligations and eligibility criteria). Therefore the Member States are bound to comply with, on the one hand, international law and the rules created by the Kyoto Protocol and, on the other, European Community law and the secondary legislation adopted accordingly. The accession to the EU of twelve new Member States in 2004 and 2007, after the ratification of the Kyoto Protocol and the acceptance of its obligations by the European Community and the Member States, contribute to the complexity and the innovative character of the legal analysis below.

Before addressing the details of the responsibility for non-compliance mentioned above, a few words should be said about the concept of responsibility under international law. In accordance with Articles 1 and 3 of the Draft Articles on Responsibility of States for Internationally Wrongful Acts adopted by the International Law Commission (ILC Draft Articles) in 2001, 'every internationally wrongful act of a state' entails state responsibility.[148] In other words, in this book, reference is made to the responsibility of a state under international law for the

[148] Report of the International Law Commission, Fifty-Third Session, Doc. A/56/10 (2001), p. 58.

breach of an international obligation. The general regime of state responsibility established by the ILC Draft Articles is not exhaustive, as specified under Article 55 which clarifies that the ILC Draft Articles do not apply 'where and to the extent that the conditions of an internationally wrongful act or the content or implementation of the international responsibility of a State are governed by special rules of international law'. Pineschi defines Article 55 as a 'saving clause' which 'allows for the co-existence' of special or secondary rules with the regime of the ILC Draft Articles.[149] Whether and to what extent the non-compliance mechanism established by a MEA is covered by Article 55 ILC, thus excluding the application of the general rules on state responsibility, depends on the quality and strength of that mechanism, as well as on its applicability in practical terms.[150] In many cases, consequences in a compliance regime were established as an alternative to the general rules on state responsibility. In this book, it is assumed that the countermeasures established under the non-compliance regime of the Kyoto Protocol are sufficiently strong and detailed, although parties cannot be prevented from seeking to settle a dispute under the state responsibility regime in public international law.

However, the responsibility of the EC and the Member States for failure to comply with the Kyoto Protocol obligations discussed in this book is more intriguing when assessed from the perspective of the obligations of Member States under Community law.

The responsibility of a regional economic integration organisation and its parties for failure to comply with the Kyoto Protocol obligations is determined by Article 4 of the Kyoto Protocol. Under the international climate regime, a regional economic integration organisation is defined as an 'organization constituted by sovereign States of a given region which has competence in respect of matters governed by this Convention or its protocols and has been duly authorized, in accordance with its internal procedures, to sign, ratify, accept, approve or accede to the instruments concerned'.[151] Article 4(1) applies to the European Community and its Member States that 'have reached an agreement to fulfil their commitments under Article 3 jointly'.

Article 4(5) refers to the individual state responsibility, namely 'in the event of failure by the Parties to such an agreement to achieve their total combined level of emission reductions, each Party to that agreement shall be responsible for its own level of emissions set out in the agreement'. In the event that the EC and the EU15 achieve their total combined level of GHG emission reductions of 8% in the period 2008–2012, Article 4(5) of the Kyoto Protocol will not be applicable, irrespective of the performance of the EU15 in reaching their individual commitments under the EU Burden Sharing Agreement. In this case, the non-compliance procedure of

[149] Pineschi (2009), p. 484.

[150] Ibid., p. 497.

[151] Article 1 of the UNFCCC. This definition is similar to that of a regional economic integration organisation provided by the UN Law of the Sea Convention and Article 1(6) of the Ozone Layer Convention.

the Kyoto Protocol will not be activated. On the other hand, the Member States may be held responsible under EU law for failure to comply with their individual limitation and reduction commitments. Compliance by the EC and the EU15 with the aggregated GHG emission reduction commitment of 8% automatically excludes the individual responsibility of the EU15 under the Kyoto Protocol. In the event that the EC and the EU15 do not achieve their total combined level of emission reductions of 8%, Article 4(5) of the Kyoto Protocol becomes applicable and the EC together with those EU15 that are in breach of their individual limitation and reduction commitments under the Burden Sharing Agreement are held responsible under Article 4(6) of the Protocol and the non-compliance procedure of the Kyoto Protocol.

Article 4(6) goes beyond the individual state responsibility and introduces the joint responsibility of the Community and those Member States (EU15) which are in default. On the other hand, Article 4 is less clear in addressing the issue of responsibility in respect of the EC's and Member States' performance regarding the monitoring, reporting and verification obligations and the eligibility requirements.

In this context, it is necessary to differentiate between the Kyoto Protocol obligations as to the nature of the commitments undertaken by the EC and the Member States. In other words, considering the particular character of the EU's joint commitment under Article 4 of the Kyoto Protocol towards the limitation and reduction commitments, the first question to be answered is whether the limitations and rules in Article 4 also apply to the other obligations created by the Kyoto Protocol.

Article 4(1) explicitly refers to the limitation and reduction commitments under Article 3 of the Protocol. Article 4(4) limits the effect of an alteration in the composition of the regional organisation after the adoption of the Kyoto Protocol in the sense that it shall not affect 'existing commitments under this Protocol'. The reference to the existing commitments under the Protocol is not explicit enough to be interpreted extensively as covering the three sets of obligations under the Kyoto Protocol. It rather refers exclusively to the limitation and reduction commitments under Article 3 as confirmed by the sentence immediately after it, i.e., 'any alteration in the composition of the organization shall only apply for the purposes of those commitments under Article 3 that are adopted subsequent to that alteration'. The assumption that the joint commitment of the EU and the Member States as regulated in Article 4 of the Kyoto Protocol is valid only for the compliance with the limitation and reduction commitments is confirmed by the analysis of the international negotiations resulting in the adoption of the Kyoto Protocol in 1997. The idea that the limitations imposed by Article 4 could be extended to the other obligations under the Protocol was never mentioned in the discussion of the text of Article 4.[152]

According to some authors, the inclusion of a clause in an international treaty which addresses the details of a joint commitment must be interpreted extensively,

[152] UNFCCC (2000), pp. 57–59.

in the sense that the joint commitment shall be valid for the entire treaty, that is to say, also for the obligations not specifically addressed in that article. According to this interpretation, the EC and its Member States should be considered as jointly committed, not only in respect of the limitation and reduction commitments but also towards the monitoring, reporting and verification obligations as well as the eligibility requirements. This line of reasoning derives from the only case where the Community's and the Member States' liability under a mixed agreement was discussed, namely the *Lomé IV/EDF* case.[153] In this case, Advocate General Jacobs, referring to the Lomé Convention and to the relation of the Community with third parties, made clear that this 'Convention was concluded as a mixed agreement and has essentially a bilateral character'. If interpreted extensively, this judgment can be interpreted in the sense that all mixed agreements by which the EC and the Member States are bound have a bilateral character and therefore automatically entail the joint liability of the EC and the Member States for failure to comply with the obligations created by that agreement.[154]

Opposite to this approach, as described by Björklund, is the position of the EC expressed in a *WTO dispute settlement* case[155] where the EC denied the existence of an implicit joint commitment with the Member States, referring to the 1994 General Agreement on Tariffs and Trade (GATT) to which the Community and the Member States are parties (mixed agreement).[156] It seems reasonable to agree with this thesis, i.e., to follow a strict interpretation of the articles where the EC's and the Member States' joint commitment under an international treaty is addressed. In the international climate regime, the fact that the Kyoto Protocol regulates the joint commitment of the EC and the Member States in respect of the limitation and reduction commitments under Article 3(1), thus not referring explicitly to the monitoring, reporting and verification obligations and the eligibility requirements, implies that joint liability does not apply in reference to those obligations. Having said this, where the treaty does not expressly address the joint commitment, the main question is how to address the delimitation of responsibilities between the EC and the Member States in respect of those obligations.

The Compliance Committee determines the situation and the consequences of non-compliance by Annex I parties with the Kyoto Protocol obligations. The Compliance Committee is therefore required to decide on the compliance by the EC and the Member States with the Kyoto Protocol obligations. Although Article 4(6) explicitly refers to the responsibility of the regional economic integration organisation and its parties for their respective levels of emissions, this does not seem to be enough to establish a clear indication of the distribution of responsibility among the EC and the Member States. It is beyond the sphere of competence

[153] Case C-316/91 [1994] *ECR* I-625, para. 69.

[154] Macleod et al. (1996), p. 159.

[155] Customs classification of certain computer equipment WT/DS62/R, WT/D67/R and WT/D68/R and AB-1998-2: Report of the Appellate Body, 5 June 1998.

[156] Björklund (2001), p. 377.

of the Compliance Committee to address in its decision the issue of the division of responsibility between the EC and the Member States. This matter falls within the framework of European Community law. Since EC law regulates the relation between the EC and the Member States, their responsibility for the consequences of non-compliance with the obligations established by the international climate regime shall be decided at the EU level.

The primary relevance of EC law in this respect is confirmed by both the UNFCCC in Article 22(2), 'one or more of whose Member States Party to the Convention, the organization and its Member States shall decide on their respective responsibilities for the performance of their obligations under the Convention', and the Kyoto Protocol in Article 24(2), 'In the case of such organizations, one or more of whose Member States is a Party to this Protocol, the organization and its Member States shall decide on their respective responsibilities for the performance of their obligations under this Protocol', and Article 24(3), REIOs 'shall declare the extent of their competences with respect to the matters governed by this Protocol'. The Kyoto Protocol sets out the commitments of the EC and the Member States: the responsibility for compliance with those obligations is laid down in Annex III of Decision 2002/358/EC which states that 'the quantified emission reduction commitment under the Protocol will be fulfilled through action by the Community and its Member States within the respective competence of each'. The clarity required by the above-mentioned articles in the UNFCCC and the Kyoto Protocol is therefore not provided by Annex III of Decision 2002/358/EC. This is due to the fact that the GHG emission reduction obligation created by the Protocol relates to an aggregate result and not to specific measures (e.g., reducing GHG emissions from a particular source for which one or the other level is responsible and competent for the adoption of specific legislation). A clear and precise declaration on the division of responsibilities between the European Community and the Member States relating to the GHG emission reduction obligations under the Kyoto Protocol is therefore missing. Further reference to the distribution of competence in the European Community as to the fulfilment of the Kyoto Protocol obligations is provided in Sects. 6.8.1 and 6.8.2.

Furthermore, in a few cases the ECJ confirmed that the division of responsibility between the Community and the Member States is a matter of Community law. In the *Draft Convention of the IAEA* case,[157] the ECJ stated that the nature of the division of powers between the Community and the Member States is a domestic question when it involves third parties. Furthermore, the ECJ added that 'it is not necessary to set out or determine, as regards other Parties to the Convention, the division of powers in this respect between the Community and the Member States, particularly as it may change in the course of time' and 'the exact nature of that division is a domestic question in which third Parties States have no need to intervene'.[158] In this respect, it is necessary to look at the details included in the

[157] Case 1/78 *Draft Convention on the International Atomic Energy Agency* [1978] *ECR* 2151, para. 35.

instrument adopted by the EC to ratify and accept the obligations of the Kyoto Protocol. This instrument is Annex III to Decision 2002/358/EC regarding the declaration of competence. The declaration of competence is an instrument commonly issued by the EC when adopting an MEA in which the EC and the Member States share a joint commitment. Under Annex III 'the EC declares that its QELRC under the Kyoto Protocol will be fulfilled through action by the Community and its Member States within the respective competence of each and that it has already adopted legal instruments, binding on its Member States, covering matters governed by the Protocol'. Annex III does not specify the details of the division of competences and concludes that the supplementary information to be submitted by Annex I parties under Article 7(2) will be provided by the Community on a regular basis.

Moreover, in the *Hauptzollamt Mainz* case (1982), the ECJ stated that the Member States must 'fulfil an obligation not only in relation to the non-Member State concerned but also and above all in relation to the Community which has assumed the responsibility for due performance of the agreement'. Temple Lang added that 'the division of responsibilities is not a matter into which other parties are entitled to inquire'.[159]

The necessity to shed light on to which parties the different obligations created by the Kyoto Protocol are addressed is of primary relevance to determine the Community's and Member States' responsibility for non-compliance with the international obligations. For the EU, this is even more relevant when considering the evolution of the composition of the EU after the two enlargements of 2004 and 2007. What has to be investigated is whether or not the new Member States can be held responsible for the non-compliance by the Community with the Kyoto Protocol obligations and, moreover, whether the new and old Member States share the same degree of responsibility in such an event.

The answer to these questions is affirmative: the new Member States can be held responsible in the event of the failure by the EC as Annex I party to comply with the three main sets of obligations established by the Kyoto Protocol. This conclusion can be drawn firstly from an accurate reading of the Kyoto Protocol and the details of the different obligations for Annex I parties, but also, in more general terms, from the doctrine on the Community's and Member States' responsibility under international law regarding obligations created by a mixed agreement. In the international climate regime, independently from the blocking clause created by the Kyoto Protocol under Article 4 regarding the joint limitation and reduction commitment of the EC and the Member States, the latter shall be considered jointly responsible, 'co-responsible',[160] or 'jointly liable'[161] for the failure to comply with the obligations of a mixed agreement regarding which they share a

[159] Temple Lang (1986), p. 174.

[160] Jacquemont (2005), p. 371.

[161] Advocate General Jacobs, ECJ, case C-316/91 *European Parliament* v. *Council* [1994] *ECR* I-625, para. 69.

concurrent competence and by which they have agreed to be bound. The EC's responsibility in respect of the obligations in an international treaty to which it is party covers the Community as a whole and therefore all the EU27. Therefore, when the EU is enlarged, the new Member States are drawn into the EC's responsibility through their accession by means of the accession treaties. The difference between the EU15 and EU27 created by the Kyoto Protocol as regards the limitation and reduction commitments does not apply in Community law to the EC's and Member States' joint liability under an international treaty. In this respect, it is relevant to mention both the EC Treaty and the jurisprudence of the ECJ. The EC Treaty, in Article 300(7), determines the binding nature in respect of the Community and the Member States of any agreement concluded under Article 300 EC. The ECJ discussed the issue of the division of responsibility between the Community and the Member States in case 1/78. On this occasion, the ECJ declared that 'it is not necessary to set out or determine, as regards other Parties to the Convention, the division of powers in this respect between the Community and the Member States, particularly as it may change in the course of time'. This judgment recognised the *internal* character of the EC's participation in an international treaty and therefore implied that any matter concerning the Community's legal and institutional system, such as enlargement with new Member States, does not affect the international law aspects of the participation of the EC and the Member States in the Treaty.

EU membership requires the Member States to comply with the *acquis communautaire*, and compliance with the obligations created by an international treaty by which the European Community is bound is part of the *acquis*. On this basis, the most radical interpretation could be that the Member States, with the exception of Malta and Cyprus (non-Annex I parties) (EU25), should be considered responsible in respect of the obligations under the Kyoto Protocol by default. This is due to the fact that all Member States are required to comply with the *acquis communautaire*, and the obligations of the Kyoto Protocol are integrated in the *acquis*. Furthermore, with regard to the participation of the EC and the Member States in mixed agreements, as indicated in Article 6(1)[162] of the Act of Accession to the EU (2003), the new Member States that joined the EU in 2004 and 2007 are bound by the international obligations contracted by the European Community and the Member States existing at the time of ratification. Article 6(2) of the Act of Accession is clear on the accession of new Member States to agreements and conventions in which the Community and the

[162] 'The agreements or conventions concluded or provisionally applied by the Community or in accordance with Article 24 or Article 38 of the EU Treaty, with one or more third States, with an international organisation or with a national of a third State, shall, under the conditions laid down in the original Treaties and in this Act, be binding on the new Member States' (Article 6, Act concerning the conditions of accession of the Czech Republic, the Republic of Estonia, the Republic of Cyprus, the Republic of Latvia, the Republic of Lithuania, the Republic of Hungary, the Republic of Malta, the Republic of Poland, the Republic of Slovenia and the Slovak Republic and the adjustments to the treaties on which the European Union is founded).

Member States have decided to act jointly.[163] Article 6(2), second indent, concerns agreements or conventions which have been jointly concluded or signed by the Community and its Member States and which 'shall be agreed by the conclusion of a protocol to such agreements or conventions between the Council, acting unanimously on behalf of the Member States, and the third country or countries or international organisation concerned'. The fact that neither the Kyoto Protocol nor the UNFCCC is listed in Article 6(2) and the fact that no additional protocol to this agreement and convention was signed is a clear sign of the full applicability of the international rules of the Kyoto Protocol to the new Member States in compliance with the *Acquis Communautaire* requirements. Moreover, during the phase of negotiations with the EU, the new Member States did not request any transitional periods to be applied to the national obligations arising from the Kyoto Protocol.

The second explanation can be found in the EC legislation adopted to comply with the Kyoto Protocol obligations. Council Decision 2002/358/EC concerning the approval, on behalf of the European Community, of the Kyoto Protocol to the United Nations Framework Convention on Climate Change and the joint fulfilment of commitments thereunder is addressed to all EU Member States (EU27), and so is Comitology Decision 2006/944/EC on the assigned amounts for the EC and the Member States (EU25) with Monitoring Decision 280/2004/EC concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol (EU27). As already mentioned, Decision 2002/358/EC is not a decision *sui generis*; it is rather the main European provision requiring the Member States to ratify and implement the Kyoto Protocol. Furthermore, Annex II of Council Decision 2002/358/EC contains the details of the limitation and reduction commitments of the EC and the Member States which are to be met 'through action by the Community and its Member States within the respective competence of each'. Council Decision 2002/358/EC is part of the *acquis communautaire* and therefore binding on the Member States.

In particular, in order to determine the degree of responsibility of the EC and the Member States under EC law in the event of a failure to comply with the obligations of the Kyoto Protocol, it is clearly necessary to identify whether those obligations apply to the EU15, EU25 or EU27. To this end, the obligations established by the Kyoto Protocol need to be addressed separately.

[163] 'The new Member States undertake to accede, under the conditions laid down in this Act, to the agreements or conventions concluded or provisionally applied by the present Member States and the Community, acting jointly, and to the agreements concluded by those States which are related to those agreements or conventions' (Article 6(2), Act of Accession).

6.8.1 GHG Emission Limitation and Reduction Commitments

Article 4 of the Kyoto Protocol is the legal basis for the joint commitment of the EC and the EU15 in respect of the quantified emission limitation and reduction commitments listed in Annex B of the Protocol. As to the limitation and reduction commitments, the Community and the EU15 are jointly liable on the basis of Article 4 of the Kyoto Protocol in the event of a failure to comply with the joint GHG emission reduction commitment of 8%. According to the blocking clause under Article 4(4) of the Protocol, the EU Bubble agreement included in Council Decision 2002/358/EC is fixed both in geographical and in temporal terms. No changes due to an alteration of the composition of the European Community can be applied to the EC's and EU15's joint commitment. The twelve Central and Eastern European countries that joined the EU in 2004 and 2007 are not considered part of the EU Bubble by the international climate regime. The EU Burden Sharing Agreement is blocked, at least until the end of the first commitment period. The direct consequence is that the assigned amount calculated by the EC through the Commission Decision of 14 December 2006 covers the EU15, and the EC is therefore not allowed to include in the EU BSA any contribution from the new Member States to achieve the 8% reduction target in terms of available assigned amount units (AAUs) ('hot air'). It is different when it involves the composition of the Community under EC law: neither the Kyoto Protocol nor any other international rule can affect the Community internal order and consequently the effects which accession of new Member States has on that organisation.

The EC adopted Council Decision 2002/358/EC in which the 'European Bubble' under Article 4 Kyoto Protocol is codified into Community law. Through the EU Bubble, the Member States confirmed the overall 8% GHG emission reduction target and at the same time agreed on differentiated national targets, taking into consideration different national circumstances. Article 4(6) introduced the joint responsibility of the Community and the EU15 towards the achievement of the limitation and reduction commitments. In accordance with Article 4(6) of the Kyoto Protocol, the Community, together with the Member States, is responsible for achieving the 8% GHG emission reduction commitment. Article 4(6) refers explicitly to 'each Member State […] and together with the regional economic integration organization' as being 'responsible for its level emissions'. It is also important to stress that both paras. 5 and 6 of Article 4 refer to the failure by parties to achieve the 'total combined level of emissions'. Thus, under the Kyoto Protocol and the rules of the non-compliance regime, the responsibility of the EC and the EU15 can be triggered only in the event that the 8% GHG emission limitation and reduction commitment is not met and applies to the EC and to those EU15 that have exceeded their individual levels of AAUs. Provided that the joint reduction obligation (8%) is fulfilled, irrespective of the performance of the EU15 as regards their individual targets, there will be no consequences for the EU15 in the event of non-compliance with their individual limitation and reduction commitments inscribed in Annex B to the Protocol. In other words, the compliance by

the EC and the EU15 with the joint reduction target excludes any consequence under international law of a potential breach of the EU15's individual targets. Whether this compliance is achieved by recourse to the flexible mechanisms or through over-performance of a few Member States is irrelevant as far as international law is concerned.

This thesis is confirmed by Jacquemont, who provides an interpretation *a contrario* of these commitments under the Protocol: as long as the EC and the Member States meet the 8% reduction obligation, the performance of the EU15 in respect of their individual targets is not relevant in terms of liability. Provided that the joint commitment of 8% is met, the EU15 cannot be considered liable under the Kyoto Protocol, even in the event of a failure to meet their individual reduction obligations.[164] In this case, what should be considered is the extent and the legal force of the individual obligations of the parties to a REIO in the light of the joint commitment. However, the agreement to jointly fulfil the GHG emission limitation and reduction commitments under the Kyoto Protocol does not exclude individual state responsibility in the event of the failure to achieve the combined level of emissions as provided for under Article 4 of the Protocol. The rules on individual state and joint responsibility stipulated in Article 4 of the Kyoto Protocol do not automatically exclude the rules on individual state responsibility that apply to each of the Annex I parties included in a REIO with QELRCs under Annex B of the Kyoto Protocol. If the EU15 do not achieve their total combined level of emission reductions of 8%, Article 4(5) of the Protocol will apply, and the EC together with the Member States that did not meet their commitments under the Burden Sharing Agreement will be held responsible under Article 4(6). Although the QELRCs for the EC and the EU15 inscribed in Annex B of the Kyoto Protocol are equal to 8%, pursuant to Article 4(6), the level of the commitment set out in the EU Burden Sharing Agreement applies to the EU15.

The situation is different where it concerns the responsibility of the EC and the Member States regarding the fulfilment of the greenhouse gas emission limitation and reduction commitments from the perspective of EC law. In this case, since responsibility is a matter coming under EC law, and although the Kyoto Protocol explicitly refers to the EC composed of fifteen Member States, one could argue that, under Community law, responsibility for the fulfilment of the limitation and reduction commitments is twofold: on the one hand, the EC composed of 27 Member States as a party to the Kyoto Protocol, and, on the other, the EU15. Under international law, the EU10 are not part of the EU's joint commitment and are therefore excluded from the application of Article 4 of the Kyoto Protocol. Accordingly, they are considered by the Compliance Committee as any other Annex I party with GHG emission limitation and reduction commitments on the basis of Article 3(1).

In EC law, the EC's compliance with its 8% GHG emission reduction commitment does not exclude the responsibility of the Member States for their

[164] Jacquemont (2005), p. 369.

individual targets agreed under the EU BSA. This can be derived from Decision 2002/358/EC concerning the approval by the EC of the Kyoto Protocol and the joint commitment. In Annex II of this Decision, the percentage of base year levels (92%) indicated for the European Community refers to the quantified emission limitation or reduction commitments as laid down in Annex B of the Kyoto Protocol. Different is the indication of the percentage for the EU15 that were part of the EC on the date of adoption of Council Decision 2002/358/EC. For the EU15, Annex II refers to the quantified emission limitation or reduction commitments 'as agreed in accordance with Article 4(1) of the Kyoto Protocol' and therefore defined under the EU BSA. Annex II of Council Decision 2002/358/EC clearly distinguishes between the European Community and the EU15, and there is no indication whatsoever in that document that the compliance by the EC with its 8% GHG reduction commitment annuls the individual commitments of the EU15. In this respect, under EC law, the Community is responsible for the 8% GHG emission reduction commitment, while the EU15 are responsible for their individual limitation and reduction targets agreed under the EU BSA and inscribed in Annex II to Decision 2002/358/EC.

What about the responsibility of the new Member States in this respect? Decision 2002/358/EC refers to Article 4 of the Kyoto Protocol and therefore to the limits set by the Protocol regarding the joint GHG emission reduction commitment of the EC and the Member States. In this respect, any change in the internal composition of the EC is a matter of Community law which does not affect the participation of the EC in the Kyoto Protocol. Under international law, the new Member States are held responsible exclusively for the compliance with their individual GHG reduction commitments as inscribed in Annex B of the Kyoto Protocol, and the compliance by the EC and the EU15 with their QELRCs does not affect the position of the new Member States.

Under Community law, the responsibility of the new Member States for the failure by the EC and the EU15 to comply with the Kyoto Protocol obligations has to be assessed in the light of Council Decision 2002/358/EC and the provisions of the EC Treaty, notably Articles 10 and 300.

When looking at Decision 2002/358/EC, a clear distinction must be made between the European Community as a whole on the one hand, and the EU15, on the other. Article 2 of Council Decision 2002/358/EC refers to the obligations of the EC and the Member States: 'the European Community and its Member States shall fulfil their commitments under Article 3(1) of the Protocol jointly, in accordance with the provisions of Article 4 thereof, and with full regard to the provisions of Article 10 of the Treaty establishing the European Community' (para. 1) and 'the European Community and its Member States shall take the necessary measures to comply with the emission levels set out in Annex II, as determined in accordance with Article 3 of this Decision' (para. 3). There were fifteen EU Member States when the Decision was adopted and no reference is made to the joint fulfilment of the commitments under Article 3(1) in the case of future enlargements. The inclusion of the word 'jointly' at the end of the first indent of Article 2 is a confirmation that the Council, when adopting this Decision,

explicitly referred to Article 4 of the Kyoto Protocol and had no intention to consider future EU enlargements and new Member States, as far as the individual QELRCs of the Member States are concerned.

In this respect, interesting conclusions can be drawn from the assessment of Commission Decision 2006/944/EC determining the respective emission levels allocated to the Community and each of its Member States under the Kyoto Protocol pursuant to Council Decision 2002/358/EC.[165] The Annex to Decision 2006/944/EC contains a list of Member States with the levels of emission allocated for the first commitment period of the Kyoto Protocol. The Annex includes the EU15 and the EU10, and these two groups of countries are kept separate, in accordance with the EU Bubble agreement under the Kyoto Protocol.

The situation is different as regards the obligation of the European Community as a whole as inscribed in Council Decision 2002/358/EC. Article 2 of that Decision requires the Member States to have 'full regard to the provisions of Article 10 of the EC Treaty', notably the principle of loyal cooperation between the European Community and the Member States. Since Decision 2002/358/EC applies to the EU27, the new Member States are also obliged to respect the principle of loyalty and cooperation between the Member States and the Community as regards the ratification and implementation of the Kyoto Protocol. If interpreted extensively, Article 2 of Decision 2002/358/EC could be read as imposing on the new Member States the obligation to cooperate with the EC and the EU15 in the implementation of the Kyoto Protocol and therefore in the achievement of the Protocol obligations by the EC and the Member States.

A similar conclusion could be drawn when considering, *a contrario*, how Commission Decision 2006/944/EC refers to the European Community. In the Annex to this Decision, the European Community is on the top of the list with a clear reference to the joint commitment of the EC and the Member States under Article 4 of the Kyoto Protocol and to Council Decision 2002/358/EC.[166] Commission Decision 2006/944/EC does not mention Article 10 TEC. The fact that Council Decision 2002/358/EC does not include an explicit reference to the joint commitment in Annex II where the QELRC of the EC is listed and that it recalls Article 10 TEC and the principle of cooperation between the EC and the Member States could be used, again, as an argument in favour of the thesis that the EU27 are under the duty to ensure the fulfilment of the Kyoto Protocol obligations by the European Community.

The conclusion that the GHG reduction commitment agreed by the EC under the Kyoto Protocol shall be binding on the Community as a whole from the perspective of EC law, i.e., 27 Member States including Malta and Cyprus, is also based on more general considerations on the EC Treaty.

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[165] Commission Decision of 14 December 2006 determining the respective emission levels allocated to the Community and each of its Member States under the Kyoto Protocol pursuant to Council Decision 2002/358/EC (2006/944/EC), *OJ* L 358, 16 December 2006, pp. 87–89.

[166] 'For the purpose of the joint fulfillment of the commitments under Article 3(1) of the Kyoto Protocol in accordance with the provisions of Article 4 thereof, pursuant to Decision 2002/358/EC and applying to the Member States listed in Annex II to that Decision'.

First of all, Article 300(7) TEC states that 'agreements concluded under the conditions set out in this Article [300] shall be binding on the institutions of the Community and on Member States'. Therefore, the Kyoto Protocol, which has been concluded and ratified by the EC and the EU15, shall be binding on the EC and the Member States. The limitations introduced by Article 4(4) of the Kyoto Protocol, namely the restriction that the joint fulfilment of the limitation and reduction commitments applies to the EC and the EU15 and that 'any alteration in the composition of the organization after adoption of this Protocol shall not affect existing commitments under this Protocol' is relevant under international law. The accession of twelve new Member States to the EU in 2004 and 2007 does not affect the 'existing commitments' of the EC and the EU15 under the Kyoto Protocol: the EC and the EU15 remain jointly bound by the 8% GHG limitation and reduction commitment. By the same token, Article 4(4) does not have any effect on the composition of the Community under EC law. It is the EC as a whole, together with the EU15, which is bound under the Kyoto Protocol by the joint commitment to reduce greenhouse gas emissions by 8% in the period 2008–2012. The EC as a whole refers to the EC composed of its Member States and therefore the EU27 at the time of writing. As a consequence, the EU27 can be held responsible under EC law for the EC's compliance with the 8% reduction commitment. From the perspective of EC law, the new Member States can therefore be considered co-responsible with the EU15 for achieving the 8% QELRC by the EC.

Furthermore, in case of international agreements concluded by the EC, the *acquis communautaire* is not automatically extended to the new Member States. In other words, since the ratification of the Kyoto Protocol is part of the *acquis communautaire*, the new Member States were obliged to ratify that international agreement in accordance with the procedures established in their constitutional systems. In doing so, the new Member States accepted to be bound by the Kyoto Protocol and indirectly accepted the obligations of the European Community under that treaty. The obligations included in a treaty under international law do not automatically become binding on states that have newly acceded to a regional organisation. Each state must ratify and accept an international treaty in order to be fully bound by all its obligations. Furthermore, it may be reasonable to assume that in the event that the new Member States had chosen not to be bound by the obligations of the EC under the Kyoto Protocol, they should have included a specific clause in the treaty of accession, and this is not the case.

In the *Kupferberg* case, the Court referred to the effect on the Member States of an international agreement ratified by the European Community. In particular, the Court confirmed that international agreements are binding on the Member States 'in the same way as on the institutions' and emphasised that the Member States and the Community institutions are responsible for compliance with the obligations arising from such agreements.[167] Macleod sees in this judgment the

[167] Case 104/84, paras. 11–13.

establishment of a duty for the Member States under Community law 'to ensure that the Community complies with its international obligations (by, for example, taking steps to enact any necessary internal legislation)'.[168] According to Macleod, the *Kupferberg* judgment clarified that the role of the Member States is to ensure 'by their action as members of the Community that the Community fulfils its obligations'.[169] Furthermore, Macleod concludes that any action by the Member States in breach of the obligations of the Community under an international agreement may be made subject to an infringement proceeding under Community law[170] and links these considerations to Article 10 TEC and the principle of loyal cooperation.

Below are a few preliminary considerations on the role of Article 10 TEC in terms of the responsibility of the Member States for the EC's compliance with the obligations created by the Kyoto Protocol.

The relation between, on the one hand, the EC and EU15 and, on the other, the new Member States is of great relevance since the EU10 have a significant GHG emissions surplus which could be of great help in the fulfilment of the limitation and reduction commitments by the EC and the EU15.

Affirming that the EU12 share the same level of responsibility as the EU15 in respect of the EC's joint commitment to reduce its level of greenhouse gas emissions is probably too extreme, since Annex II to Council Decision 2002/358/EC lists only the EU15 and the Commission Decision of 14 December 2006 on the determination of emission levels of the EC and the Member States.[171]

What could be considered is a sort of indirect responsibility of the EU12, outside of the EU BSA, in the event of the failure by the Community to meet its GHG emission reduction commitment. In this respect, the breach of Article 10 TEC could trigger an indirect responsibility of the new Member States for the failure by the EC and the Member States to achieve the joint reduction commitment. Article 10 of the EC Treaty introduced the principle of cooperation and loyalty of the Member States *vis-à-vis* the European Community.[172] A certain degree of responsibility of the Member States to assist the Community in the achievement of the GHG emission limitation and reduction commitments under

[168] Macleod et al. (1996), pp. 126–127.

[169] Ibid., p. 127.

[170] Ibid., p. 128.

[171] Commission Decision of 14 December 2006 2006/944/EC determining the respective emission levels allocated to the Community and each of its Member States under the Kyoto Protocol pursuant to Council Decision 2002/358/EC, *OJ* L 358, 16 December 2006, p. 87.

[172] 'Member States shall take all appropriate measures, whether general or particular, to ensure fulfilment of the obligations arising out of this Treaty or resulting from action taken by the institutions of the Community. They shall facilitate the achievement of the Community's tasks. They shall abstain from any measure which could jeopardise the attainment of the objectives of this Treaty' (Article 10 EC Treaty).

the Kyoto Protocol could be drawn from Article 10 TEC. Article 10 TEC is recalled in several parts of Decision 2002/358/EC.

The relation between the Community and the Member States in respect of the obligations created by the Kyoto Protocol is explicitly tackled in the preamble of Decision 2002/358/EC, namely under recital 10: 'In deciding to fulfil their commitments jointly in accordance with Article 4 of the Kyoto Protocol, the Community and the Member States are jointly responsible […] and in accordance with Article 10 of the Treaty establishing the European Community, Member States individually and collectively have the obligation to take all appropriate measures, whether general or particular, to ensure fulfilment of the obligations resulting from action taken by the institutions of the Community, including the Community's quantified emission reduction commitment under the Protocol, to facilitate the achievement of this commitment and to abstain from any measure that could jeopardise the attainment of this commitment' and under recital 12: 'The Community and its Member States have an obligation to take measures in order to enable the Community to fulfil its obligations under the Protocol without prejudice to the responsibility of each Member State towards the Community and other Member States to fulfilling its own commitments'. The joint commitment of the EC and the Member States towards the limitation and reduction commitments of the Kyoto Protocol mentioned in the preamble of Council Decision 2002/358/EC, as well as the obligation of loyalty of the Community and the Member States in respect of each other, refer to the EU27 for the reasons explained above. Furthermore, Article 2 of Decision 2002/358/EC confirms the assumptions in the preamble by mentioning once more the joint commitment of the EC and the Member States under Article 3(1) of the Protocol and the respect of the principle of loyalty under Article 10 TEC.

The obligation of loyalty of the EU15 towards the EC in the achievement of the 8% reduction commitment indicated in the EU Burden Sharing Agreement is linked to the capacity of the EU15 to achieve their individual targets in order to enable the EC as a whole to comply. The obligation of loyalty of the EU12 towards the EC derives also from the EC legislation on monitoring and reporting (Article 8 of Decision 280/2004/EC). The EC composed of 27 Member States together with the EU15 are responsible, and therefore, in case the EU Bubble (8%) bursts, the EU12 may also be considered co-responsible.

Under EC law, the responsibility of the Member States for the achievement of the GHG emission limitation and reduction commitments of the Kyoto Protocol may encompass not only the individual GHG emission reduction targets under the Kyoto Protocol but also other obligations under EC law. In other words, any act or action of a Member State which potentially jeopardises the objectives of the EC would fall under the generic obligations of Article 10 TEC. What form the assistance of the new Member States to the EU15 could take appears to be related to the surplus of AAUs which could be transferred from new to old Europe. The transfer or acquisition of Kyoto units can take place either at the installation level through the EU ETS and JI or at the state level through the participation of the EC and the EU15 in IET. On the basis of the above considerations, one could argue

that although Article 4 of the Kyoto Protocol refers strictly to the EU15, under EC law, the EU12 could be considered co-responsible in the event of the failure by the Community and the EU15 to meet their joint reduction commitment under the Kyoto Protocol.

The hypothesis according to which the EU would link the original BSA with an additional implicit bubble constituted by the new Member States in order to facilitate the transfer of their AAUs surplus or simply to create a safety valve for the EC has been dropped.[173] This is due to several reasons: first of all, the EU institutions have never referred to such an option in any official document. The EU policies and measures on climate change only refer to the agreed EU BSA without making any reference to the new Member States regarding the establishment of an implicit bubble to facilitate the EU's compliance with the Kyoto Protocol's limitation and reduction commitments. Furthermore, the new Member States have never shown interest in this solution and have preferred to maintain full control of the GHG emissions surplus in order to make the best use of it.[174]

Below are potential situations where the Member States could contribute to the failure by the Community and the EU15 to reach their limitation and reduction commitments under the Kyoto Protocol and could therefore be held liable under EC law for failure to comply with Article 10 TEC:

- Failure to adopt adequate policies and measures at the national level aimed at mitigating climate change;
- Opposition to the adoption of policies and measures at the Community level aimed at mitigating climate change;
- Use of the option created under Article 3(13), i.e., the right of Annex I parties to bank to the next commitment period a certain level of assigned amounts in the event that the level of greenhouse gas emissions is lower than the agreed target[175];
- Conclusion of an MOU with a third state for the transfer of AAUs under IET.[176]

To sum up, the Member States' responsibility for the compliance by the Community and the Member States with the GHG emission limitation and

[173] Michaelowa and Betz (2000).

[174] 'Decisions taken pursuant to para. 1 or 2 shall be in accordance with the requirements of the Treaty, in particular Articles 87 and 88 thereof' (Article 11.3 of the EATD), and Annex III of the EATD requires that 'the plan shall not discriminate between companies or sectors in such a way as to unduly favour certain undertakings or activities in accordance with the requirements of the Treaty, in particular Articles 87 and 88 thereof' (point 5). In this respect, many new Member States' governments have, on several occasions, explicitly declared that under the EU ETS, EUAs would be allocated to the national installations only in relation to their needs, thus excluding any extra allocation, and this decision is in conformity with EC law.

[175] This option is subject to some limitations introduced by Decision 19/CP.7, Annex, F Carry-over, 15 and 16, FCCC/CP/2001/13/Add.2 of 21 January 2002.

[176] See Chap. 7.

reduction commitments of the Protocol is triggered under EC law in accordance with the following:

- The EC and EU15 are not in compliance with their GHG emission reduction commitment (8%): the EC composed of 27 Member States (Article 10 EC Treaty) together with the EU15 (Article 4(6) Kyoto Protocol) in non-compliance are responsible, though to a different degree;
- The EC and EU15 as a whole are in compliance with their GHG emission reduction commitment (8%) but some of the EU15 are not in compliance with their individual GHG emission limitation and reduction commitments: none of the EU15 and EU12 is responsible under international law, but may be responsible under EC law for failure to comply with Decision 2002/358/EC.

6.8.2 Monitoring, Reporting and Verification Obligations and Eligibility Requirements

Different from the considerations on the GHG emission limitation and reduction commitments, the discussion of the responsibility of the EC and the Member States to comply with the other two sets of obligations of the Kyoto Protocol, i.e., the monitoring, reporting and verification obligations and the eligibility requirements to participate in the flexible mechanisms, appears to be somewhat clearer. First of all, Article 4 of the Kyoto Protocol is silent on the obligations listed in Articles 5(1)(2) and 7(1)(4) of the Kyoto Protocol. These obligations apply to Annex I parties, and neither Article contains a specific reference to a regional economic integration organisation, nor to any right regarding joint commitment, as foreseen for the limitation and reduction commitments under Article 3(1) of the Protocol. In respect of the monitoring, reporting and verification obligations and the eligibility requirements, the EC and the Member States included in the list of Annex I parties (EU25) are individually committed to the Kyoto Protocol and, under international law, are held individually responsible for the failure to comply with those obligations.

The same reasoning and conclusion can be drawn from reading Annex III of Decision 2002/358/EC, i.e., the declaration of competence by the EC made in accordance with Article 24(3) of the Kyoto Protocol. In this document, the EC 'declares that its quantified emission reduction commitment under the Protocol will be fulfilled through action by the Community and its Member States within the respective competence of each and that it has already adopted legal instruments, binding on its Member States, covering matters governed by the Protocol'. The Decision only refers to the quantified emission limitation and reduction commitments and does not mention the MRV obligations and the eligibility requirements.

Therefore, it seems reasonable to affirm that under EC law, as under international law, the joint commitment of the Community and the Member States is valid exclusively for the GHG emission limitation and reduction commitments. The EC and the Member States listed in Annex I of the UNFCCC (EU25) share the same level of responsibility as far as compliance with the monitoring, reporting and verification obligations and the eligibility requirements are concerned. The same conclusion can be drawn from the text of Article 4(4) of the Kyoto Protocol, which refers to any alteration in the composition of a REIO but only in respect of 'existing commitments under' the Kyoto Protocol. Since Article 4(1) only refers to the commitments under Article 3 (reduction obligations), it thus seems to exclude that the term 'commitments' in Article 4(4) covers all obligations of the Kyoto Protocol. Furthermore, from the history of the negotiations on the Kyoto Protocol it appears evident that parties negotiating the Kyoto Protocol focused almost exclusively on the limitation and reduction commitments when drafting and adopting Article 4.[177]

While the EU25 are held individually responsible for compliance with the MRV obligations and the eligibility requirements under international law, the EU27 share the same responsibility under EC law in the event of a failure by the Community as a whole to comply with the monitoring, reporting and verification obligations and the eligibility requirements under the Kyoto Protocol. In respect of the monitoring, reporting and verification obligations as well as the eligibility requirements under the Kyoto Protocol, the accession to the EU of twelve Member States after the ratification of the Kyoto Protocol by the Community in 2002 did affect the Community's commitments under the Protocol.[178] In accordance with Community law, the greenhouse gas inventory information presented by the Community to the UNFCCC also includes information on the new Member States (also non-Annex I parties), and the same applies, for instance, to the standardised system of registries. As mentioned above, the Community is committed under the Kyoto Protocol as a whole and as an Annex I party. In accordance with the principle of moveable treaty borders, the Kyoto Protocol obligations have remained valid for the Community as a whole after the enlargements of 2004 and 2007. Furthermore, the new Member States share with the EU15 the same degree of responsibility in respect of compliance with the MRV obligations and the eligibility requirements, as confirmed by the ECJ in the above-mentioned *Hauptzollamt Mainz* case.

The MRV obligations and the eligibility requirements are fully covered under EC legislation, and the system for monitoring, reporting and verification of GHG emissions as well as the registry requirements created under EC law are based on 'full and effective cooperation and coordination' between the EC and the Member States (Article 8 of Decision 280/2004/EC). Furthermore, the EC relies on the

[177] UNFCCC (2000).

[178] Report from the Commission, Assigned Amount Report of the European Union, COM(2006) 799, Brussels, 15 December 2006.

diligence of the Member States to comply with EC rules in time (the Commission has only 4 months to submit its GHG inventory to the UNFCCC), rather than establishing specific preventive rules for preventing non-compliance. Indeed, the EC legislation mentioned above does not provide for any direct penalty for Member States not in compliance with the MRV obligations and eligibility requirements; rather, it has opted to fill the gap (by supplying data).

The main legal questions under international law which arise when studying the fulfilment of the MRV obligations and the eligibility requirements by the EC and the Member States are as follows: (i) what are the consequences for the Community if the Member States are not in compliance with these obligations?; (ii) as far as the eligibility requirements are concerned, does the failure by the Member States to comply with them have any effect on the right of the Community to participate in the flexible mechanisms of the Kyoto Protocol?; (iii) what is the role, if any, played by the EU enlargement in the fulfilment of the MRV obligations and the eligibility requirements by the EC and the Member States? A key point to be kept in mind when considering these questions is that both the MRV obligations and the eligibility requirements imply mutual cooperation of the Member States and the European Community as regards the information to be collected and provided to the secretariat.

Let us first focus on the monitoring, reporting and verification obligations. The main consequences of non-compliance by Annex I parties with the MRV obligations, namely submission of a plan addressing the reasons for non-compliance and containing detailed measures and a timetable to reinstate compliance, are of a less stringent nature than the consequences of non-compliance provided for by the Kyoto Protocol and the Marrakech Accords regarding the other obligations. In terms of the relation between the EC and the Member States, it seems more interesting to consider the adjustment and correction consequences mentioned above. These concern adjustments of the national greenhouse gas inventory in case of a dispute between a party and the expert review team (Article 5(2)) and corrections to the holdings of assigned amounts in case of a dispute between a party and the expert review team in respect of the validity of a transaction (Article 7(4)). What the ERT could do is to recommend an adjustment to the EC GHG inventory in case the assigned amount and the commitment period reserve calculated by the Member States are not in accordance with the modalities for the accounting of assigned amounts under Article 7(4) of the Kyoto Protocol and Decision 11/CMP.1.

In that case, non-compliance by the Member States with the monitoring, reporting and verification obligations could affect the EC's global level of assigned amounts and also, indirectly, decisions of the EC regarding climate policy. The correction to the holdings of assigned amounts in the registry of the Member States could imply, for instance, a modification, either positive or negative, of the EU policies and measures aimed at compliance with the GHG emission limitation and reduction commitments. Only in these terms could one imagine a potential relation between the non-compliance by the Member States with the monitoring, reporting and verification obligations and the limitation and reduction commitments of the EC and the Member States. In general, it may be concluded that the Member

States' failure to comply with the MRV obligations of the Kyoto Protocol is likely to affect the Community's compliance with those obligations.

The compliance by the EC and the Member States with the MRV obligations must be read together with the eligibility requirements to be fulfilled by Annex I parties to be able to participate in the flexible mechanisms. Since the former coincides with the latter as far as the establishment of a national registry and the annual submission of a GHG inventory are concerned, it appears evident that failure to comply with part of the MRV obligations has a direct effect on the EC's eligibility to participate in the flexible mechanisms.

In addressing the question of compliance with the eligibility requirements, the EC and the Member States will be considered separately, even though as regards compliance with the eligibility requirements these parties are interrelated. If we look at the EC as an Annex I party and at its individual right to participate in the flexible mechanisms, it should be stressed that failure by the Member States to comply with the eligibility requirements is likely to affect the position of the EC as a whole as regards the Kyoto Protocol and, more specifically, its right to participate in the flexible mechanisms. Focusing on the first criterion, namely the obligation to ratify the Kyoto Protocol, what would have been the consequences for the EC if, for instance, one Member States had not ratified the Kyoto Protocol despite the adoption of Decision 2002/358/EC? Would the failure by the Member States to ratify the Kyoto Protocol have affected the participation of the EC in the flexible mechanisms? Although such a situation is hypothetical since the Member States committed themselves through Decision 2002/358/EC to take 'the necessary steps' to deposit the instrument of ratification, when answering this question a distinction between international and European law should be made.[179] The failure by the Member States to ratify the Kyoto Protocol would represent a breach of EC law, i.e., more precisely, non-compliance with the obligations set by Decision 2002/358/EC and breach of Article 300(7) TEC. Under international law, since the Kyoto Protocol and the Marrakech Accords only refer to Annex and non-Annex I parties as main actors in the flexible mechanisms, once the EC has deposited its instrument of ratification to the secretariat, this can be considered sufficient for the EC to fulfil the first of the eligibility criteria, even though the Member States have not yet ratified the Protocol. Slightly different is the case of other eligibility criteria, such as, for instance, the establishment and submission of a greenhouse gas inventory or a national registry. In the previous section, the details of a failure to respect the monitoring, reporting and verification obligations set by the Kyoto Protocol and EC law and the resulting consequences for the Member States, were investigated. As to the fulfilment by the EC of the eligibility requirements related to the monitoring, reporting and verification obligations, the fact that a Member State is not in compliance with these obligations may have more serious consequences for the EC's eligibility to participate in the flexible mechanisms. This is

[179] Article 6(2) of Council Decision 2002/358/EC, and the same holds true for the new Member States since Decision 2002/358/EC is part of the *acquis communautaire*.

because the GHG inventory and the national registry are 'jointly prepared' and submitted by the Member States and the Community and are based on the information provided by the Member States. Therefore, any imperfections and a failure by the Member States in this respect could have negative consequences for the preparation of the required documentation by the Community and put the EC in a situation of non-compliance with the eligibility requirements. In that event, the EC law infringement procedure could apply to the Member States because of the failure to implement EC legislation correctly, and, furthermore, the consequences of non-compliance with the Kyoto Protocol regime could apply to the EC as Annex I party.

This account is valid not only in theoretical terms. In practice, something very similar has already occurred. Greece has been sanctioned by the enforcement branch of the Compliance Committee for failing to comply with the national system obligations under Article 5(1) of the Kyoto Protocol. This decision has had no direct consequences for the position of the EC as a whole, but this could have been the case if other obligations had been at stake. For instance, since the EC greenhouse gas inventory is based on the collection of the greenhouse gas inventories of the EU27, failure by the Member States to submit adequate and sufficient information in this regard could jeopardise the compliance by the EC with the same obligation. Other potential critical situations regarding the compliance by the Member States with the eligibility requirements could concern:

(i) The connection of the Member States' registries with the UNFCCC international transaction log (ITL) for the transfer of CERs. As from 1 January 2008, the Member States' registries established under the EU ETS have to be Annex I registries and AAUs must be converted into CERs and/or ERUs in case of emission reductions generated by JI and CDM projects. EUAs issued by the Member States in the second phase of the EU ETS will be registered in the national registry with the AAUs log. Therefore, the transfer of the different carbon units depends on the Member States' compliance with the eligibility requirements and in particular with the requirement to establish the national registries. Failure to meet these requirements may result in a fragmented European carbon market where some Member States can trade and some cannot. The EU has encountered delays in connecting the Community independent transaction log (CITL) with the ITL due to the fact that not all Member States were in compliance with the eligibility requirements at the time the link with the ITL could have been established. If this situation persists, there may be a risk that CERs or ERUs remain stuck in the EU Member States' registries with no possibility of transfer.[180]

[180] On 22 November 2007, the European Commission confirmed that the EU ETS would not be linked to the international market of credits created by the Kyoto Protocol's flexible mechanisms. In other words, the EU cannot yet link the CITL to the international transaction log (ITL) since this connection is and will be subject to testing for a few months (ready by April 2009). The failure to establish this link mainly affects the EU installations falling within the scope of Directive 2003/87/EC which cannot use credits from JI and CDM for compliance with the EU ETS obligations.

(ii) Once the link between the ITL and the CITL is created, eligibility shall be maintained by the EC and the Member States. Any loss of eligibility will automatically trigger the impossibility for the EC and the Member States to use the flexible mechanisms.
(iii) In case of a breach of the Commitment Period Reserve by an Annex I party, the ITL will automatically block the transactions and notify the party that it must increase its holdings up to the required level within 30 days.

As to the role of the EU enlargement in the compliance by the EC and the Member States with the MRV obligations and the eligibility requirements, Chap. 4 emphasised the technical difficulties and the need for capacity building in the new Member States with regard to the implementation of the Kyoto Protocol. From a legal perspective, once the new Member States have joined the EU, they have the same duties and responsibilities as the old Member States in terms of compliance with EC law and international law. Since the EU has adopted extensive legislation aimed at the implementation of and compliance with the Kyoto Protocol obligations, it can be affirmed without a doubt that the position of the new and old Member States is equal in this respect. The same applies with regard to the obligations of Malta and Cyprus. These two countries are members of the EU and therefore have to comply with the *acquis communautaire* like any other member, under the Kyoto Protocol they are non-Annex I parties until the end of the first commitment period and therefore not eligible for participation in the flexible mechanisms. More precisely, they can only host CDM projects and are not eligible to trade Kyoto units under IET. However, although under international law Malta and Cyprus are not required to fulfil the eligibility requirements established by the Kyoto Protocol, they are required to contribute to the fulfilment of the monitoring, reporting and verification obligations by the European Community.

6.9 Consequences of a Failure by the EC and the Member States to Comply with Community Law

In international law, the issue of joint liability under an international treaty as well as the consequences of the failure by states party to a joint commitment to comply with a treaty are not clear, nor is there sufficient practice which might help to identify to what extent a state can be held liable for a joint commitment. Quoting the words of Macleod, 'what exactly the consequences of joint liability are is harder to say'.[181] From the perspective of Community law, the same degree of uncertainty exists regarding the joint responsibility of the EC and the Member States in mixed agreements. In the case of the GHG emission limitation and reduction commitments under the Kyoto Protocol, the failure by the EC and the

[181] Macleod et al. (1996), p. 142.

Member States to comply with their joint commitment will be sanctioned by the enforcement branch of the Compliance Committee. The same applies in the case of the monitoring, reporting and verification obligations and the eligibility requirements, although a joint commitment of the Community and the Member States does not exist in respect of these obligations.

Under Community law, the consequence of the failure by the EC and the Member States to comply with the EC legislation aimed at achieving the Kyoto Protocol obligations is the infringement procedure under Articles 226 and 228 of the EC Treaty. Responsibility for developing, implementing and enforcing obligations arising from the EC Treaty and EC legislation lies with the Member States and the Community institutions. This is clearly stated in Article 175(1) EC: 'The Council, acting in accordance with the procedure referred to in Article 251 and after consulting the Economic and Social Committee and the Committee of the Regions, shall decide what action is to be taken by the Community in order to achieve the objectives referred to in Article 174' and 175(4): 'Without prejudice to certain measures of a Community nature, the Member States shall finance and implement the environment policy'. Member States' failure to enforce European environmental law is a matter for the European Commission, which the EC Treaty, in Article 211, has invested with the power to 'ensure that the provisions of this Treaty and the measures taken by the institutions pursuant thereto are applied'. Under the infringement procedure, the European Commission is authorised to bring a Member State before the ECJ for failure to fulfil an obligation of Community law; at the informal level, there is the complaints procedure which has been developed in practice and is available electronically on the official EU websites.[182] Furthermore, the European Commission is not required to have a 'specific interest in bringing an action in order to commence proceedings under Article 226 EC'.[183]

As indicated by Jans and Vedder (2008),[184] there are three types of infringement proceedings which the Commission can institute:

- Failure by the Member States to adopt and communicate adequate implementing measures (non-communication);
- Adoption of transposition measures which are not in conformity with the requirements of EC legislation (non-conformity);
- Failure to comply, through action or inaction of a Member State, with requirements of European environmental law other than the obligations to implement EC legislation correctly (bad application).

The pre-litigation procedure defined in Article 226 is based on three formal stages which the European Commission is required to follow:

- A letter of formal notice which is preceded by several formal and informal contacts between the representatives of the European Commission and their

[182] Jans and Vedder (2008), p. 163.

[183] Case C-422/92 *Commission* v. *Germany* [1995] *ECR* I-1097.

[184] Jans and Vedder (2008), p. 159.

counterparts in the Member States. The formal notice includes the request by the European Commission to the Member States to provide adequate information about the implementation and enforcement of EC legislation. Member States are required to reply to the formal notice within 2 months.

- A reasoned opinion which is issued by the European Commission in case the response of the Member States to the formal notice is considered unsatisfactory. The reasoned opinion describes the alleged infringement and stipulates a new deadline.
- Referral to the Court of Justice in case the Member States fail to comply with the established deadline.

Once a Member State is referred to the Court of Justice by the European Commission Article 228 TEC applies. In this respect, the Court of Justice is required to assess whether the Member State in question has failed to fulfil an obligation under the Treaty. If this is the case, 'the State shall be required to take the necessary measures to comply with the judgement of the Court of Justice' (Article 228(1)). In the event that the Member State 'fails to take the necessary measures to comply with the judgement of the Court', it may be brought before the Court either by the Commission, which shall 'specify the amount of the lump sum or penalty payment to be paid by the Member State' or by the Court itself, which in finding that the Member State has not complied with its judgement 'may impose a lump sum or penalty payment' (Article 228(2)).

Many infringement procedures under Article 226 EC have related to the failure by the Member States to comply with European environmental law.[185] The same applies to the few judgments handed down by the Court of Justice under Article 228 TEC.[186]

Two main deficiencies affect the infringement procedure: its excessive length and the fact that many proceedings do not last long enough to reach the Court because in the meanwhile Member States reach compliance. As to the duration of proceedings under Article 226 EC, the average time from the issuance of the letter of formal notice and the judgment of the Court was 45 and 47 months in the periods 2002–2003 and 2004–2005, respectively. The five cases brought under Article 228 EC were concluded approximately 4, 5, 6, 8 and 14 years, respectively, after the judgments under Article 226 EC.[187] The main cause of this exceptional duration is the length of the prejudicial phase, and the need to speed up this process is urgent. Regarding the second deficiency, the fact that a large number of cases are closed before reaching the Court does not automatically imply that in the meantime the Member States concerned have achieved full compliance with EC environmental law. This cannot be proved since infringement proceedings lack

[185] More than one-third of proceedings under Article 226 EC in 2004 and 2005 concerned cases of environmental protection, see European Commission (2004), p. 6.

[186] At the time of writing, 3 of the 5 judgements following an Article 228 procedure concern the protection of the environment in the EC.

[187] Wennerås (2007), pp. 291–292.

transparency, and closed cases are kept confidential by the European Commission. In this respect, it cannot be ruled out that Member States have sometimes used the length of the procedure and their influence with the Commission to delay the correct implementation of EC environmental law.[188]

Both critical points discussed above may have an implication under EC law for potential cases of non-compliance by the Member States with the Kyoto Protocol obligations. In other words, the weaknesses of the infringement procedure may not be sufficiently deterrent for the Member States which are required to comply with the obligations of the Kyoto Protocol and to adopt adequate policies and measures aimed at the reduction of greenhouse gas emissions.

It is also important to mention that the majority of proceedings under Article 226 EC falling within the sphere of environmental protection concern the application of directives in the national systems, more precisely the correct transposition of EC legislation into national law and the adoption of precise and adequate national implementing measures. In the case of the obligations established under the Kyoto Protocol, only a minor part of the EC legislation concerned consists of directives. The main two EC measures adopted by the EC to meet the requirements of the Kyoto Protocol are Decision 2002/358/EC on the ratification and implementation of the Kyoto Protocol and Decision 280/2004/EC concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol. Although Decision 2002/358/EC can be considered a decision *sui generis*, different from Decision 280/2004/EC, as defined in Article 249 EC Treaty, both acts produce legal effects for the Member States. Nevertheless, it is important to stress that the EC Treaty, in Articles 226 and 228, does not explicitly refer to directives or regulations; it rather mentions a general 'obligation under this Treaty'. In practice, there are several cases regarding the wrongful application of EC environmental law by Member States that, for instance, fail to implement correctly either the general principles of the EC Treaty or an act other than a directive or regulation. These are cases of bad application of EC legislation, more correctly defined by the European Commission as cases of 'action or inaction, [when] a Member State fails to comply with EU environmental law requirements other than the requirements to adopt and communicate correct implementing legislation'.[189]

The distinction between the limitation and reduction commitments and the other two sets of obligations (MRV obligations and eligibility requirements) is evident when assessing the potential breach of EC law by the Member States. As regards the limitation and reduction commitments and the failure by the Member States to meet the targets set in Decision 2002/358/EC, this concerns a situation of incorrect application of an EC decision and a potential breach of a general principle of EC law, namely Article 10 TEC. As for the monitoring, reporting and verification obligations and the eligibility requirements, this involves the failure by

[188] Ibid., pp. 293–294.

[189] See European Commission (2006), p. 64.

the Member States to implement existing and specific EC legislation, although a separate or parallel breach of Article 10 TEC cannot be excluded a priori. In the case of the limitation and reduction commitments, although the details of the Burden Sharing Agreement are included in Council Decision 2002/358/EC, there is no specific EC legislation aimed directly at the limitation and reduction commitments agreed by the EC and the Member States under the Kyoto Protocol. However, the study above has shown the existence of several pieces of EC legislation adopted by the European institutions to fulfil the monitoring, reporting and verification obligations and the eligibility requirements.

Consequences of non-compliance with the limitation and reduction commitments by the EC and the Member States may affect the EC and the Member States in the post-2012 phase of the international climate regime, and in particular where it concerns the definition and calculation of assigned amounts for the period after 2012.[190] This is the case, for instance, with the deduction of units from the party's assigned amount for the second commitment period following the non-compliance by the EC and the Member States with the limitation and reduction commitments. If applied, this consequence would imply an additional burden for the EC and the Member States in respect of future limitation and reduction commitments; eventually, it could also affect and weaken the position of the EC and the Member States in the negotiations on the post-2012 strategy *vis-à-vis* other parties to the Kyoto Protocol and could, moreover, influence the discussions on the potential new EU Burden Sharing Agreement.

The failure by the EC and the Member States to comply with the monitoring, reporting and verification obligations and the eligibility requirements may result, from the perspective of international law, in (1) correction and adjustment consequences, and (2) ineligibility to participate in the flexible mechanisms. As shown above, such cases have already been assessed by the enforcement branch of the Compliance Committee in relation to the Member States, notably (1) adjustments in the assigned amounts of the Netherlands and Greece following the review of the initial reports submitted to the UNFCCC, and (2) the question of implementation and the consequent declaration of non-compliance by Greece with the requirements for the establishment of a national system under Article 5(1) of the Kyoto Protocol. Potentially, as indicated above, similar failures by the Member States may affect the position of the EC as a whole as regards the same obligations, and in the next chapter this will be studied in conjunction with the principle of cooperation and loyalty enshrined in Article 10 TEC.

In the event that the EC and the Member States are in non-compliance with the MRV obligations and eligibility requirements, the infringement procedure under European Community law could be triggered, for instance, by the European

[190] Declaration of competence—Annex III, CD 2002/358/EC, 'The European Community declares that its quantified emission reduction commitment under the Protocol will be fulfilled through action by the Community and its Member States within the respective competence of each and that it has already adopted legal instruments, binding on its Member States, covering matters governed by the Protocol'.

Commission under Article 211 TEC, in relation to the failure by Member States to comply with the correspondent EC legislation in force. The EC legislation concerned is Decision 280/2004/EC amending Decision 99/296/EC and Commission Decision 2005/166/EC identifying parameters for projecting future emissions as well as indicators for the measurement of progress towards GHG emission commitments, as well as Regulation 2216/2004/EC regarding a standardised and secured system of registries pursuant to Directive 2003/87/EC and Decision 280/2004/EC and Commission Regulation 916/2007/EC. Accordingly, the following obligations for the Member States were established:

- Report from the Member States to the European Commission by 15 January each year 'for the assessment of actual progress and to enable the preparation of annual reports by the Community' (Article 3(1));
- Preparation of the Community greenhouse gas inventory and Community greenhouse gas inventory report (Article 4(1));
- Preparation of the annual Community report and the Member States' report on the demonstration of progress towards fulfilling their commitments under the UNFCCC and the Kyoto Protocol according to Decision 2002/358/EC (Article 5(1));
- Preparation by the Commission of an annual report to the European Parliament and the Council (Article 5(2));
- Establishment and maintenance of a Community and Member States' registry (Article 6(1));
- Preparation and submission of a report determining the assigned amounts to the UNFCCC secretariat by 31 December 2006 (Article 7(1)).

Since the EC law infringement procedure may be too lengthy, alternative remedies can be found in EC secondary legislation to provide a valid and quick response to Member States' failure to comply with the Kyoto Protocol obligations. In this respect, according to the EU legislation on monitoring, reporting and verification of GHG emissions, the European Commission has the power to assess the progress of the Community and the Member States in fulfilling the obligations under the UNFCCC and the Kyoto Protocol (Article 5(1)). The compliance instrument created under Article 7(2) of Decision 280/2004/EC requires the Member States to withdraw from their registry, each year of the Kyoto Protocol's first commitment period, assigned amount units, removal units, emission reduction units and certified emission reductions with a view to completing the review of their national inventories under the Kyoto Protocol, including the resolution of any questions of implementation.

6.10 Conclusions

The international climate regime is founded on obligations which are different for Annex I and non-Annex I parties and on the establishment of an advanced non-

compliance regime. This book discusses the three main sets of obligations created by the Kyoto Protocol for Annex I parties, namely:

- Monitoring, reporting and verification obligations under Articles 5(1)(2) and 7(1)(4) of the Kyoto Protocol (MRV obligations);
- Eligibility requirements as defined under Articles 6, 12 and 17 of the Kyoto Protocol and the Marrakech Accords (Eligibility requirements);
- Quantified Emission Limitation and Reduction Commitments (QELRCs) under Article 3(1) of the Kyoto Protocol (Limitation and Reduction commitments).

The enforcement branch of the Compliance Committee is responsible for determining the consequences of the non-compliance by Annex I parties with these obligations.

The EU has adopted several direct and indirect secondary provisions aimed at the fulfilment by the Community and the Member States of the obligations created by the Kyoto Protocol. Specific legislation has been adopted regarding compliance with the MRV obligations and the eligibility requirements, among others, Council Decision 280/2004/EC concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol, and Commission Regulation 994/2008 for a standardised and secured system of registries. As regards the limitation and reduction commitments, apart from Council Decision 2002/358/EC setting the individual obligations for the EC and the Member States, the EU has adopted different pieces of legislation aimed directly and indirectly at the reduction of greenhouse gas emissions in the EU within and outside the framework of the European Climate Change Programme (ECCP).

The European Community and the EU15 have decided to jointly fulfil the GHG emission limitation and reduction commitments as provided for in Article 4 of the Kyoto Protocol. Consequently, they have agreed to be held individually and jointly responsible in the event of non-compliance with the joint commitment. In respect of the monitoring, reporting and verification obligations and the eligibility requirements, the Kyoto Protocol does not provide a clear legal basis to justify a joint commitment and it is therefore reasonable to assume that the Community and the EU25 are individually responsible for compliance with these obligations. Malta and Cyprus are considered as non-Annex I parties until the end of the first commitment period and have no obligation to comply with the monitoring, reporting and verification obligations and eligibility requirements. However, as specified above, they are required to contribute to the fulfilment of those obligations by the European Community.

Both international and Community law are clear on the fact that the distribution of responsibility between the Community and the Member States in the event of a failure to comply with the obligations of the Kyoto Protocol is a matter that falls under Community law. In international law, the Compliance Committee is responsible for addressing cases of non-compliance and for determining the proper consequences for the Community and the Member States. The distribution of responsibility between the Community and the Member States is dependent on the

Table 6.8 EC's and Member States' responsibility under international and European law for the failure to comply with the limitation and reduction commitments under the Kyoto Protocol

State responsibility	Joint GHG reduction commitment (8%) achieved	Joint GHG reduction commitment (8%) not achieved
International law	No responsibility	EC and EU15 (only those in non-compliance)
European law	EU15 (only those in non-compliance)	EU27

general principles of the EC Treaty and the jurisprudence of the European Court of Justice.

All the Member States are responsible for the Community's compliance with the obligations arising from an international treaty to which it is party, irrespective of the date of accession to the EU. Council Decision 2002/358/EC is addressed to the EU15 and, on the basis of the *acquis communautaire*, applies without any limitation to the new Member States. The same applies to the EC legislation adopted in compliance with the Kyoto Protocol obligations. The binding effect of the obligations of an international treaty on the Member States is confirmed by the EC Treaty (Article 300(7)) and the jurisprudence of the ECJ. Furthermore, Article 6 of the Act of Accession obliged the new Member States to accede to the agreements or conventions by which the EC and the existing Member States are bound and to implement such treaties in accordance with the details and obligations negotiated by the EC and its existing Member States.

In respect of the limitation and reduction commitments, the responsibility for achieving those commitments lies, on the one hand, with the European Community as Annex I party to the Kyoto Protocol and, on the other, with the EU15. Any change in the composition of the EC is a matter of Community law and does not affect the participation and the commitments of the Community and the Member States under the Kyoto Protocol. The Community together with the EU15 remain directly responsible for the achievement of the 8% reduction commitment by 2008–2012. In this regard, one could argue that the degree of the responsibility of the EU15 and EU12 is not the same and justify this argument on the basis of Council Decision 2002/358/EC. The EU15 are listed in Annex II and included in the EU BSA, while the EU12 are bound by the reference to Article 10 TEC (principle of loyal cooperation) as recalled in several parts of Decision 2002/358/EC.

However, under international law, the achievement of the joint reduction commitment by the EC and the EU15 automatically excludes the Member States' individual responsibility regarding their limitation and reduction commitments in the EU BSA. Under EC law, the EU15 are responsible should they fail to comply with their individual limitation and reduction commitments.

Table 6.8 provides an overview of the EC's and Member States' responsibility under international and European law for the failure to comply with the limitation and reduction commitments under the Kyoto Protocol. In the event that the 8% GHG reduction commitment of the EC is met, there is no state responsibility under

international law but there may be a responsibility for some Member States under Community law if their individual reduction commitments as inscribed in the EU BSA are not achieved. If the 8% GHG reduction commitment of the EC is not met, the EC and the EU15 not in compliance with their individual QELRCs are held responsible under the Kyoto Protocol, as are all the EU27 under Community law.

As to the monitoring, reporting and verification obligations and the eligibility requirements, the issue of responsibility for the failure by the EC to comply with those obligations seems somewhat clearer. These obligations apply to Annex I parties as such and there is no specific reference to joint commitments in the text of the Kyoto Protocol in this respect. Therefore, the EC and the Member States included in the list of Annex I parties (EU25) are individually committed towards the Kyoto Protocol and, under international law, are held individually responsible for the failure to comply with those obligations. However, the fact that a Member State is in non-compliance with these obligations may have more serious consequences for the eligibility of the EC to participate in the flexible mechanisms. This is due to the fact that the collection and submission by the EC of the GHG inventory and the national registry is 'jointly ensured' by the Member States and the Community, based on the information provided by the Member States. Therefore, any imperfections and failure by the Member States in this respect could give rise to a situation where the EC is in non-compliance with the eligibility requirements. The failure by the Member States to comply with the EC legislation on the MRV obligations and the eligibility requirements is punished through the EC law infringement procedure. No difference between old and new Member States applies in this respect, since once the new Member States have joined the EU, they have the same duties and responsibilities as the old Member States in terms of compliance with EC law and international law.

The consequences under EC law of the Community's and Member States' failure to comply with the obligations of the Kyoto Protocol are incorporated in the Community enforcement system. In the event that the EC and the Member States are in non-compliance with the limitation and reduction commitments, EC secondary legislation will be breached (mainly Council Decision 2002/358/EC) and the same applies to the other obligations.

In the next chapter, the applicability and enforceability of Article 10 TEC in relation to the obligations created by the Kyoto Protocol for the EC and the Member States are studied.

Chapter 7
The EC Principle of Loyal Cooperation and the Obligations of the Kyoto Protocol

In this chapter, the obligations of the Community and the Member States under the international climate regime will be investigated exclusively in relation to primary Community law. In particular, Article 10 TEC and the principle of loyal cooperation will be considered in order to determine to what extent this general principle of EC law can be applied in relation to the compliance by the EC and the Member States with the obligations of the Kyoto Protocol. The term 'primary Community law' refers to the general principles of EC law in the founding Treaties as well as to the jurisprudence of the European Court of Justice which by applying these rules often fills the gaps in the Community law system. The Court's primary role in developing Community law is generally recognised, and it is basically through preliminary rulings under Article 234 TEC that the Court has developed its most famous principles (supremacy, direct effect, loyal cooperation, etc.).[1] As for Article 10 TEC, the applicability and enforceability of this fundamental principle is supported by the jurisprudence of the ECJ.

In this chapter, Article 10 TEC and the related jurisprudence of the ECJ are considered from the perspective of European climate policy and of the obligations of the EC and the Member States under the Kyoto Protocol. In this respect, the main question to be considered is whether or not the Member States can be held liable under Community law for the breach of the principle of loyal cooperation in relation to the failure by the EC and the Member States to comply with the obligations of the Kyoto Protocol. One of the main challenges of this task is related to the general character of Article 10 TEC and the relatively scarce jurisprudence and literature on the applicability of the principle in question to the international obligations undertaken by the Community.

A few conclusions will be drawn on the possibility to apply Article 10 TEC in the event of non-compliance by the EC and the Member States with the three sets of obligations investigated in the previous chapter. We will find that the possibilities to invoke Article 10 TEC in order to ensure the correct enforcement of EC law in the field of climate change are quite limited. Article 10 TEC can be applied

[1] Craig and De Búrca (2007), pp. 460-462.

L. Massai, *The Kyoto Protocol in the EU*, DOI: 10.1007/978-90-6704-571-1_7,

by the Court only as *ultima ratio*, i.e., in cases where EC legislation is lacking or is not sufficient to address a specific matter.

After having clarified that environmental protection and the fight against climate change are to be classified among the European Community's main objectives and that the international climate regime is the main tool at the global level to combat climate change, the binding effect of the obligations established by the Kyoto Protocol for the EC and the Member States are addressed, together with the obligation of cooperation between the Community and the Member States.

To this aim, this chapter is divided in three main parts. At first, the scope of application of the principle of loyal cooperation is addressed, namely identifying when and in which cases that principle applies in EU law. Once the scope of application is clarified, this chapter deals with the meaning of that principle and its implications for the EU Member States. In this respect, the major case law of the Courts (EU and national) and comparative law reflections on the subject are considered. Finally, both case law and comparative law considerations are used to ascertain certain duties for the Member States to respect and not to jeopardise the international obligations of the European Community under the Kyoto Protocol.

7.1 The Legal Value of General Principles in Community Law

The EC legal system is based on the founding Treaty and its amendments, as well as on the legislation adopted by the European institutions and on the jurisprudence of the European Court of Justice. The role and the binding force of the general principles of EC law may be subject to different interpretations. According to Tridimas, the most important principles are those that play a primary role in the constitutional system of the Community and that refer to the relationship between the Member States and the Community institutions.[2] These principles are listed in Part One of the EC Treaty, and their primary position indicates their level of importance in the Community legal system. Furthermore, the important role played by these principles is confirmed by the jurisprudence of the Court in several cases. This is the case with the first two principles to be mentioned, both not explicitly included in the EC Treaty: the principle of supremacy of Community law over national law and the principle of direct effect of EC legislation, which have been recognised in several cases by both the European Court of Justice and national courts.[3] The other key principles are: the principle of attribution of powers

[2] Tridimas (2000).

[3] On the relationship between EC law and national law, see, *inter alia*, case 44/79 *Hauer* v. *Land Rheinland-Pfalz* [1979] *ECR* 3727, para 14; case 26/62 *N.V. Algemene Transporten Expeditie Onderneming van Gend en Loos* v. *Nederlandse Administratie der Belastingen* [1963] *ECR* 1; case 6/64 *Flaminio Costa* v. *ENEL* [1964] *ECR* 585, p. 593; case 11/70 *Internationale Handelsgesellschaft mbH* v. *Einfuhr- und Vorratsstelle für Getreide und Futtermittel* [1970] *ECR*

and subsidiarity (Article 5 EC), the principle of loyal cooperation with the Community (Article 10 EC) and the principle of integration of environmental protection requirements into the Community policies and objectives (Article 6 EC). As to the supremacy of EU law over national law, this principle does not have a 'formal basis' in the EC Treaty and it is due to the jurisprudence of the Court that national courts are required to apply the EC provisions which have direct effect in their national legal system. However, the debate on the principle of supremacy of EC law is still ongoing and the acceptance of this general principle has been questioned by several national courts, which in some cases have made explicit that an ultimate constitutional review of legislative acts of the EU may be required.[4] In the late 60s the European Court of Justice provided its first judgment on this principle. In *Costa/ENEL*, the Court declared that the 'EEC Treaty has created its own legal system' and that 'Member States have limited their sovereign rights […] thus created a body of law which binds both their nationals and themselves'.[5]

In terms of sources of Community law, the principles play a key role insofar as some scholars define them as part of European constitutional law or primary law.[6] Independently of the definition which can be associated to these principles, the binding force of a provision or a general principle can be identified by the procedure required to modify them. Regarding the general principles of EC law which are explicitly enunciated in the EU Treaty such as the principle of loyal cooperation, Article 48 of the EU Treaty requires the Member States or the Commission to present a proposal to the Council 'for the amendment of the Treaties on which the Union is founded'. This proposal shall be ratified by all the Member States in order for it to enter into force. This procedure, requiring the unanimity of the Member States, is a clear sign of the relevant role that these principles play in the Community legal system.

Environmental protection principles were introduced in the EC Treaty in 1987 and have since been partly modified by the different amending treaties. These principles are[7]

- Principle of integration (Article 6 TEC);
- Objectives and purposes of environmental protection in the EU (Article 174(1));
- Environmental principles indicated in Article 174(2);
- Conditions which the Community shall take into account in the definition of environmental policy (Article 174(3)).

(Footnote 3 continued)
1125; case 106/77 *Amministrazione delle Finanze dello Stato* v. *Simmenthal SpA* [1978] *ECR* 629; case C-213/89 *R. Secretary of State for Transport, ex parte Factortame Ltd. and Others* [1990] *ECR* I-2433.

[4] Craig and De Búrca (2007), pp. 344–346.

[5] Case 6/64 *Flaminio Costa* v. *ENEL* [1964] *ECR* 585.

[6] See, for instance, Lenaerts and Van Nuffel (1999) or von Bogdandy (2006).

[7] Epiney (2006), p. 19.

Many scholars have investigated whether and to what extent environmental principles give rise to binding consequences. Nearly all authors as well as the ECJ admit that environmental principles are, to a certain extent, legally binding. More unclear is the discussion of the consequences deriving from the non-compliance by the Member States with those principles. However, since this debate is not of great relevance to the arguments in this book, the focus will be only on the principle of loyal cooperation in the EC legal system in order to establish whether it can be invoked in the event of non-compliance by the EC and the Member States with the obligations under the Kyoto Protocol.

7.2 The Principle of Loyal Cooperation

One of the most important legal principles in international law, enshrined in Article 26 of the Vienna Convention of the Law of Treaties, and recognised by the international community is that of *pacta sunt servanda*: 'every treaty in force is binding upon the parties to it and must be performed by them in good faith'.[8] In international law, the parties to a multilateral treaty are required to act and cooperate in order to achieve the objectives and goals by which they have agreed to be bound. In international law, the principle of good faith in the fulfilment of the obligations arising from an international treaty is based on the assumption that the general consent of the sovereign states which are party to a treaty is needed to ensure that international rules function properly. Furthermore, the Declaration on Principles of International Law Concerning Friendly Relations and Cooperation among States in Accordance with the Charter of the United Nations clearly confirms that 'every State has the duty to fulfil in good faith its obligations under the generally recognized principles and rules of international law'.[9]

The system of attribution of powers created by the EC Treaty based on the differentiation between exclusive and shared competences between the Community and the Member States may give rise to a certain degree of uncertainty as to the extent to which the different actors shall take action. To regulate this relationship, the EC Treaty has introduced the principle of loyalty enshrined in Article 10 TEC (ex Article 5 EEC Treaty) which obliges the Member States to 'ensure the fulfilment of EC Treaty obligations'.[10] Article 10 TEC reads as follows:

> Member States shall take all appropriate measures, whether general or particular, to ensure fulfilment of the obligations arising out of this Treaty or resulting from action taken by the institutions of the Community. They shall facilitate the achievement of the Community's

[8] The Vienna Convention on the Law of Treaties, 23 May 1969, entered into force on 27 January 1980, Trb. 1975 No. 51.

[9] General Assembly, Resolution 2625, 24 October 1970.

[10] In this dissertation, this principle is referred to as the principle of loyalty, cooperation and loyal cooperation. On this matter see Temple Lang (1997).

tasks. They shall abstain from any measure which could jeopardise the attainment of the objectives of this Treaty.

Before assessing in detail the legal aspects related to the interpretation and application of Article 10 TEC, it is important to recognise that the literature concerning this principle of EC law is still quite limited. Two scholars have mainly contributed to the legal discussion on the interpretation and legal consequences for the Member States of the application of the principle of loyalty: John Temple Lang and Marc Blanquet.[11] As a result, most of the considerations and reflections in this chapter are inspired by the work of these two scholars.

First of all, it is important to stress that Article 10 TEC contains a general principle of EC law, which is very often recalled by the ECJ and whose application has an important consequence for the interpretation of the legal force of EC legislation. Article 10 TEC includes a series of obligations for the Member States to cooperate and refers to either positive or negative actions taken by them.

Article 10 is divided into three parts: two general obligations and one general prohibition for the Member States. The linkage between these general duties and other provisions and objectives in the Treaty is highly relevant insofar as the principle of loyalty can be effectively applied to enforce Community law. The relevance of Article 10 TEC is confirmed by the European Court of Justice in several judgments, for instance, in *Centre Leclerc* where the Advocate General stated that 'Article 5 (now Article 10) does more than merely set out a programme which is relevant solely in the determination of the objectives of other provisions of the Treaty'.[12]

The first general obligation in Article 10 TEC requires the Member States to act within the framework of Community law in compliance and conformity with Community legislation as well as with the international treaties concluded by the Community. Therefore, Article 10, first sentence, refers to one of the foundations of the Community legal system: the Members States shall act in conformity with the obligations deriving from the existence of the EC legal order and in particular 'arising out of this Treaty or resulting from action taken by the institutions of the Community'.

The second general obligation introduced by Article 10 TEC requires the Member States to 'facilitate the achievement of the Community's tasks'. In the context of this Article, the term 'facilitate' can be considered as an obligation for the Member States to provide assistance to each other and to the Community in the achievement of the Community's tasks.

Particular relevance is assumed by the final sentence of Article 10 TEC, i.e., the introduction of a general duty for the Member States to 'abstain from any measure which could jeopardise the attainment of the objectives of this Treaty'. The legal

[11] Temple Lang (1986 and 2001) and Blanquet (1994).

[12] Case 231/83 *Centre Leclerc* v. *Au Blé Vert* [1985] *ECR* 1; see also joined cases 6 and 11/69 *Commission* v. *France* [1969] *ECR* 523, para 16, and case 240/86 *Commission* v. *Greece* [1988] *ECR* 1835, p. 1849.

boundaries and the consequences for the Member States resulting from this broad prohibition included in the principle of loyal cooperation is open to different interpretations. An extensive assessment of the ECJ's jurisprudence in this respect will help to draw conclusions as to the extent to which this general prohibition can be applied to the EC's and the Member States' non-compliance with the Kyoto Protocol obligations and what consequences would follow.

Thus, the first issue that needs to be addressed concerns the nature of the obligation in Article 10 TEC.

The first reference to the principle introduced by Article 10 TEC appeared in an official EC document, namely the Notice on cooperation between national courts and the Commission in the state aid field[13] aimed at providing guidance regarding cooperation between national courts and the European Commission in the field of state aid. This Notice is not a binding document and interferes neither with the interpretation of Community law by the European Court of Justice and the Court of First Instance, nor with the operation of the national courts. It explains how the Commission intends to assist national courts in this matter, aiming at closer cooperation in the application of Articles 87 and 88 (ex Articles 92 and 93) as far as individual cases are concerned. The Notice makes clear that 'Article 5 (now Article 10) of the EC Treaty establishes the principle of loyal and constant cooperation between the Community institutions and the Member States with a view to attaining the objectives of the Treaty'.[14] Furthermore, Member States and the Community institutions shall ensure mutual assistance in the achievement of the Community's objectives, and cooperation between the European Commission and the judicial authorities of the Member States shall also be ensured.

The principle of loyal cooperation enshrined in Article 10 TEC has never been modified by the amending treaties adopted in the European Union. The same text is repeated in Article 192 of the Treaty establishing the European Atomic Energy Community (Euratom),[15] and very similar wording was used in Article 86(1) and (2) of the Treaty establishing the European Coal and Steel Community.[16]

The relevance of the principle of cooperation was confirmed by the amendments to the EC Treaty proposed by the Draft Treaty Establishing a Constitution

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[13] Notice on cooperation between national courts and the Commission in the State aid field, *OJ* C 312, Brussels, 23 November 1995, p. 8.

[14] Notice on cooperation between national courts and the Commission in the State aid field, para 24.

[15] 'Member States shall take all appropriate measures, whether general or particular, to ensure fulfilment of the obligations arising out of this Treaty or resulting from action taken by the institutions of the Community. They shall facilitate the achievement of the Community's tasks. They shall abstain from any measure which could jeopardise the attainment of the objectives of this Treaty'.

[16] Article 86: 'The member States bind themselves to take all general and specific measures which will assure the execution of their obligations under the decisions and recommendations of the institutions of the Community, and facilitate the accomplishment of the Community's purposes. The member States bind themselves to refrain from any measures which are incompatible with the existence of the common market referred to in Articles 1 and 4'.

for Europe (2003).[17] Although in the end the Draft Constitution project was dropped by the Member States and the Community institutions, at least in the form of the said Draft Treaty, the fact that in the proposed reform of the founding treaties of the Community Article 10 would have been replaced and extended shows that the Community and the Member States attribute to this principle a significant role to be played within the Community law system. The Draft Treaty included a new Article 5 on the relations between the Union and the Member States, which, in paragraph 1, recalled the principle of respect of national identities of the Member States and, in paragraph 2, formulated the principle of loyal cooperation.

> Following the principle of loyal cooperation, the Union and the Member States shall, in full mutual respect, assist each other in carrying out tasks which flow from the Constitution. The Member States shall facilitate the achievement of the Union's tasks and refrain from any measure which could jeopardise the attainment of the objectives set out in the Constitution (Article 5(2) Draft Treaty).

With the Draft Treaty, the principle of loyal cooperation was for the first time explicitly mentioned in the first part of the Treaty. Furthermore, Article 10 of the Draft Constitution included, in paragraph 1, the primacy of Community law over the law of the Member States and, in paragraph 2, required the Member States to take all appropriate measures to ensure the achievement of the obligations resulting from Community law.

The Treaty on the Functioning of the European Union mirrors the Draft Treaty and includes the principle of loyal cooperation in Article 4(3) in Title I on common provisions:

> Pursuant to the principle of sincere cooperation, the Union and the Member States shall, in full mutual respect, assist each other in carrying out tasks which flow from the Treaties.
>
> The Member States shall take any appropriate measure, general or particular, to ensure fulfilment of the obligations arising out of the Treaties or resulting from the acts of the institutions of the Union.
>
> The Member States shall facilitate the achievement of the Union's tasks and refrain from any measure which could jeopardise the attainment of the Union's objectives.

7.3 The *Lex Specialis* Dichotomy

In respect of the general principle of EC law introduced by Article 10 TEC, on the basis of which Member States shall cooperate with each other and with the Community, the ECJ referred a few times to the residual character of this principle. In joined cases C-78/90 and C-83/90, the Court confirmed that 'the wording of Articles 5 and 6 of the Treaty is so general that there can be no question of

[17] Draft Treaty establishing a Constitution for Europe, 18 July 2003, in *OJ* C 169/1. The Draft Constitution has not entered into force because it has not been ratified by all the Member States.

applying them independently when the situation concerned is governed by a specific provision of the Treaty'.[18,19] In this judgment, the Court recognised the general character of ex Articles 5 and 6 and clarified the supremacy of any specific provision in the Treaty in respect of the principle of loyal cooperation.

Can the same conclusion be drawn in respect of the existence of EC legislation covering a certain area of Community policy? In other words, can Article 10 EC be applied to settle a case in an area where the EC has adopted specific legislation? It seems reasonable to affirm that the existence of specific EC legislation regulating a certain matter automatically excludes the applicability of the general principle of loyalty. In other words, the failure by the Member States to comply with EC legislation or legislation indirectly derived from it justifies potential legal action against the Member States before the Court and automatically excludes the necessity and utility of using a principle of a more general character in the same proceeding. A *lex specialis* automatically takes precedence over a *lex generalis*, according to the principle of *lex specialis derogat legi generali*. This was confirmed by Advocate General Mischo in case C-86/99, stating that 'before considering the lex generalis it must be examined whether the lex specialis may apply'.[20] The same view is shared by Temple Lang, who refers to the application of Article 10 'only in the absence of a *lex specialis*'.[21]

The absence or incompleteness of EC legislation are a prerequisite for the application of Article 10 TEC. The adoption of specific EC legislation in a certain field is sufficient to ensure the correct enforcement of EC law through the infringement procedure in the event that Member States do not comply with secondary legislation. Thus, the breach by the Member States of the obligations arising from EC legislation (directive, decision or regulation) already in itself prevents recourse to Article 10 TEC aimed at ensuring the enforcement of EC law. Article 10 TEC can be invoked only in cases where secondary EC legislation is lacking or is not sufficient to cover a specific issue. When a directive, decision or regulation establishes specific rules for the Member States in response to an obligation created by an international treaty, the failure by the Member States to meet those requirements implies the non-compliance with the international

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[18] 'Member States shall, in close cooperation with the institutions of the Community, coordinate their respective economic policies to the extent necessary to attain the objectives of this Treaty. The institutions of the Community shall take care not to prejudice the internal and external financial stability of the Member States' (Article 6 Treaty establishing the European Economic Community, Rome 1957).

[19] Joined cases C-78/90, C-79/90, C-80/90, C-81/90, C-82/90 and C-83/90, judgment of the Court of 11 March 1992, *Compagnie Commerciale de l'Ouest and others* v. *Receveur Principal des Douanes de La Pallice Port.* References for a preliminary ruling: Cour d'appel de Poitiers—France [1992] *ECR* I-1847, para 19.

[20] Opinion of Advocate General Mischo delivered on 11 January 2001 in case C-86/99 *Freemans plc* v. *Commissioners of Customs & Excise* [2001] *ECR* I-4167, para 32. See also the opinion of Advocate General Mischo delivered on 20 September 2001 in case C-65/00 *Commission of the European Communities* v. *Italian Republic* [2002] *ECR* I-1795, para 21.

[21] Temple Lang (2001), p. 91.

obligations as well as with Community law. In principle, in areas where EC legislation has been adopted, there is no room for applying the principle of loyalty as a tool to ensure the compliance by the Member States with international obligations covered by EC law.

The *lex specialis* test is therefore the first test which should be applied to the different sets of obligations established by the Kyoto Protocol in order to identify the correct scope of application of the principle of loyal cooperation in this area.

However, a few exceptions to this rule can be found in the jurisprudence of the EU Courts. There are precedents where the EU Courts applied the principle of loyal cooperation even in areas where specific EC legislation exists. In some cases the EU judges have applied this principle in order to reinforce the applicability and enforceability of general principles of EU law, while in others the application of the principle of loyal cooperation was needed in order to foster the achievement of the Community's obligations under an international treaty. A few examples of these exceptions are provided below.

In the *Moormann* case the Court has applied the principle of loyal cooperation in relation with the principle of the direct effect of EC directives by stating that on the basis of the 'obligation of cooperation laid down in Article 5 (now Article 10) the Member State to which a directive is addressed cannot evade the obligations imposed by the directive in question'.[22] The Court stressed the following: 'The right of an individual Community citizen to rely on an unconditional and sufficiently precise provision of a directive against a Member State which has failed to implement it or has not correctly implemented it is based on the combined provisions of the third paragraph of Article 189 and Article 5 of the EEC Treaty'. In this case, the binding force of ex Article 5 was based on the combination with ex Article 189 TEC. Moreover, all important judgments concerning the direct effect of EC law[23] take ex Article 5 EC Treaty as a legal basis for their reasoning. As to the binding effects of Community acts and their relation with Article 10 TEC, the judgment of the Court in case 141/78 made clear that on the basis of ex Article 5 even a Council resolution can be considered binding, provided that it is adopted in reference to a serious problem.[24] Furthermore, the effects of the application of Article 10 TEC could even go beyond the scope of application of other duties of the Member States under EC law, as stated by the Advocate General in case 231/83 who declared that the principle of cooperation 'may under certain circumstances transcend specific legally binding duties laid down elsewhere'.[25]

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[22] Case 190/87, judgment of the Court (Fifth Chamber) of 20 September 1988, *Oberkreisdirektor des Kreises, Borken and Vertreter des öffentlichen Interesses beim Oberverwaltungsgericht für das Land Nordrhein-Westfalen* v. *Handelsonderneming Moormann BV.* Reference for a preliminary ruling: Bundesverwaltungsgericht—Germany [1988] *ECR* 4689, paras 22 and 24.

[23] Namely the judgments of the Court in the cases *Ratti*, *Factortame*, *Francovich*, *Marleasing* and *Costanzo*.

[24] Case 141/78 *France* v. *UK* [1979] *ECR* 2923, p. 2942.

[25] See *supra* n. 12.

The principle of cooperation enshrined in Article 10 is based on the achievement of a result, namely the fulfilment of the obligations arising from the EC Treaty, but the Article is silent on the lawful means to pursue this goal. In this regard, the Court has contributed several times to clarifying the extent of the application of this principle. In case 192/84, the Court stated that ex Article 5 'places Member States under an obligation to facilitate the achievement of the tasks which the first indent of Article 155 (current Article 211) assigned to the Commission, namely to ensure that the provisions of the Treaty and the measures taken by the institutions pursuant thereto are applied'.[26] To this end, Member States 'are required to cooperate bona fide in any inquiry undertaken by the Commission under Article 169 (current Article 226), and to supply the Commission with all the information requested to that end'.[27] In this case, the Court observed that the Member State could have prevented the misunderstandings encountered in the pre-litigation phase by providing the Commission with the relevant information. By failing to do so it was in breach of the loyalty principle and therefore not in compliance with EC law. The same reasoning was behind the decision of the Court in case C-375/92, in which Spain did not reply to the requests of the Commission to communicate the text of the specific national regulation.[28] The non-compliance of Spain with the Commission's requests 'has made the achievement of its task under the Treaty more difficult, and it therefore breaches the obligation of cooperation laid down by Article 5 of the Treaty'.[29] The conclusions of the Court in case 192/84 and case 375/92 were also recalled in case 478/01 where the Court declared the Grand Duchy of Luxembourg 'is in breach of the duty to cooperate in good faith imposed by Article 10 TEC, inasmuch as it has failed to provide the information requested'.[30] Referring to its case law, the Court confirmed that 'Article 10 EC makes it clear that the Member States are required to cooperate in good faith with the enquiries of the Commission pursuant to Article 226 TEC, and to provide the Commission with all the information requested for that purpose'.[31] It is important to emphasise that in all these cases, the breach of Article 10 TEC is related to the failure by the Member States to provide the Commission with the required information.[32] This is the key

[26] Judgment of the Court of 11 December 1985 in case 192/84 *Commission of the European Communities* v. *Hellenic Republic* [1985] *ECR* 3967, para 19.

[27] Ibid.

[28] Judgment of the Court of 22 March 1994 in case C-375/92 *Commission of the European Communities* v. *Kingdom of Spain* [1994] *ECR* I-923, para 25.

[29] Ibid.

[30] Judgment of the Court of 6 March 2003 in case C-478/01 *Commission of the European Communities* v. *Grand Duchy of Luxembourg* [2003] *ECR* I-2351, paras 22 and 24.

[31] Ibid.

[32] Along the same line, see also the judgment of the Court of 19 February 1991 in case C-374/89 *Commission of the European Communities* v. *Kingdom of Belgium* [1991] *ECR* I-367, paras 12–17.

element which induced the Court to declare that the Member States infringed EC law as they had failed to comply with the principle of loyal cooperation. The Commission's request for information can be either a mere request for information necessary to complete the pre-litigation procedure or a more formal request to cooperate in good faith with the enquiries of the Commission pursuant to Article 226 EC.[33]

Finally, the importance of Article 10 TEC has been recalled by the Court in reference to the possibility to introduce a general penalty for infringement of EC law in cases where this measure is not specifically provided by EC law. In case C-186/98, the Court said that 'where a Community regulation does not specifically provide any penalty for an infringement or refers for that purpose to national laws, regulations and administrative provisions, [ex] Article 5 of the EC Treaty requires the Member States to take all measures necessary to guarantee the application and effectiveness of Community law'.[34] In his opinion in this case, Advocate General Jacobs recognised that, on the basis of the obligation arising from Article 10 TEC, 'which, as mentioned in case C-68/88, requires the Member States to take all measures necessary to guarantee the application and effectiveness of Community law […] Member States are not merely empowered to impose criminal sanctions but are obliged to take all effective measures, which may include criminal sanctions'.[35] More specifically, in case C-186/98, the Court affirmed that 'Article 5 of the Treaty requires the Member States to take all effective measures to penalise conduct harmful to the financial interests of the Community' and added that those measures 'may include criminal penalties even where the Community legislation only provides for civil ones'.[36]

Thus, in order to ascertain the scope of application of the principle of loyal cooperation in relation with the obligations of the Community and the Member States under the Kyoto Protocol the *lex specialis* test should be accompanied by the considerations about potential exceptions mentioned above.

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[33] See also the judgment of the Court of 13 July 2004 in case C-82/03 *Commission of the European Communities* v. *Italian Republic* [2004] *ECR* I-6635, and the judgment of the Court of 26 April 2005 in case C-494/01 *Commission of the European Communities* v. *Ireland* [2005] *ECR* I-3331, paras 195–200.

[34] Judgment of the Court of 8 July 1999, criminal proceedings against Maria Amélia Nunes and Evangelica de Matos. Reference for a preliminary ruling: *Tribunal de Círculo do Porto—Portugal*, case C-186/98 [1999] *ECR* I-4883. On the same matter, see also the judgment of the Court of 21 September 1989 in case 68/88 *Commission of the European Communities* v. *Hellenic Republic* [1989] *ECR* 5965, para 23.

[35] Opinion of Advocate General Jacobs delivered on 20 May 1999 (1) in case C-186/98 *Ministério Público* v. *Maria Amélia Nunes and Evangelina de Matos* [1999] *ECR* I-4883, paras 7–8.

[36] See *supra* n. 34.

7.4 The Application of the Principle of Loyalty to the Kyoto Protocol Obligations

At this point, before addressing the details of the applicability of Article 10 TEC *vis-à-vis* the Kyoto Protocol obligations, a few words need to be said about: (1) the duty of cooperation and its applicability in mixed agreements in general and (2) the relation between climate change and the Community objectives.

7.4.1 The Duty of Cooperation and Mixed Agreements

Mixed agreements are often 'legally complex and politically controversial'[37] as well as likely to raise many questions for the EC and the Member States, especially about competence, democracy, internal and external responsibility, and compliance.[38] In the case of the international climate regime, the said complexity of mixed agreements is rendered even more complicated by the fact that the Community and the EU15 have agreed to be jointly bound by part of the obligations of the Kyoto Protocol.

In accordance with Article 10 TEC, the Member States shall adopt appropriate measures and facilitate the achievement of the Community's tasks. In respect of an international agreement, the Community and the Member States are bound by this principle, as confirmed by the jurisprudence of the ECJ, and shall cooperate with each other; more precisely, they shall coordinate their activities and positions in the context of an international treaty.

In a number of cases, the Court, referring to its prior case law on the duty of cooperation of the Member States with the Community in the field of mixed agreements, clarified that 'the obligation to cooperate flows from the requirement of unity in the international representation of the Community'.[39] Opinion 1/94 on the participation of the Community and the Member States in the Agreement on Technical Barriers to Trade annexed to the Agreement establishing the World Trade Organisation (WTO) can be used as a useful reference since the Court declared that close cooperation needs to be ensured by the Community and the Member States in the processes of negotiation, conclusion and fulfilment of any commitments within the WTO. This was recalled by the Court in opinion 2/91 (ILO), stating, on the basis of points 34–36 of ruling 1/78,[40] that in case of

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[37] Craig and De Búrca (2003), p. 131.

[38] See Article 300 TEC, and Neuwahl (1991).

[39] Opinion of the Court of 15 November 1994, Competence of the Community to conclude international agreements concerning services and the protection of intellectual property—Article 228(6) of the EC Treaty, opinion 1/94 *WTO* [1994] *ECR* I-5267, para 108, and opinion 1/78 (*Rubber Agreement*) [1978] *ECR* 2151, paras 34–36.

[40] [1978] *ECR* 2151.

agreements where the Community and the Member States have shared competence, 'it is important to ensure that there is a close association between the institutions of the Community and the Member States both in the process of negotiation and conclusion and in the fulfilment of the obligations entered into. This duty of cooperation, to which attention was drawn in the context of the EAEC Treaty, must also apply in the context of the EEC Treaty since it results from the requirement of unity in the international representation of the Community'.[41] In case C-25/94, the Court reiterated the duty to ensure unity in the Community position in international negotiations, as well as the close cooperation between the Member States and the Community in the negotiation, conclusion and fulfilment of an international agreement, provided that its subject falls within a shared competence. Furthermore, in this case, the Court recognised the obligation of cooperation and 'the requirement of unity in the international representation of the Community'.[42]

As regards the same issue, the EC Treaty can play a role in understanding more deeply the role of the Member States in respect of a commitment of the EC within the framework of a mixed agreement. Article 300(7) TEC states that 'agreements concluded under the conditions set out in this Article (300) shall be binding on the institutions of the Community and on Member States'. In addition, Article 10 TEC, at an even more general level, requires Member States to assist the EC in the implementation of the obligations arising from the EC Treaty but also from 'action taken by the institutions', for instance, the conclusion of an international treaty. Furthermore, Article 175(4) confirms that 'without prejudice to certain measures of a Community nature, the Member States shall finance and implement the environment policy'. National authorities are therefore obliged to implement and apply EC Treaty rules and secondary regulation even if these are contrary to the existing national legal order or otherwise.[43]

7.4.2 Climate Change and Community Objectives

The scope of application of Article 10 TEC is in principle very wide since it constitutes a general principle of Community law which potentially covers all Community objectives, policies and activities. As highlighted by Temple Lang, the duty of cooperation arising from Article 10 TEC involves the achievement of the Community's objectives if these are 'legal, found in or derived from the Treaties, or policy objectives adopted by the Community institutions'.[44] The following

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[41] Opinion of the Court of 19 March 1993 delivered pursuant to the second subparagraph of Article 228(1) of the EEC Treaty, Convention No 170 of the International Labour Organisation concerning safety in the use of chemicals at work, opinion 2/91 [1993] *ECR* I-01061, para 36.

[42] Judgment of the Court of 19 March 1996 in case C-25/94 *Commission of the European Communities* v. *Council of the European Union* [1996] *ECR* I-1469.

[43] Kiss (1996), p. 49.

[44] Temple Lang (1990), p. 657.

clarifies that the fight against global warming is a Community objective derived from the Treaties or from the actions of the Community.

There is no doubt that environmental protection is among the main objectives of the European Community. It is derived from the EC Treaty and the activities of the Community institutions, as well as from various judgments of the Court. The EC Treaty has been amended several times, and in many cases these changes have contributed to the enhancement of environmental protection within the Community legal system. Article 2 TEC states as Community tasks, to be achieved through the establishment of a common market and an economic and monetary union: 'a harmonious, balanced and sustainable development of economic activities' and 'a high level of protection and improvement of the quality of the environment'.[45] Moreover, Article 2 TEC refers to the Community's common policies and activities included in Articles 3 and 4 TEC. Article 3 states as a Community activity a policy in the sphere of environmental protection.

The protection of the environment is one of the main objectives of the EC Treaty also according to the jurisprudence of the Court.[46] In case 71/76, the Court affirmed that the objectives of the Community 'may be attained by measures enacted by the Member States, which under Article 5 of the Treaty are bound to take all appropriate measure' unless a specific provision is adopted under Community law.[47] Specifically, on the subject of environmental protection, in case 32/79 the Court made clear that when there is scientific evidence that a measure is needed for the preservation of maritime biological resources, the Member States have a duty to adopt that measure on the premise of Article 10 TEC.[48] In addition to these judgments, it is important to remind that the precautionary principle is a basis of Community environmental policy (Article 174(2) TEC) which implies that action even in a situation of scientific uncertainty may be required. On the basis of these considerations, one might fairly assume that in general terms, provided that a Community objective is clear and the necessity to adopt a specific measure to protect the environment is recognised by either the scientific community or the policy-maker, the Member States are obliged to contribute to the achievement of

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[45] 'The Community shall have as its task, by establishing a common market and an economic and monetary union and by implementing common policies or activities referred to in Articles 3 and 4, to promote throughout the Community a harmonious, balanced and sustainable development of economic activities, a high level of employment and of social protection, equality between men and women, sustainable and non-inflationary growth, a high degree of competitiveness and convergence of economic performance, a high level of protection and improvement of the quality of the environment, the raising of the standard of living and quality of life, and economic and social cohesion and solidarity among Member States' (Article 2 EC Treaty).

[46] See the judgment of 7 February 1985 in case 240/83 *Procureur de la République* v. *ADBHU* [1985] *ECR* 531 and the judgment of 20 September 1988 in case 302/86 *Commission* v. *Denmark* [1988] *ECR* 4607.

[47] Case 71/76 *Thieffry* v. *Conseil de l'ordre des advocates à la cour de Paris* [1977] *ECR* 765, pp. 777–778, paras 15–18 and 22.

[48] Case 32/79 *Commission* v. *UK* [1980] *ECR* 2403, pp. 2437–2438 and 2460–2461.

that objective either by adopting specific measures or by avoiding any countermeasure or action. On a different subject, namely fisheries and bird conservation, the jurisprudence of the Court made clear that insofar as the conservation of fish stocks and migratory bird populations is a Community objective and there is scientific evidence that some measures are needed, Member States are required to adopt environmental protection and conservation measures accordingly.[49] Finally, in case C-176/03, the Court stated that 'it is common ground that protection of the environment constitutes one of the essential objectives of the Community'[50] and in case C-440/05 confirmed that environmental protection 'is one of the essential objectives of the Community'.[51]

By the late 90s, within the area of environmental protection, the fight against climate change assumed greater importance at the EU and global level so that it can now also be considered as a major objective of the Community. Climate change has become one of the key priorities in the Community's action in the field of environmental protection. There is no doubt that the international climate regime and the fight against climate change must be considered as a Community objective not only on account of Articles 2 and 3 TEC mentioned above. The Community and the Member States are strongly committed towards the international climate regime, are therefore subject to the provisions of the Kyoto Protocol at least until the end of the first commitment period (2012) and are moreover actively engaged in the negotiations on the post-2012 phase. In addition, EC legislation adopted in this field by the European Community is very advanced and completely harmonises this sector. For these reasons, it seems difficult to imagine the Member States acting unilaterally at the international level in the field of climate change. Similarly, if we consider the international negotiations on the post-2012 regime, the EC's position is defined and embedded in many different documents and official positions of the European institutions.[52] Furthermore, on several occasions, the European Community and the Member States confirmed the common and joint action in the field of climate change and the goal of reducing greenhouse gas emissions at the EU and international level. In the Energy Policy for Europe of 10 January 2007,[53] the European Commission set the reduction of greenhouse gas emissions at 20% by 2020 in order to ensure a limit to global warming of no more than 2° above pre-industrial temperatures. In 2007, together

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[49] Case C-165/91 *Van Munster* [1994] *ECR* I-4661, paras 32–33; case 71/76 *Thieffry* [1977] *ECR* 765, pp. 777–778.

[50] Judgment of the Court of 13 September 2005 in case C-176/03 *Commission* v. *Council* [2005] *ECR* I-7879, para 41.

[51] Judgment of the Court of 23 October 2007 in case C-440/05 *Commission of the European Communities* v. *Council of the European Union* [2007] *ECR* I-09097, para 60.

[52] EU Presidency Conclusions of 14 and 15 December 2006, welcoming the results of the Nairobi Climate Summit. At the Environment Council, there was unanimous support for long-term commitments regarding the reduction of greenhouse gas emissions (30% by 2020).

[53] Communication from the Commission to the European Council and the European Parliament: An Energy Policy for Europe, COM(2007)1, Brussels, 10 January 2007.

with the Energy Policy for Europe, the Commission released the Communication 'Limiting Global Climate Change to 2°C: The way ahead for 2020 and beyond', including a proposal for actions aimed at the limitation of global warming.[54] Furthermore, at the European Council of 8 and 9 March 2007, the EU heads of state and government agreed on an integrated climate and energy policy including specific and advanced targets in terms of reduction of greenhouse gas emissions, as well as on the promotion of renewable energy and energy efficiency. These targets are

- Reduction of greenhouse gas emissions by 30% by 2020 in respect of 1990 levels if other developed countries make the same commitment;
- Reduction of greenhouse gas emissions by 20% for the EU in respect of 1990 levels by 2020;
- Ensure a 20% share of renewable energy in the EU energy mix by 2020;
- Ensure a 10% share of biofuels in the EU fuel consumption of the transport sector by 2020;
- Reduction of EU energy consumption through improvements in energy efficiency by 20% by 2020.

The set of commitments and obligations adopted by the EC in respect of the post-2012 phase is independent of but related to the existing efforts of the international community to fight climate change. Bearing in mind the increasing importance of climate change issues at the global level and the strong commitment of the EU to solving this problem, as well as the prominent role of the protection of the environment within the Community, it could be fairly concluded that the objective of reducing greenhouse gas emissions by at least 20% by 2020 compared to 1990 levels, adopted by the Community and the Member States, is in line with the achievement of the Community's objectives.

Furthermore, the proposal made by a few Member States concerning the inclusion in the EU Reform Treaty (Treaty of Lisbon on the Functioning of the EU—TFEU) of a reference to the fight against climate change by amending Article 174(1) TEC on the goals of the European Community in the field of the protection of the environment[55] demonstrates the importance and relevance of this principle at the EU level. In the Treaty of Lisbon sustainable development is mentioned along with the objectives of the European Union (Article 2(3) TEU) after the incorporation of the objectives of the European Community. Furthermore, Article 2(5) TEU refers to the role of the EU in the world and to the 'sustainable development of the Earth' and sustainable development is contained in the title on General Provisions on the Union's External Action (Article 21(2)d and f TEU).

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[54] Communication of the European Commission: Limiting Global Climate Change to 2°C. The way ahead for 2020 and beyond, COM(2007)2, Brussels, 10 January 2007.

[55] According to the text of the EU Reform Treaty, in Article 174(1), the fourth indent shall be replaced by the following: '—promoting measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change'.

Thus, sustainable development is included in the list of objectives which guide the external action and the common foreign and security policy of the EU.

Furthermore, Title XX on Environment in the TFEU (Articles 191–193) mirrors the precedent versions of the EU Treaties with the only exception of a reference to climate change among the objectives of EU policy on environment (Article 191(1) TFEU).[56]

In line with these considerations, the main condition in Article 10(1) TEC is satisfied. Less simple is defining what actions can be considered 'appropriate', what is the meaning of the term 'facilitate' and what kind of measures could jeopardise the achievement of the Kyoto Protocol objectives by the European Community.

7.4.3 EC Legislation to Fulfil the Obligations of the Kyoto Protocol

The Community's achievement of the joint reduction commitment of the Kyoto Protocol is ensured by the adoption of specific EC legislation aimed at the reduction of greenhouse gas emissions and by the consequent distribution of the common burden among the Member States (EU15). In other words, the Member States are required to contribute in different ways to the Community's compliance with the Kyoto Protocol obligations. To this end, at the EU level, the principal obligations of the Member State are laid down in directives, decisions and regulations. If a Member State fails to comply with such specific EC legislation, it will be in breach of Community law. In these cases, Article 10 TEC does not apply since it only applies when there is no *lex specialis* regulating the same matter, or in other words, when there is a gap in the legislation which can be filled by the principle of loyal cooperation. Furthermore, Article 10 TEC should apply where it is clear what the duty under Article 10 is or ought to be. As recalled by the Court in case 229/83 on *book prices*, ex Article 5(2) cannot apply in cases where it is 'not specific enough to preclude' Member States from enacting legislation on a specific matter.[57] If there were a 'gap' in a state's obligations under the directive or decision, the duty to fill it would probably not be clear (because Member States have some discretion as to how to fulfil their obligations, if these are imprecise). Temple Lang confirmed this thesis by affirming that 'Article 10 has effects only in combination with some other rule or policy, but only when that other rule is not complete and sufficient in itself'.[58] Finally, Article 10 TEC only applies to the

[56] The intention to include in the text of the TFEU a reference to the fight against climate change has already been expressed by EU leaders on several occasions, for instance, by the Luxembourg Deputy Minister for Foreign Affairs Nicolas Schmit on 28 February 2007 and by the Dutch Foreign Minister Maxime Verhagen on 21 May 2007.

[57] Judgment of the Court of 10 January 1985 in case 229/83 *Leclerc* v. *Au Blé Vert* [1985] *ECR* 17.

[58] Temple Lang (2001), p. 91.

obligations of the EC and the Member States under the Kyoto Protocol insofar as EC legislation is not sufficient.

When considering the range of possibilities to apply Article 10 TEC as regards the obligations of the EC and the Member States under the international climate regime, reference should first be made to the differentiation of obligations created by the Kyoto Protocol. Chapter 6 of this book explained how these obligations differ in terms of consequences of non-compliance by Annex I parties. It also set out the different positions of the EU15 and EU27 in relation to the responsibility of the EC and the Member States for the failure to comply with the obligations of the Kyoto Protocol. In particular, to determine the sphere of application of Article 10 TEC in the context of this book, two issues need to be clarified: first, whether the Kyoto Protocol obligations are addressed equally to the EU27, EU25, EU15, EU12 and EU10; second, whether EC legislation covers all three sets of obligations of the Protocol in the same manner. Therefore, since the applicability of Article 10 TEC in the event of non-compliance by the Community and the Member States with the Kyoto Protocol obligations strongly depends on those two factors, it is fundamental to address the three sets of obligations separately.

As for the obligations established under the Kyoto Protocol, clear and direct legislation has been adopted by the EC with regard to the monitoring, reporting and verification obligations—Regulation 2216/2004/EC for a standardised and secured system of registries pursuant to Directive 2003/87/EC, Decision 280/2004/EC and Commission Regulation 916/2007/EC—as well as the eligibility requirements, among which Council Decision 2002/358/EC. In this area, the Court, in case C-61/07, under request of the European Commission (applicant), condemned the Grand Duchy of Luxembourg (defendant) for the failure to fulfil its obligations arising from Article 3(2) of Decision 280/2004/EC concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol.[59] In particular, the defendant had failed to communicate to the European Commission the report required under Article 3(2) containing 'information on national projections of greenhouse gas emissions and measures taken to limit and/or reduce such emissions'. The Court condemned the Member State for failure to comply with a Council Decision and had no reason to mention or refer to the principle of loyal cooperation enshrined in Article 10 TEC. It is clear that in this case EC secondary legislation and the enforcement procedure provided by the EC Treaty were sufficient to ensure the correct application of Community law and there was no reason to apply the general principles. Quite evidently, in this case, the applicability of Article 10 TEC was excluded by the existence of appropriate and specific EC legislation, i.e., *lex specialis*.

However, the principle of 'full and effective cooperation and coordination' between the Community and the Member States is explicitly recalled in Article 8 of Decision 280/2004/EC, creating an obligation for the Member States to submit

[59] Judgment of the Court (Fifth Chamber) of 18 July 2007 in case C-61/07 *Commission of the European Communities* v. *Grand Duchy of Luxembourg*, *OJ* C 95, 28 April 2007.

to the European Commission specific information on GHG emissions. The failure by the Member States to comply with EC legislation may determine the non-compliance by the European Community as Annex I party with the Kyoto Protocol's monitoring, reporting and verification obligations. In that case, the Member State together with the European Community will be held liable under the non-compliance procedure of the Protocol for non-compliance with the Kyoto Protocol obligations.

In the latter situation, although there is clear and specific legislation adopted by the European Community which has not been correctly observed by the Member States, there seems to be some space of manoeuvre for the application of Article 10 TEC. The duty of cooperation can be invoked by the European Commission in an infringement procedure as an argument to emphasise the alleged breach of Community law by the Member States. In the *Kupferberg* judgment, the Court recognised the obligation of the Community and the Member States 'to ensure compliance with the obligations arising from'[60] international agreements, which 'form integral part of the Community legal system'.[61] The failure by the Member States to comply with the principles of unity and cooperation in the situation described above would go against the core of the *Kupferberg* judgment. Furthermore, the Member States would be in non-compliance with Article 10(2) TEC and with the obligation to abstain from any action which could jeopardise the achievement of the Community's objectives. In this sense, Article 10 TEC would strengthen the obligations of the Member States to comply with EC law because of the international obligations of the European Community under the Kyoto Protocol. The reason would be that the non-compliance by the Member States with EC legislation on monitoring, reporting and verification of GHG emissions would also imply the non-compliance by the Member States with the Kyoto Protocol obligations, thus probably jeopardising the compliance by the EC with the same obligations under the Kyoto Protocol as well as the right of the Community and the Member States to participate in the flexible mechanisms. Therefore, in the event that the MRV obligations are violated by the Member States, Article 10 TEC could be applied because this would be not a matter of the uniform application of EU law but rather an added damage for the EU in terms of its compliance with international rules.

On this topic, it should be mentioned that even the argument used by some scholars[62] to oppose this thesis is questionable. That argument is that once there is a gap in EC legislation it should be filled by a further directive or decision and cannot be filled by Article 10 TEC, because neither of the two kinds of obligations to be imposed are sufficiently precise to be invoked during the said infringement proceeding. More precisely, Article 10 TEC would not create any implicit specific obligation for the Member States different from EC legislation. It would rather

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[60] Case 104/81 *Kupferberg* [1982] *ECR* 3641, para 11.

[61] Ibid., para 13.

[62] Electronic interview with John Temple Lang, 30 January 2008, on file with the author.

focus on the responsibility of the Member States regarding the achievement of the EC objectives related to the implementation of an international treaty.

In Chap. 6, we explained that as for the monitoring, reporting and verification obligations and the eligibility requirements, the EU27 are responsible for the failure by the Community to comply with those obligations. Consequently, no distinction has to be made between the EU15 and EU12 regarding the applicability of Article 10 TEC as indicated above. EC legislation adopted to comply with the MRV obligations and eligibility requirements of the Kyoto Protocol applies indistinctly to the EU27.

Different from the monitoring, reporting and verification obligations and the eligibility requirements is the case of the GHG emission reduction and limitation commitments. Regarding the latter, the applicability of Article TEC is all the more needed since the obligation to achieve a clear and precise outcome, namely the reduction of greenhouse gas emissions, is not literally translated into one specific Community act but is rather the subject of a set of EC and Member States' policies and measures. As highlighted in Chap. 6 there is EC law affecting the compliance of the EC with the Kyoto Protocol reduction and limitation commitments, directly or indirectly (e.g., Directive 2003/87/EC establishing an EU Emissions Trading System legislation aimed at enhancing energy efficiency and the share of renewable energy sources). To this extent, there is no need to rely on the principle of Community loyalty. Additionally, given the fact that the obligations of the Kyoto Protocol cover a wide range of sectors and source categories of greenhouse gas emissions as highlighted in Annex A to the Protocol (energy, industrial processes, solvent and other product use, agriculture and waste) there may be other areas of human induced activities where no EC legislation is directly adopted to fulfil the Protocol reduction and limitation commitments. This may be the case for instance of the protection and management of certain forestry activities (sinks) or urban planning or agricultural policy which are activities contributing to climate change indirectly. In these areas, the EU may be keen to prompt Member States to make efforts in view of reaching the Kyoto Protocol reduction and limitation commitments by applying the principle of loyal cooperation.

The most important field in which EU rules fail to provide clear guidance is the extent to which the flexible mechanisms can be used by the Member States in order to meet the Kyoto Protocol reduction and limitation commitments.[63] In this respect, for instance, there are no specific rules requiring the EU12 to give preference to the EU15 in the implementation of the flexible mechanisms, in particular international emissions trading. We will see below that this is one of the major area of application of Article 10 TEC in view of the compliance of the EC and the Member States with the Kyoto Protocol reduction and limitation commitments.

Concerning the GHG emission limitation and reduction commitments created by the Kyoto Protocol, it has already been stressed that both the EU15 and EU10

[63] See Chap. 4.

can be held responsible for the failure by the EC to achieve these objectives, though with a different degree of responsibility. In this respect, the EC adopted Council Decision 2002/358/EC through which the EC and the Member States ratified the Kyoto Protocol. This Decision also includes, in Annex II, the individual limitation and reduction commitments of the EU15. More importantly, Article 2 of Decision 2002/358/EC recalls the provisions of Article 10 EC, of which full regard shall be taken by the Community and the Member States in the joint fulfilment of the reduction commitments under Article 3(1) of the Kyoto Protocol. Furthermore, Article 2 clearly states that 'the European Community and its Member States shall take the necessary measures to comply with the emission levels set out in Annex II'. Council decisions appear sufficiently clear in requiring the Member States to comply with the limitation and reduction commitments and in emphasising the role of the principle of loyal cooperation enshrined in Article 10 TEC. The combination of a clear reference to the obligations of the Member States to comply with the limitation and reduction commitments and the mentioning of Article 10 TEC in Article 2 of Council Decision 2002/358/EC can be explained by the legislator's intention to give the limitation and reduction commitments of the EC and the Member States a high degree of importance. The reference to Article 10 TEC in Council Decision 2002/358/EC introduces an added value and strengthens the compliance obligations of the EU15 in respect of the greenhouse gas emission reduction and limitation commitments of the Kyoto Protocol. Article 10 TEC seems to be placed in Council Decision 2002/358/EC with the aim fill potential gaps in EC legislation, thus providing the EU an additional basis to require adequate efforts from the Member States in view of reaching the −8% GHG emission reduction obligation of the EC. The fact that Council Decision 2002/358/EC was adopted when the EU was still composed of fifteen Member States and consequently did not mention the new Member States does not seem sufficient to exclude the applicability of Article 10 TEC for the EU12 because of the *Acquis Communautaire* requirement.

When addressing Article 2 of Council Decision 2002/358/EC it is therefore relevant to determine the exact meaning of the term 'cooperation' and to what extent an action or inaction of the Member States could be considered a breach of the principle of loyal cooperation.

7.5 Article 10 TEC and the Duties of the Member States According to Case Law

As indicated above, the broadness of the principle of loyal cooperation and the uncertainty related to the consequences that may follow from its application require both a comprehensive analysis of the jurisprudence of the European Court of Justice and the Court of First Instance as well as reflections about comparative laws in the Member States regarding the application of this principle. This is needed in order to shed some light on the possibility for the Community and the

Member States to apply Article 10 TEC in the event of non-compliance with the international and Community obligations arising from the Kyoto Protocol.

The ECJ has referred to Article 10 TEC several times, and in consideration of the potential broadness of its application, the Court has also used it in cases where the gaps in the Community legal order needed to be filled. The Court has moreover handed down a large number of judgments without explicitly mentioning Article 10 TEC but indirectly referring to it. This is also one of the reasons why it is complicated to provide a clear assessment of the potential implications of the application of this principle in the Community legal order. In other words, it is thanks to the jurisprudence of the Court that the principle of loyal cooperation has maintained its original moral character, but, above all, that it has gained the legal dimension necessary to justify certain important decisions of the Court.[64]

As mentioned above and also pointed out by Temple Lang,[65] the Court has extrapolated from this general principle, a series of general duties for the Member States, of which the following assume a certain relevance in the context of this book:

- The duty to correctly implement EC law;
- The duty to assist and support Community action when required;
- The duty to refrain from any action which could interfere with the Community institutions and tasks.

Moreover, the jurisprudence of the Court has recognised a more general duty of cooperation, namely the duty of the Community institutions to cooperate with the Member States as well as the duty of the Member States to cooperate with each other.

The obligations of the Member States created under Article 10 TEC, i.e., the requirement to adopt all necessary legislative, administrative and judicial measures to enforce Community law[66] and to follow the judgments of the European Court of Justice,[67] are directly related to the general prohibition introduced by the second paragraph of Article 10 TEC. The Member States shall abstain from any action which could jeopardise the achievement of the objectives of the EC Treaty. More precisely, the Member States shall not take any measure which is contrary to Community law and to the judgments of the Court, but also to the general principles of Community law, such as, for instance, proportionality and legal certainty.[68]

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[64] Mortelmans (1998), p. 67.

[65] See Temple Lang (2001).

[66] Joined cases 205–215/82 *Deutsche Milchkontor GmbH* v. *Germany* [1983] *ECR* 2633 and case 54/81 *Firma Wilhelm Fromme* v. *Bundesanhalt fur landwirtschaftliche Marktordnung* [1982] *ECR* 1449.

[67] Joined cases 314–316/81 and 83/82 *Procureur de la Republique* v. *Waterkeyn* [1982] *ECR* 4337, para 14.

[68] Case 237/82 *Jongeneel Kaas* [1984] *ECR* 483, p. 520.

7.5.1 Article 10 TEC and External Competence

The issue of whether the EU and the Member States have shared or exclusive external competence has been discussed in Chap. 4. Other areas of concern over the external competence and the relation between the Community and the Member States in the field of EU climate policy are: the conclusion by the Community and the Member States of mixed agreements and their participation in them; a change in the composition of the Community due to the accession of new Member States; the implications and obligations for the Community and the Member States arising from an international agreement; the relation between obligations arising from an international treaty and Community and national legislation in that same area; and the participation of the Member States in international organisations active in areas where the Community has already legislated. To deal with these concerns, the Member States and the Community shall cooperate with each other in aiming to fulfil the obligations established under the international climate regime. In particular, as regards environmental protection, Article 174(4) is clear in this respect: 'within their respective spheres of competence, the Community and the Member States shall cooperate with third countries and with the competent international organisations. The arrangements for Community cooperation may be the subject of agreements between the Community and the third parties concerned, which shall be negotiated and concluded in accordance with Article 300'.

A number of relevant judgments of the ECJ are related to the application of Article 10 TEC and international law. In the assessment of this jurisprudence, Temple Lang defined the following series of duties for the Member States which are derived from the judgments of the Court in the field of external relations and Article 10 TEC[69]:

- The duty to avoid any action which could jeopardise the position of the Community in international negotiations;
- The duty not to obstruct the exclusive competence of the Community as well as the implementation of EC law[70];
- The duty to assist the Community in its participation in international negotiations where it has exclusive competence or where the Council has decided on its participation[71];
- The duty to act on behalf of the Community after consultation with the European Commission in cases where the Community does not participate in the international negotiations[72];

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[69] Temple Lang (2001), pp. 89–90.

[70] Opinion 2/91 ILO Convention on the safe use of chemicals [1993] *ECR* I-1061.

[71] Case 61/77R *Commission* v. *Ireland* [1977] *ECR* 937, para 28, and [1978] *ECR* 417, pp. 468–469 (Advocate General).

[72] Joined cases 3, 4 and 6/76 *Kramer* [1976] *ECR*, 1311, paras 44, 45. Opinion 2/91, ILO Convention [1993] *ECR* I-1061.

- The duty to ensure unity in the Community position in international negotiations, as well as close cooperation between the Member States and the Community in the negotiation, conclusion and fulfilment of international agreements in cases where the subject falls within a shared competence[73];
- The duty to implement and ratify a treaty to which the Community is a party or which implements EC policy;
- The duty to resign from a treaty which is not in line with EC law, and not to apply a treaty that is contrary to EC law[74];
- The duty not to create any institution which may hamper the institutional balance of the Community;
- The duty to abstain from any measure which could place the Community in non-compliance with a treaty to which the Community is a party.[75]

The principle of ensuring unity in the international representation of the Community as well as the obligation to ensure close cooperation between the Community and the Member States in the negotiation, conclusion and fulfilment of an international treaty were recalled by the Court in opinion 2/00[76] and in many other cases.[77] Moreover, in case C-246/07, the European Commission brought an action against the Kingdom of Sweden following the unilateral proposal of the Kingdom of Sweden aimed at the adoption of an amendment of the Stockholm Convention on persistent organic pollutants (POPs).[78] In this case, still pending at the time of writing, the European Commission claimed that Sweden had 'failed to fulfil its obligations under Article 10 EC' and argued in particular that the unilateral proposal undermined the unity in the EC's international representation in the Stockholm Convention on POPs and obstructed any possibility for the Community and the Member States to present a joint proposal.

When reading the second part of Article 10 TEC, i.e., that Member States shall abstain from taking any action which could jeopardise the achievement of the Community's objectives, we should, in reference to the external power of the EC and the Member States, first focus on the exclusivity principle. As indicated by O'Keeffe, exclusive external competence of the Community is defined either in the EC Treaty or by the jurisprudence of the Court referring to the joint implementation of internal and external powers.[79] In the *ERTA* case in

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[73] Case C-25/94 *Commission of the European Communities* v. *Council of the European Union* [1996] *ECR* I-1469, para 48.

[74] Case C-324/93 *Evans Medical* [1995] *ECR* I-563, para 32.

[75] See *supra* n. 60, para 13.

[76] Opinion 2/00 of the Court of 6 December 2001 [2001] *ECR* I-09713, para 18.

[77] See ruling 1/78 [1978] *ECR* 2151, paras 34, 35 and 36; opinion 2/91 of the Court of 19 March 1993 [1993] *ECR* I-01061, para 36, and opinion 1/94 of the Court of 15 November 1994 [1994] *ECR* I-05267, para 108.

[78] Case C-246/07 *Commission of the European Communities* v. *Kingdom of Sweden*, *OJ* C 183/19, Brussels, 4 August 2007.

[79] Dashwood and Hillion (2000), p. 181.

1971,[80] confirmed in opinions 1/76 and 1/94,[81] the ECJ affirmed that once the Community has adopted 'common rules' aimed at the implementation of a common policy within the EC Treaty, Member States no longer have the power to assume obligations together with third parties 'which may affect those rules or alter their scope'.[82] In this context, the ECJ has interpreted the principle of loyalty in the sense of requiring the Member States to desist from undertaking international obligations not only in every sector falling within the Community's common policy established by the EC Treaty, but also in sectors where another legislative act was adopted by the Community which could 'affect' those rules.[83] In these terms, on the basis of the ECJ's jurisprudence, we have to differentiate between cases where the Community enjoys exclusive competence, when complete harmonisation of legislation on a certain matter is achieved, and sectors where the Community only adopted minimum standards and therefore maintains a shared external competence with the Member States. In the former case, the existence of complete harmonisation justifies the extensive interpretation of Article 10 TEC, namely the impossibility for Member States to take action, either internally or externally.[84] In the latter case, there is more room to manoeuvre for the Member States in terms of external competence.

The Court's view linking the principle of loyalty and the external competences of the Community and the Member States is not necessarily incompatible with the right of the Member States to adopt a more stringent approach on environmental protection measures whose legal basis can be found in Articles 176 and 95 of the EC Treaty. Article 176 EC Treaty allows Member States to adopt or maintain 'more stringent protective measures' compatible with the EC Treaty and to be notified to the Commission when respective environmental legislation adopted under Article 175. Article 176 EC Treaty seems sufficiently clear to justify unilateral action by the Member States in the field of environmental policy. Article 95(4)(6) gives the Commission the power to authorise the Member States to maintain or enact stricter measures in derogation of EC internal market regulation. The stronger role of the Commission in the latter case is quite evident. In practice, the Commission and the Member States have used Article 95(4)–(6) a few times, while there seems to be no record of any Member State notifying the Commission of its intention to adopt stricter national environmental legislation than the EC standards.[85]

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[80] Case 22/70 *Commission of the European Communities* v. *EC Council* [1971] *ECR* 263.

[81] Opinion 1/94 [1994] *ECR* I-5267.

[82] *ERTA* case, para 22.

[83] *ERTA* case, paras 19 and 21, 'The Member States are required on the one hand to take all appropriate measures to ensure fulfilment of the obligations arising out of the Treaty or resulting from action taken by the institutions and, on the other hand, to abstain from any measure which might jeopardise the attainment of the objectives of the Treaty'.

[84] Opinion 1/94, para 96.

[85] Pagh (2005), p. 5.

In particular, the need to prove the existence of an obligation for the Member States not to take any action that may provoke a breach of an international obligation by the Community is of extreme relevance in our case. According to the Court, the application of Article 10 TEC in the sphere of external competence creates an indirect obligation for the Member States to take into consideration all international constraints of the Community and to abstain from acting in a way which could damage the Community's position in international law. This is particularly relevant in cases where the Member States, or some of them, are not party to a treaty ratified by the Community, or in cases of enlargement of the EU when the new Member States are under the obligation to ratify and accept an international treaty to which the Community is already a party.

In the *Kupferberg* case, the Court was called upon to rule on the relation between the interpretation of Article 90 TEC (ex Article 95) and the application of international agreements binding on the Community and the Member States. The Court confirmed its principal duty 'within the framework of its jurisdiction in interpreting the provisions of agreements, to ensure their uniform application throughout the Community'.[86] The Court also recalled the general principle of international law that every agreement must be performed *bona fide*.[87] Furthermore, it recognised the binding force of an international agreement within the Community legal system as it clearly stated that the provisions of an international agreement 'form an integral part of the Community legal system'.[88]

The Court also considered the issue of compliance and responsibility regarding the obligations arising from an international agreement to which the Community and the Member States are parties. Firstly, it confirmed the external power of the European institutions 'not only of adopting measures applicable in the Community but also of making agreements with non-member countries and international organizations in accordance with the provisions of the Treaty'. Secondly, the Court affirmed the binding effect of international agreements on the Community and the Member States—'according to Article 228(2) these agreements are binding on the institutions of the Community and on Member States'—and consequently the obligation for the Community and the Member States 'to ensure compliance with the obligations arising from such agreements'.[89]

In the same judgment, the Court recalled the responsibility of the Community and the Member States in respect of an international agreement concluded by the Community, stating that 'the Member States fulfil an obligation not only in relation to the non-member country concerned but also and above all in relation to the Community which has assumed responsibility for the due performance of the agreement'.[90] The wording of this sentence quite clearly confirms the obligation of

[86] See *supra* n. 60, para 14.

[87] Ibid., para 18.

[88] Ibid., para 13.

[89] Ibid., para 11.

[90] Ibid., para 13.

the Member States to comply with the obligations arising from an international agreement concluded by the Community. Therefore, the duty of the Community and the Member States to contribute to the fulfilment of the obligations deriving from the ratification of an international agreement which 'form an integral part of the Community legal order' seems unequivocal.

Furthermore, according to the Court, Member States are also required to abstain from any action which could damage or compromise the position of the Community in international negotiations.[91] Finally, it is also worth mentioning the duty of the Member States to abstain from any action which could damage the interest of another Member State, and would be in breach of the general principle of prosperity of the Community.[92]

As to the legal force of the loyalty principle, it is worth recalling the opinion of Advocate General Kokott in the *Pupino* case where the Court was called upon to interpret a framework decision adopted on the basis of Articles 31 and 34(2)(b) EU on police and judicial cooperation in criminal matters. Regarding the issue of the existence of a general principle of loyalty to the Union in Community law, Italy and UK claimed that the Treaty on European Union did not include an article equivalent to Article 10 TEC.[93] The Court stated nevertheless that both in Union and in Community law Member States and Community institutions were 'bound by a duty of mutual loyalty'.[94] In her reasoning, Advocate General Kokott recalled Article 1 TEU and its objective to create an ever closer union, and stressed that the objective of the EU would only be reached if all Member States and the institutions of the Union 'cooperate sincerely and in compliance with the law'. Finally, the implicit duties of the Member States created by Article 10 TEC, i.e., compliance with the obligations arising from the Community Treaty and membership, as well as the obligation to abstain from any action which could jeopardise the achievement of the Community objectives, apply in both Community and Union law 'without needing to be expressly mentioned'.[95] In this sense, Advocate General Kokott conferred key relevance on the principle of loyalty created by Article 10 TEC as regards the correct enforcement of EC law.

The following limits of the scope and application of Article 10 TEC can be identified from the jurisprudence of the Court on the principle of loyal cooperation[96]:

- Article 10 TEC does not create obligations alone but only if applied in combination with either a provision of Community law or a principle or objective enshrined in the EC Treaty;

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[91] Case 61/77 *Commission* v. *Ireland* [1977] *ECR* 937, para 28.

[92] Case 32/79 *Commission* v. *UK* [1980] *ECR* 2403, para 58.

[93] There is no equivalent wording in the EC Treaty either.

[94] Opinion of Advocate General Kokott, 11 November 2004, case C-105/03, Criminal proceedings against Maria Pupino [2005] *ECR* I-5285, para 25.

[95] Ibid., paras 26 and 27.

[96] Temple Lang (2001), pp. 91–93.

- Article 10 TEC does not create any new obligations for the Member States; it creates a general principle requiring the Member States to enforce Community law correctly;
- The application of Article 10 TEC is limited to cases where Community legislation and policy alone are incomplete or insufficient to justify an action before the Court;
- The application of the principle of loyal cooperation is not limited to the European Community legal order (first pillar) and it can be applied to the second and third pillars;
- The application of Article 10 TEC by national courts is subject to the condition that the Community provision, policy or objective under consideration is precise and clear enough to create a specific obligation for the national authorities;
- The only procedure at the Commission's disposal to enforce Article 10 TEC is the infringement procedure foreseen under Article 226 EC.

In the assessment of the limits related to the application of Article 10 TEC one can agree with Temple Lang in his explanation why legal scholars have paid little attention to Article 10 TEC and its legal application. According to Temple Lang, this has two main reasons: judgments concerning this Article are usually not seen 'as a series' and the binding force of general principles of EC law is questioned.[97] Another reason for the scarce attention in legal literature to the application of Article 10 TEC is related to the fact that lawyers dealing with EC law are often specialised in one of the substantial topics of EC law, like competition law or environmental law, and do not focus on the application of general and institutional Community law. It is one of the aims of this book to contribute to the debate on the interpretation and application of Article 10 TEC and its effectiveness within EC law.

7.5.2 The Role of National Authorities

One of the principles at the foundation of the Community legal system is the principle of subsidiarity enshrined in Article 5 TEC: in those areas where the Community has no exclusive competence the EC Treaty confers power on the Member States to act. According to this principle, action shall be taken by the Community 'in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States'. National authorities and courts play a large role in the implementation of Community law.[98]

As regards Article 5 TEC, national authorities and courts have both an active duty to contribute to the effective implementation of Community institutions, laws and policies, and a passive duty to abstain from obstructing the correct

[97] Temple Lang (2001), p. 91.

[98] National authorities include government ministries, regulatory bodies, local or regional bodies, non-governmental bodies, state-owned enterprises, etc.

implementation of Community law and policy. In this respect, mention should be made of the Protocol (No. 30) on subsidiarity and proportionality attached to the Treaty of Amsterdam. In this Protocol, 'where the application of the principle of subsidiarity leads to no action being taken by the Community' Member States are urged to take action on the basis of Article 10 TEC. That is to say, Member States are obliged to adopt all necessary measures to fulfil the main objectives of the EC Treaty and to abstain from any action which could jeopardise the achievement of the Community objectives. Therefore, the focus has to be on the objectives of the EC Treaty and the extent to which they are formulated in Community legislation. In this regard, it is fair to acknowledge that the Community's objectives can be considered legally binding on the Member States, but only in conjunction with the adoption by the Community of specific legislation or the undertaking of international commitments aimed at the achievement of those goals.

In particular, on the principle of loyal cooperation the Court clarified that, since the Member States have the possibility to decide which national authority is responsible for the achievement of the Community tasks, Article 10 TEC applies to all national authorities, state enterprises, regional and local authorities as well as private entities to which state powers have been delegated.[99]

The clearest duties of national authorities under Community law are those derived from a specific directive which directly addresses the Member States or where the authority is directly responsible for its application. More difficult is identifying the duties of national authorities resulting from general principles of Community law. The most relevant duties of national authorities include:

- A duty to contribute to the enforcement of Community law;
- A duty to assist the Community, and act on its behalf, in the achievement of the Community's objectives if these are sufficiently clear; in this respect the Court, in case 32/79,[100] ruled in favour of a national authority which decided to adopt stricter national measures for the protection of the environment in the case of a directive imposing a more generic obligation;
- A duty to promote a Community policy once it is clearly established through concrete actions, even if EC legislation is not directly applicable.

As to the general prohibition for the Member States to interfere with the implementation of Community policies even if the measures they have taken are in conformity with Community legislation extensive case law is available.[101] This is especially true in several cases regarding common agricultural policy. In particular, in case 52/76, the Court held that the intervention by a Member State is in

[99] Joined cases 51–54/71 *International Fruit Co. NV* v. *Produktschap voor Groenten en Fruit* [1971] *ECR* 1107, pp. 1115–1116; case 50/76 *Amsterdam Bulb B.V.* v. *Produktschap voor Siergewassen* [1977] *ECR* 137, para 32; see also Temple Lang 1990, p. 645.

[100] Case 32/79 *Commission* v. *UK* (fisheries) [1980] *ECR* 2403, pp. 2434–2439.

[101] These include case 65/75 *Tasca* [1976] *ECR* 291, pp. 305–306, case 83/79 *Pigs Marketing Board* v. *Redmond* [1978] *ECR* 2347, p. 2371, case 52/76 *Beneditti* v. *Muanri* [1977] *ECR* 163, pp. 181–183.

breach of Community law if it jeopardises the objectives or operation of the common organisation of the market. In this case, the Member State was prevented from buying an agricultural product covered by the common organisation of the market and from reselling it at a price lower than the target price. As recalled by Temple Lang, from the assessment of the case law related to agricultural policy it appears that such jurisprudence is not limited to the subject considered, namely price controls, but that it also applies to other state measures and in particular non-legislative actions. In addition, the duty of non-interference with the operation of a Community policy also applies to private parties.[102]

7.6 The Principle of Loyal Cooperation and Similar Principles in the Member States: a Comparative Law Reflection

Principles similar to Article 10 TEC are embedded, amongst others in the federal system of three EU Member States: Germany, Belgium and Spain.[103] Firstly, it is important to emphasise that in principle, comparing the position of the Member States in the Community with the position of states or communities (sub-entities) in a federal system is not always appropriate. The European Community is not a federation of countries but rather a regional organisation composed of sovereign states which maintain their powers and competences at different levels and in specific areas. Although the principle of loyal cooperation between the Community institutions and the Member States has not been applied frequently in Community law, the inclusion and the application of that principle or a similar rule in the legal order of other Member States demonstrate the importance of such a principle in ensuring the correct functioning of a legal order composed of different entities. By the same token, in international law, the principle of *pacta sunt servanda* has been mentioned and its importance has been already stressed.[104]

Having said that, a comparative law analysis of the application of the principle of loyal cooperation enshrined in the legal orders of the Member States is aimed at drawing a parallel with Article 10 TEC.

7.6.1 The Case of Belgium

The federal nature of the Belgian state resulted from the fourth state reform of 1993 which established the federal state consisting of three Communities (the

[102] Temple Lang (1997a), p. 6.

[103] The legal orders of Austria and Switzerland contain also a similar principle.

[104] Furthermore, Article 2(2) of the Charter of the United Nations includes a provision which is very similar to Article 10 TEC, namely the obligation that all UN Member States, 'to ensure to all of them the rights and benefits resulting from membership, shall fulfil in good faith the obligations assumed by them in accordance with the present Charter'.

French Community, the Flemish Community and the German-speaking Community) and three Regions (the Walloon Region, the Flemish Region and the Brussels Region).[105] In Belgium, the federal authority, the Communities and the Regions share the same position at the constitutional level and exercise their powers according to their respective competences. Since the 1993 state reform, the provision on loyal cooperation is included in the Belgian Constitution. Article 143(1) of the Belgian Constitution introduces the principle of loyalty to the federation for the Federal Government, the Communities, the Regions and the Common Community Commission. These actors shall respect the principle of loyalty to the federation and avoid any conflict of interests.[106] Although this principle may seem similar to the principle of loyal cooperation established under Article 10 TEC, in the case of Belgium, loyal cooperation is based on the different nature of the division of powers and competences among the various actors in the Belgian constitutional system. Unlike in the EC, where the Community law system has supremacy over the Member States, in Belgium, the federal and federated governments have 'equal legal status within their respective fields of competence'.[107] In Belgium, there is no hierarchy of norms and thus the rules adopted by each authority have the same level and value in their implementation. The dual character of the Belgian system is therefore based on the equal legal force of the legislation adopted by federal and federated governments. Thus, the principle of loyal cooperation in Belgium is aimed at the elimination of conflicts among the different entities in the federal state. To this end, following the state reform of 1993, a committee composed of representatives of federal and federated governments was set up with the task of solving any potential dispute resulting from a conflict of interests. The principle enshrined in Article 143(1) reinforced the jurisprudence of the Belgian Court of Arbitration and the Council of State, which held that in the exercise of their powers the federal and federated authorities shall act within their respective spheres of competence and respect each other's interests. The legal force of the principle of federal loyalty in Belgium is also confirmed by its application and interpretation by the said Courts. For instance, the Council of State recalled the principle of loyalty in the review of a Flemish draft decree concerning the collection of news by the press when it required the Flemish authorities to wait for the federal regulation in that field before adopting the draft decree.[108] In another case, the Belgian Court of Arbitration rejected, on the basis of, *inter alia*, the principle of federal loyalty, a national measure adopted at the federal level which was stricter than what was required for the implementation of a European directive. The federal measure was considered too severe, establishing

[105] Articles 1, 2 and 3 of the Belgian Constitution.

[106] 'Dans l'exercice de leurs compétences respectives, l'État fédéral, les communautés, les régions et la Commission communautaire commune agissent dans le respect de la loyauté fédérale, en vue d'éviter des conflits d'intérêts' (Article 143(1) of the Belgian Constitution).

[107] Verhoeven (2000), p. 329.

[108] Council of State, opinions no. L 24040/8 and 24041/8 of 17 February 1995, Gedrukte Stukken, Vlaamse Raad, 1993–1994, no. 577/2 and 1994–1995, no. 633/2.

an excessive burden at the national level and therefore being in breach of the non-discrimination principle.[109]

7.6.2 The Case of Spain

The functioning of the Spanish constitutional system is guaranteed by the interaction of different principles which apply to both the Kingdom (central state) and the Autonomous Communities. According to the Spanish Constitutional Court, the distribution of competences between the State and the Autonomous Communities in the legislative sphere shall be balanced.[110]

Article 2 of the national Constitution of 1978 contains the principle of solidarity between the state authorities and the local Autonomous Communities (*Comunidades Autónomas*) and Article 138 lays down an obligation for the Spanish state to ensure the correct implementation of this principle.[111] Furthermore, under Article 138 of the Constitution, the Spanish state is required to ensure and maintain economic balance, as well as to avoid the creation of any economic and social privilege for the state and the Autonomous Communities. This obligation is fulfilled through national economic planning, through the fund for intraterritorial compensation and through a minimum level of public services.

Article 156 of the Spanish Constitution guarantees the financial autonomy of the Communities subject to two principles: coordination with the State financial administration (*Hacienda estatal*) and the solidarity of all Spaniards.[112] However, the relationship between the principles of coordination and solidarity is not so clearly defined and the obligations for the Autonomous Communities arising from the principle of solidarity are limited by the principle of coordination.

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[109] Arbitragehof/Cour d'arbitrage, judgment no. 102/99 of 30 September 1999.

[110] Decision of 28 January 1982, Official Journal of Spain of 26 February 1982, supplement to N. 49, p. 1. For the jurisprudence of the Spanish Constitutional Court, see http://www.boe.es/g/es/bases_datos/tc.php.

[111] 'La Constitución se fundamenta en la indisoluble unidad de la Nación española, patria común e indivisible de todos los españoles, y reconoce y garantiza el derecho a la autonomía de las nacionalidades y regiones que la integran y la solidaridad entre todas ellas' (Article 2 Spanish Constitution) and 'El Estado garantiza la realización efectiva del principio de solidaridad consagrado en el artículo 2 de la Constitución, velando por el establecimiento de un equilibrio económico, adecuado y justo entre las diversas partes del territorio español, y atendiendo en particular a las circunstancias del hecho insular. Las diferencias entre los Estatutos de las distintas Comunidades Autónomas no podrán implicar, en ningún caso, privilegios económicos o sociales' (Article 138 of the Spanish Constitution).

[112] 'Las Comunidades Autónomas gozarán de autonomía financiera para el desarrollo y ejecución de sus competencias con arreglo a los principios de coordinación con la Hacienda estatal y de solidaridad entre todos los españoles. Las Comunidades Autónomas podrán actuar como delegados o colaboradores del Estado para la recaudación, la gestión y la liquidación de los recursos tributarios de aquél, de acuerdo con las Leyes y los Estatutos' (Article 156 of the Spanish Constitution).

The collaboration between the state and the Autonomous Communities is regulated at the constitutional level by Article 155, which gives the state adequate power to introduce coercive measures to force the Autonomous Communities to comply with national legislation without creating a situation of dependence of the Autonomous Communities on the state.[113] The Constitutional Court has confirmed this line by introducing a general duty of collaboration which takes the form of an obligation of information provision by the administrations of the state and the Autonomous Communities.[114] Furthermore, in another case, the Constitutional Court referred to a general duty of mutual assistance between the two sets of actors.[115] In addition, the Spanish Constitution, under Article 145, prevents the Autonomous Communities from establishing a federation between them.[116]

In terms of coordination between the state and the Autonomous Communities, the Spanish Constitutional Court affirmed the importance of the integration of all parties into the constitutional system with the aim to avoid any contradiction or malfunctioning which could affect the effectiveness of the system.[117] By the same token, the Court affirmed the need to establish adequate tools and structures which allow the exchange of information within the system, common action by national and local actors and the correct exercise of their competences.[118]

Finally, the Court also referred to the principle of harmonisation enshrined in Article 150(3) of the Spanish Constitution which gives the state the power to safeguard the national interest. The Court confirmed its view based on a coordinated and interrelated system of competences by providing a notion of general interest to be distinguished at different levels: the general interest of the state and supra-community to be ensured by the state, and the general interest of each Autonomous Community to be ensured through the specific competences of the Autonomous Communities.[119]

7.6.3 The Principle of Bundestreue *in Germany*

In Germany, the principle of loyalty of the German federal *Länder* to the central government (*Bund*) is an unwritten constitutional principle. This is the principle of *Bundestreue*, which plays a key role in the determination and distribution of powers and competences between the *Bund* and the *Länder*. In fact, it was at the request of Germany that the principle of loyal cooperation was introduced in the founding text of the EC Treaty.

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[113] Blanquet (1994), p. 406.

[114] Decision of 5 August 1983, p. 11.

[115] Decision of 4 May 1982.

[116] Quesada (2006), p. 349.

[117] Decision of 28 April 1983, p. 2.

[118] Decision 42/1983 of 20 May 1983, p. 3.

[119] Decision 42/1981 of 22 December 1981, *OJ* of 14 January 1982, supplement to N. 14, p. 12.

The principle of *Bundestreue* is not included in the text of the federal Constitution but has been introduced and further developed by the German Constitutional Court (*Bundesverfassungsgericht—BVerfG*) in several cases in relation with a few articles of the Constitution.[120]

The jurisprudence of the German Constitutional Court on the *Bundestreue* is quite extensive and often it provided an interpretation of the principle which was very similar to that of the European Court of Justice in several cases referring to Article 10 TEC. The jurisprudence of the *Bundesverfassungsgericht* went in the direction of regulating the relations between the *Bund* and the *Länder* as in several cases it stated that all members of the federal Constitution were required to cooperate and contribute to the fulfilment and protection of the common objectives and interests. In particular, the German Constitutional Court identified three main spheres of application of the principle of *Bundestreue* in the relation between the *Bund* and the *Länder*, namely the limitation of competence, the duty to act and procedural obligations.

The function of the principle of *Bundestreue* is to strengthen the cooperation of the *Bund* and the *Länder* in the exercise of their competences and in the consolidation of the federal nature of the German legal order.[121] Furthermore, the principle of *Bundestreue*, like Article 10 TEC, can give rise to specific duties for the *Bund* and the *Länder*. Some of them, notably those relevant for this book, are indicated below.

The principle of *Bundestreue* was first applied in 1952 by the German Constitutional Court (*Bundesverfassungsgericht*) to justify the adoption of a law on financial compensation by the *Bund*. In this case the Court referred to Article 20(1) of the German Constitution and to the duty of the members of the federal state 'to act in a manner consistent with the federal principle' and in view of protecting the common objectives.[122] In this case the Court confirmed the duty of the *Länder* to respect and to take account of the interests and assist other States thus requiring Bavaria to provide objective justification for the denying of consent on the distribution of federal funds for public housing.[123]

In 1961 the German Constitutional Court applied the *Bundestreue* principle against the federal state, namely requiring the Federation to respect the duty of consultation of all *Länder* before the adoption of the plan for the establishment of a second television network.[124] Furthermore, in 1992 the Court ruled that the federal state and the *Länder* have a duty to assist financially the *Länder* of Bremen and

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[120] Articles 20, 32, 35, 71, 72 and 93 of the German constitution. See Sachs (2003).

[121] On the principle of *Bundestreue* see Bauer (1992) and Egli (2010).

[122] Decision of the German Constitutional Court (BVerfGE) 1 at 299 and 315 (1952) 'Alle an dem verfassungsrechtlichen Bündnis Beteiligten sind gehalten, dem Wesen dieses Bündnisses entsprechend zusammenzuwirken und zu einer Festigung und zur Wahrung seiner und der wohlverstandenen Belangen seiner Glieder beizutragen'.

[123] Sachs (2003), p. 828.

[124] BVerfGE 12 at 205, 254–59 (1961).

Saarland beyond the limits of financial equalization established under Article 107 of the German Constitution.[125]

As mentioned above an explicit reference on how to apply the principle of *Bundestreue* in the relation between the Federal Government and the *Länder* is lacking in the German Constitution but the principle is mentioned in Article 2 of the Act for the ratification of the Single European Act of 1986 by Germany and the German Constitutional Court explicitly referred to the procedure of consultation included in that Act.[126]

In reference to the principle of cooperation, it is relevant to mention the judgment of the German Constitutional Court in the case regarding the adoption of the EC Broadcasting Directive 89/552/EC.[127] In this case, the dispute between the *Land* of Bavaria and the German Federal Government concerned the effect of Community legislation on the powers of the *Länder* and the role of the Federal Government. The *Land* of Bavaria challenged before the German Constitutional Court the decision of the *Bund* to transpose that EC Directive into German law with the argument that Bavaria's rights under the German Basic Law were violated. Although the Bavarian request was dismissed, the Constitutional Court recognised the violation by the Federal Government of the constitutional rights of the *Länder*, in particular the principle of *Bundestreue*, as regards the procedural aspects. In this respect, according to the Court, the *Bund* had failed to consult the Federal Council (*Bundesrat*), composed of the representatives of the *Länder* in the negotiations with the European Council regarding the adoption of the above mentioned Directive. The Court introduced the obligation for the *Bund* to conduct negotiations in line with the general interests of the *Länder* and the prohibition for the *Länder* to use their veto power for any reason beyond that under consideration. According to the German Constitutional Court, the principle of federal loyalty was based on the mutual recognition of the competences of the Federal Government and the *Länder*. Furthermore, as regards the relation between the German and the Community legal systems and the principle of loyal cooperation, the Court stressed the duty of the Government to consider the interests of both the Federal Government and the *Länder* and to avoid any erosion of the competences, powers and constitutional rights of the *Länder*.[128]

The consequences of the application of the principle of *Bundestreue* in the German legal system may be similar to those in the EU. In accordance with the jurisprudence of the German Constitutional Court on the principle of *Bundestreue*,

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[125] BVerfGE 86 at 148, 258–70 (1992), see also Sachs (2003) p. 828.

[126] Einheitliche Europäische Akte EEA Gesetz (EinhEuA), Bundesgesetzblatt 1986 II (BGBl II), 1104.

[127] BVerfGE 92 at 203 (1995).

[128] Herdegen (1995), p. 1376.

amongst others, the following duties for the *Länder* and the *Bund* can be established[129]:

- Duty of not jeopardising the position of the federal state in international law and to ensure the implementation of and compliance with the obligations arising from an international agreement. In other words, the federal state and the *Länder* are required to act in a way which is not damaging to each other in respect of the commitments undertaken in international law[130];
- Duty to comply with the principle of good faith, i.e., to act while respecting the authority of another member and of the federal state;
- Duty of assistance and solidarity in the fulfilment of the federal and the *Länder* objectives and interests, among which the correct implementation of European Community law[131];
- Duty to abstain from the exercise of legislative power by the *Bund* and the *Länder* in the event that the interests of those actors can be jeopardised[132];
- Duty of information and consultation.

In sum, the interpretation of this unwritten principle provided by the German Constitutional Court is to a great extent similar to the interpretation of the European Court of Justice regarding the application of Article 10 TEC in the Community. In the German legal system, the principle of *Bundestreue* creates a limitation to the exercise of power by both the *Länder* and the *Bund*; it creates an obligation to exercise powers and competences in line with the general and common interests and objectives of the Federation.

7.6.4 Comparative Law Reflections

The comparative law reflections on the application of the principle of loyal cooperation in a few Member States show that there are similarities with the application of Article 10 TEC in the European Community although the legal systems and actors are different.

In the 70s the former Article 5 of the EEC Treaty was presented in the legal doctrine as a principle of *bona fide* in conjunction with similar principles embedded in other European national systems.[133] In EC law, it is not possible to speak of federal loyalty as the EC is not a federal state. The relation between the parties and the state which is typical of a federal state cannot be applied to the Community legal order. Furthermore, the principle of loyalty in the EC has a triple

[129] Bauer (1992).

[130] Lück (1992), pp. 100–102.

[131] Ibid.

[132] Ibid., pp. 97–100.

[133] Van der Esch (1970), p. 309, and Pescatore (1975), p. 51.

function: it creates an obligation for the Member States *vis-à-vis* the Community, for the Community *vis-à-vis* the Member States and for the Member States *vis-à-vis* the Member States. As stated by Blanquet, the parallel between Article 10 TEC and the principle of federal loyalty therefore often remains abstract.[134] However, it is also true that the principle of federal loyalty, like the principle of cooperation under Article 10 TEC, is an instrument at the disposal of the national judges and is aimed at ensuring a better achievement of the common interests and objectives of a community, either of states or within a state.[135]

In sum, for the purpose of this book a conclusion by analogy does not always imply a comparison between equal situations. In this book we compare different legal systems which nevertheless present a number of similarities and which allow to draw conclusions derived from one situation to the other. The EU is not a federal State but, like a federal State, it is a complex entity composed of highly autonomous sub-entities. It is thanks to this similarity that a cautious analogy between the two types of entities, the EU on one side and a few Member States on the other, is meaningful. The European Community and the Member States considered have in common a legal tool—either a general principle of law or an article in a constitution—which aims at ensuring a better achievement of common interests and objectives of a community, either of states or within a state. Finally, there are concrete consequences in the event that the sub-entities (regions or states) do not comply with this legal tool.

The parallel which is most relevant for our study is the analogy between the principle of loyal cooperation in European Community law and in Germany, namely *Gemeinschaftstreue* and *Bundestreue* according to the most relevant German literature.[136] There are more similarities than differences between these two principles. They are both enshrined in the fundamental treaties (respectively, EC Treaty and German Constitution) and their application and development is a result of the jurisprudence of the Courts (European Court of Justice and German Constitutional Court). In both legal orders the principle of loyal cooperation can be applied only in relation with other provisions and it can establish duties to act and to abstain for the sub-entities under specific circumstances. The differences are related to the fact that the principle of loyal cooperation in the EC creates a duty to act aimed at fostering the implementation and application of Community law, while in the German legal system the principle of *Bundestreue* constitutes a limitation to the application of law.[137]

The above-mentioned cases of Belgium and Spain contribute in some parts to the main findings related with the analysis of the *Gemeinschaftstreue* and *Bundestreue*. In particular, in Belgium and Spain the principle of loyal cooperation

[134] Blanquet (1994), p. 372.

[135] Ibid., p. 383.

[136] See Lück (1992), pp. 103–164.

[137] Ibid., p. 131.

has been applied in view of guaranteeing the interests and competences of all entities.

The application of the *Gemeinschaftstreue* and *Bundestreue*, respectively, in the European Community and German legal orders contributed to the creation of the following common duties for the actors (entities and sub-entities) which compose the two orders:

- Duty of cooperation and good faith;
- Duty of solidarity and assistance;
- Duty of contributing to the compliance with international law and treaties;
- Duty of abstaining from actions which could jeopardise the functioning and objectives of the common legal order;
- Duty of information and consultation.

7.7 Article 10 TEC and the Duties of the Member States in View of Compliance by the EC and the Member States with the Kyoto Protocol Obligations

From this point, the focus will be on determining the extent to which the obligations and duties of the Member States derived from Article 10 TEC apply in relation with the fulfilment by the European Community of the obligations created by the international climate regime.

In this regard, it is important to emphasise once again the duties laid down in Article 10 TEC for the Member States, i.e., the obligation 'to take all appropriate measures, whether general or particular' to ensure fulfilment of the obligations created by the EC Treaty, the obligation to 'facilitate the achievement of the Community's tasks' and the obligation to 'abstain from any measure which could jeopardise the attainment of the Community's objectives'.

In the context of the international climate regime, the difference of interests and positions between the Community and the Member States, or between the Community and the EU15, on the one hand, and the EU12, on the other, needs to be overcome in order to ensure the full and correct implementation of the obligations arising from the Kyoto Protocol. As far as the Kyoto Protocol is concerned, it is the Environment Council composed of the EU27 Ministers of Environment which defines and adopts the EU common position on climate change that forms the basis of the EC and Member States' negotiations at the Conference of the Parties to the UNFCCC.

The EC is strongly committed to the fight against climate change and is one of the major actors in the international climate regime. Before and after the adoption of Council Decision 2002/358/EC on the ratification and implementation of the Kyoto Protocol by the EC and the Member States, the EU adopted extensive and specific legislation aimed directly and indirectly at the reduction of greenhouse gas

emissions. The proactive approach of the EC and the Member States in this field corresponds to, among others, the main obligations included in Article 10 TEC. In particular Article 10 TEC requires the Member States to 'take all appropriate measures, whether general or particular, to ensure fulfilment of the obligations arising out of this Treaty or resulting from action taken by the institutions of the Community'. The Member States are contributing to the achievement of the Community's tasks either through domestic actions or through the implementation of the flexible mechanisms established by the Kyoto Protocol. The advanced European climate policy put in place by the Community and the Member States is a clear sign of the extent to which the EC and the Member States are committed to fulfil the obligations of cooperation enshrined in Article 10 TEC.

In this chapter, we have concluded Article 10 TEC is applicable in the event of non-compliance of the Member States with the obligations established by the Kyoto Protocol, although differences exist in relation to three diverse sets of obligations of the Protocol. Member States 'facilitate the achievement of the Community's tasks' by assisting the Community in meeting its joint reduction commitment (−8%) under the Kyoto Protocol, either through domestic actions or via the implementation of flexible mechanisms. By the same token, the Member States 'shall abstain from any measures which could jeopardise' the compliance by the Community with the Kyoto Protocol greenhouse gas emissions limitation and reduction commitments, the monitoring, reporting and verification obligations and the eligibility requirements. On the basis of this conclusion and in consideration of the case and the comparative law reflections shown in this chapter what are the specific duties of the Member States to respect and not to jeopardise the international interests and position of the EU in the UNFCCC and Kyoto Protocol regime?

7.7.1 Duty to Take Any Reasonable Effort

In *Kupferberg*, the ECJ, referring to the Member States, reiterated 'the duty to abstain from any measure which could put the Community in a non-compliance situation with a treaty to which the Community is a party'.[138] In this case, the Court was called upon to rule on the relation between the interpretation of Article 90 TEC (ex Article 95) and the application of international agreements binding on the Community and the Member States and confirmed its principal duty, 'within the framework of its jurisdiction in interpreting the provisions of agreements, to ensure their uniform application throughout the Community'. Furthermore, the Court recalled the general principle of international law that every agreement must be performed *bona fide,* and its validity for the Member States.[139]

[138] See *supra* n. 60, para 13.

[139] Ibid., paras 2 and 4.

The duty of abstaining from actions which could jeopardise the functioning and objectives of the common legal order has been confirmed by the jurisprudence of the German Constitutional Court on the application of the *Bundestreue* principle in the German legal system.

So far, only on a few occasions has the ECJ invoked Article 10 TEC in respect of questions related to multilateral environmental agreements. In case C-246/07,[140] the ECJ condemned Sweden as it had 'failed to fulfil its obligations under Article 10 EC and Article 300(1) EC' by unilaterally proposing an amendment to the Stockholm Convention on POPs. The unilateral action of a Member State in respect of an international agreement was considered in breach of the principle of loyal cooperation. Sweden's unilateral action contributed to undermining the EC's international representation in the POPs Convention in the sense that the action of the Swedish government rendered it impossible for the EC and the Member States to propose joint amendments to that agreement.

The Member States' duty to avoid any action which could jeopardise the position of the Community in international negotiations was confirmed by Advocate General Darmon in case C-229/89, who recalled the obligation for the Member States to avoid entering into negotiations with non-Member States or into any treaties where these could interfere with the Community objectives.[141]

Unilateral action at the international level or adoption of a national measure by the Member States, such as, for instance, participation in and commitment to an international climate regime or initiative, in alternative to what the European Community is pursuing, might be seen as a breach of Article 10 TEC and the rules governing the exercise of the Community's external competence if this regime or initiative does not involve more stringent obligations than those decided at the Community level. Furthermore, in this potential case, even mere unilateral participation in international negotiations aimed at the establishment of such a new regime, in alternative to and independently from the position of the EU, could represent a breach of the principle of loyalty since it could jeopardise the Community action aimed at the definition of new greenhouse gas emission reduction commitments at the international level as well as a new burden sharing agreement for the EU27.

The following actions by the Member States could justify opening an infringement procedure against them for failure to comply with Article 10 TEC in respect of compliance with the obligations of the Kyoto Protocol—in terms of both assisting the Community in achieving its reduction commitments and not

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[140] The Commission claimed that Sweden's unilateral proposal of PFOS meant that the EC's international representation was divided. Sweden acted unilaterally with regard to PFOS despite the fact that it was aware that the Community was engaged in drafting legislation which included that substance. Sweden's action meant that the Community and Member States could not jointly present proposals for additions to the Stockholm Convention. Thus Sweden failed to fulfil its obligations under Articles 10 EC and 300(1) EC.

[141] Advocate General Darmon, case C-229/89 *Commission* v. *Belgium* [1991] *ECR* I-2205, p. 2222.

jeopardising the fulfilment by the Community of the limitation and reduction commitments:

- Non-fulfilment and/or non-maintenance of the eligibility to participate in the flexible mechanisms;
- Wrongful implementation of EC legislation adopted within the framework of EU climate policy;
- Blocking the adoption of EC legislation that would contribute to ensuring the compliance of the EC and the Member States with the GHG emissions joint reduction commitment.

In other words, the Member States are obliged to make any reasonable effort to contribute to the fulfilment of any action or to avoid any inaction with a view of ensuring the compliance of the EC as whole with its greenhouse gas emission limitation and reduction commitments under the Kyoto Protocol.

7.7.2 Preference to the EC and EU15 Under the International Emissions Trading (Duty to Abstain)

The EC and its Member States have the right to participate in the international emissions trading established under Article 17 of the Kyoto Protocol.

One of the main issues of debate concerning the participation of the new Member States and other states with economies in transition (Russia, Ukraine) in the Kyoto Protocol is the enormous amount of 'hot air' or surplus of GHG emissions rights which these countries could trade on the carbon market. The main question regarding the relation between Article 10 TEC and the new Member States in this respect is whether this surplus must be used to assist the Community and the EU15 in complying with the limitation and reduction commitments of the Kyoto Protocol. Failure to assist the Community and the EU15 in their efforts to reduce greenhouse gas emissions could eventually take the form of a transfer of AAUs under international emissions trading to a third party rather than to the Community and the EU15, or of a too lenient distribution of EUAs in the NAPs to the national installations in the new Member States within the framework of the EU ETS.

The transfer of AAUs from the Member States to other non-EU Annex I parties under IET rather than from the new Member States to the EU15 in case of a shortage of AAUs at the Community level can be considered a unilateral action.

According to the practice of Annex I parties and the rules governing international emissions trading, the sale of AAUs among Annex B parties to the Kyoto Protocol can be performed mainly in two ways: (a) by signing an agreement with another Annex B party (Memorandum of Understanding—MoU, an official document expressing the intention of two states to be bilaterally committed), and (b) by acquiring a certain amount of Kyoto units directly or indirectly in the carbon market via public or private entities.

Could both these actions be subject to a limitation due to Community legislation and general principles of Community law? In other words, the issue to be considered is whether the transfer of AAUs by the new Member States to a third party rather than to another Member State could be considered in breach of the principle of loyal cooperation if the EC and the Member States do not achieve the GHG emissions limitation and reduction commitments under the Kyoto Protocol. From the jurisprudence of the Court it emerges that the Member States' duty to contribute to the achievement of the Community's objectives is very often related to the adoption by the Member States of specific measures or to the abstention from adopting measures which may jeopardise those objectives.

If a state has included within its national policy to combat climate change the participation in the international emissions trading for reasons of compliance with the Kyoto Protocol, it is also very common that it has initiated, well in advance of the end of the first commitment period (2012), a partnership agreement with another Annex B party for the purchase of a certain amount of AAUs, often under the form of a MoU. The difference between an international treaty and a MoU is far from clear and open to several types of interpretations. However, the latter does not require a specific procedure, in most cases the consent by the national parliament, to enter into force but merely the agreement and signature of the government representatives.

Thus, for instance, Latvia, like many other Annex I countries that are in a position to sell surpluses of AAUs, signed separate deals with the Netherlands and Finland to define the details related to the sale of, respectively, 3 million AAUs and 5 million AAUs by the end of 2007.[142]

By the same token, the Member States could enter into the same kind of agreements with other Annex B parties, i.e., non-EU Member States. Can the agreement between the Member States and a third party regarding the transfer of AAUs be considered an action against one of the main Community objectives, namely the compliance with an international agreement and, more precisely, compliance with the obligations established under the international climate regime? Can the general prohibition of Article 10(2) TEC be interpreted as an obligation for the new Member States not to enter into a Memorandum of Understanding with another Annex B party for the transfer of AAUs under international emissions trading?

According to the EC Treaty, namely Article 300(7) TEC, 'agreements concluded under the conditions set out in this Article shall be binding on the institutions of the Community and on Member States' and the duty to comply with the principle of loyalty obliges the Member States to abstain from any action which could jeopardise the achievement of the Community's objectives. In this sense, the fragmentation of Member States' actions in the context of international emissions trading, pursued through agreements concluded with non-Member States, may have a strong negative impact on the EU's general obligations under the Kyoto

[142] International Center for Climate Governance, Climate Policy News, 27 April–1 May 2009.

Protocol. Membership of the EU represents in itself a voluntary limitation to the sovereignty of the Member States, and to a certain extent a restriction of their right to enter into treaties with other states. Article 10 TEC requires the Member States to act in good faith with the aim to achieve the objectives of the Treaty, and therefore the room for manoeuvre as regards the conclusion of an agreement between the Member States and a non-EU country is limited to those actions which contribute to the achievement of the Community's objectives and to the compliance by the EC with that international agreement.

This thesis is reinforced by the jurisprudence of the Court on the matter. In case C-229/89, the Court stated that the Member States are obliged not to enter into negotiations with non-Member States or into any treaties where these could interfere with the Community's objectives.[143] Although it has already been pointed out that the Court has used Article 10 TEC in respect of different issues, one judgment is particularly interesting with regard to the obligations of the Community and the Member States under the Kyoto Protocol. This is the judgment of the Court in case C-471/98 and other cases where it declared it to be contrary to Article 10 TEC for a Member State to enter into bilateral air navigation agreements with a state that is not a member of the EU.[144] This was justified by the fact that, according to the Court, the fulfilment of the Community's tasks and the achievement of its objectives would be 'compromised if Member States were able to enter into international commitments containing rules capable of affecting rules adopted by the Community or altering their scope'. In this case, Belgium failed to comply with ex Article 5 TEC 'by entering into or maintaining in force […] international commitments concerning air fares and rates charged by carriers designated by the United States of America or intra-Community routes and concerning CRSs offered for use or used in Belgian territory'. In his opinion in case C-471/98, Advocate General Tizzano confirmed that Member States and the Community institutions are required by Article 10 TEC to cooperate in respect of the international agreements concluded under Community law. He mentioned in particular that, according to Article 10 TEC, Member States shall abstain from undertaking any international obligation in any matter governed by Community law and in cases of amendments to existing international treaties, and that Member States shall cooperate with the Community institutions. Even more importantly, Advocate General Tizzano stated that Member States shall act under Community law in order to facilitate 'the achievement of the Community's tasks'.[145] In other words, a solution to a certain problem should first be found internally, within the Community, by the Member States. Case 471/98 was initiated by the Commission which had

[143] Advocate General Darmon, case C-229/89 *Commission* v. *Belgium* [1991] *ECR* I-2205, p. 2222.

[144] Judgment of the Court of 5 November 2002 in case C-471/98 *Commission* v. *Kingdom of Belgium supported by the Kingdom of the Netherlands* [2002] *ECR* I-9681.

[145] Case C-471/98 *Commission* v. *Kingdom of Belgium* [2002] *ECR* I-9681, para 124.

decided to bring an action against Belgium under Article 226 TEC for the failure to comply with ex Articles 5 and 52 TEC (now Articles 10 and 43). In the claim, the Commission stressed that 'by having individually negotiated, initialled and concluded, in 1995, and applied an "open skies" agreement with the United States of America in the field of transport, the Kingdom of Belgium has failed to fulfil its obligations under the EC Treaty'.[146] The reasoning of the Commission in this case is of great relevance for the considerations developed in this book. The emphasis is on the fact that the Member State negotiated, initiated, concluded and applied a bilateral agreement with another country on an individual basis, without taking into consideration the Community's position and obligations in the area covered by the agreement. Furthermore, in case 471/98, the Court recalled the above-mentioned opinion 2/91, paragraph 11, and the *ERTA* judgment, paragraphs 21 and 22, stressing once again the fact that 'the Community's tasks and the objectives of the Treaty would be compromised if Member States were able to enter into international commitments containing rules capable of affecting rules adopted by the Community or of altering their scope'.[147] It seems quite reasonable in this case to draw a parallel with the individual action of a Member State in respect of the negotiation, conclusion and application of a Memorandum of Understanding with a non-Member State for the transfer of AAUs.

The comparative law reflections of above confirm that sub-entities are required to act or to avoid inacting in view of contributing to assist the state in the achievement of its objectives and in the fulfilment of its obligations. This was made clear, amongst others, by the German Constitutional Court in 1992 in the case about financial equalisation of the German *Länder*.

When considering this problem from the perspective of the new Member States, a few things need to be mentioned. First of all, the new Member States may invoke a temporal justification to reject this interpretation of the jurisprudence of the Court. They may have signed an MoU with a third party listed in Annex B of the Kyoto Protocol for the transfer of AAUs well in advance of the end of the first commitment period, so that it would be impossible to predict exactly what countries and to what extent the EU15 would fall short of their limitation and reduction commitments under the Kyoto Protocol. Secondly, the new Member States may claim that the MoUs for the transfer of AAUs under IET aim at ensuring the fulfilment of the main objectives of the Kyoto Protocol, i.e., the reduction of greenhouse gas emissions by 5% by 2008–2012 at the global level, and that the obligations of the Kyoto Protocol (international law) are higher up the hierarchy than the Community obligations.

In conclusion, the jurisprudence of the Court and the text of Article 10(2) TEC provide a solid and valid legal argument to ascertain a duty for the Member States to give preference to the EU and the EU15 in the transfer of AAUs under the IET.

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[146] Ibid., para 1.

[147] Ibid., para 125.

7.7.3 Jeopardising the Participation of the EU in the Flexible Mechanisms

On the basis of the *Kupferberg* judgment considered above the Community and the Member States are required to comply with the principle of unity and cooperation in the implementation of international agreements which form integral part of the Community law system. Furthermore, on the basis of the jurisprudence analysed above the Member States are required to avoid actions or inactions which would create a situation where the EC is in non-compliance with the rules established under the Kyoto Protocol on the MRV obligations and eligibility requirements, as well as to comply with the MRV obligations and the eligibility requirements in order not to jeopardise the right of the EC to participate in the flexible mechanisms.

As regards the monitoring, reporting and verification obligations and the eligibility requirements of the Kyoto Protocol, the Member States (EU27) are required to comply with the EC legislation mentioned above and actions or inactions by the Member States in breach of Community law which could therefore determine the non-compliance by the Community as Annex I party with the Kyoto Protocol obligations are

- Non-fulfilment and/or non-maintenance of the eligibility to participate in the flexible mechanisms;
- Failure to submit information on GHG inventories and projections as required by the EC legislation on monitoring, reporting and verification;
- Failure to establish and maintain the national registry necessary for tracking reduction units and for participating in the flexible mechanisms.

The consequences of the failure by the Member States to comply with those obligations are

A. EU law infringement procedure in respect of a Member State's failure to comply with EC legislation;
B. Non-compliance by a Member State with the Kyoto Protocol obligations for failure to comply with EC legislation and application of the non-compliance procedure and consequences of the Kyoto Protocol to the Member State;
C. Jeopardising the position of the European Community in respect of its obligations under the Kyoto Protocol.

7.8 Conclusions

The principle of loyalty or loyal cooperation of the Member States with the Community is enshrined in Article 10 TEC and requires the Member States to ensure the fulfilment of the obligations arising from the EC Treaty or deriving from actions of the Community. To this end, the Member States must cooperate with the Community institutions and with each other.

This general principle of Community law is a *lex generalis* composed of two obligations and one prohibition for the Member States: Member States shall act in compliance and conformity with Community legislation and facilitate the achievement of the Community's tasks; furthermore, the Member States shall 'abstain from any measure which could jeopardise the attainment of the objectives of this Treaty'.

The compliance of the Member States with Article 10 TEC has been considered and investigated by the European Court of Justice and Court of First Instance in several cases. By the same token, comparative law reflections on the application of the principle of loyal cooperation in Belgium, Spain and Germany in particular, have shown that extensive jurisprudence is present also at the level of the Member States.

A number of general duties for the Member States in the application of Article 10 TEC can be derived from the jurisprudence of the EU Courts and from the comparative law analysis. The Courts have made reference to this principle to fill certain gaps in the Community legal order in the sense that fundamental prerequisites for the application of the principle of loyalty are the absence of a *lex specialis*, which would automatically gain precedence over Article 10 TEC, and the absence or incompleteness of EC legislation. From a careful analysis of the Court's jurisprudence it can be concluded that the principle of loyal cooperation in principle does not apply in the event that specific EU legislation is adopted. However, a few exceptions to this general rule shall be taken into consideration as confirmed by the EU Courts which in some cases have applied the principle of loyal cooperation in areas where EC specific legislation exist with a view to reinforce the applicability and enforceability of general principles of EU law.

As to the relation between the application of Article 10 TEC and the external competence of the Community, it is thanks to the assessment of the main literature in the field, the study of jurisprudence of the European Courts as well as the comparative law reflections considered above that a number of duties for the Member States in this respect can be derived. They comprise, amongst others, the principle of unity in the Community position in international negotiations; the duty to fulfil international agreements; the duty to implement, ratify and fulfil international treaties; the duty of assistance and solidarity; and the duty to abstain from any measure which could jeopardise the compliance of the Community with international obligations. In this respect, the judgment of the ECJ in the *Kupferberg* case is of particular relevance. In *Kupferberg*, the Court recognised the binding force of an international agreement under Community law as forming integral part of the Community legal system. Furthermore the Court acknowledged the responsibility of the Member States regarding the due performance of an international agreement concluded by the Community.

Article 10 TEC creates obligations for the Member States insofar as it is applied in combination with either a provision of Community law or a principle or objective included in the EC Treaty. Article 10 TEC applies in the event that Community legislation and policy are incomplete or insufficient to justify an action before the Court for the infringement of Community law.

In the implementation of mixed agreements the Member States have a duty to cooperate with the EC on the basis of Article 10 TEC. The complexity of a mixed agreement to which the Community and the Member States are parties is increased in the international climate regime by the decision of the EC and the EU15 to fulfil part of the Kyoto Protocol obligations jointly and by the exclusion of the new Member States from this joint commitment. As outlined in Article 6(1) of the Act of Accession and by the requirement of the *acquis communautaire*, the new Member States are bound by the international obligations contracted by the Community before the date of their accession. Furthermore, in accordance with Article 300(7) TEC, international agreements concluded by the Community 'shall be binding on the institutions of the Community and on Member States'.

Environmental protection and the fight against climate change are widely recognised as key objectives of the Community as specified in the EC Treaty and confirmed by various EC policies, legislation and actions. The Treaty on the Functioning of the EU (TFEU) reinforced the importance of combating climate change in the EU. In the context of EU climate policy and the obligations of the Kyoto Protocol, the application of Article 10 TEC in respect of the failure by the Member States to comply with those requirements has been studied separately.

The Community has adopted clear and direct legislation aimed at compliance with the monitoring, reporting and verification obligations and the eligibility requirements of the Kyoto Protocol. The non-compliance by the Member States with those obligations could be sanctioned by the opening of an infringement procedure against them by the ECJ in accordance with Articles 226 and 228 TEC. Nonetheless, the failure by the Member States to comply with this EC legislation may determine the non-compliance of the Community as a whole with the monitoring, reporting and verification obligations and the eligibility requirements at the international level, thus jeopardising its position under the Kyoto Protocol. In this sense, the breach of Article 10 TEC by the Member States could be invoked by the European Commission in the infringement procedure in order to emphasise the alleged non-compliance of those States with Community law.

In respect of the GHG emission limitation and reduction commitments, the difference between the position of the Community composed of 27 Member States and that of the EU15 under the Kyoto Protocol has been emphasised. Annex II of Council Decision 2002/358/EC includes the EU BSA covering the EU15's individual limitation and reduction commitments under the Kyoto Protocol. Apart from that, clear EC legislation addressing the reduction obligations of the EU27 is lacking and in this respect a gap in EC law may exist with regard to the limitation and reduction commitments assumed by the EU10 as Annex I parties under the Protocol. The principle of loyal cooperation requires the Member States to facilitate the achievement of the limitation and reduction commitment of the Community under the Kyoto Protocol. By the same token, Member States shall abstain from any measure which could jeopardise the compliance by the Community and the Member States with the limitation and reduction commitments under the Protocol.

The judgment of the Court in the *Kupferberg* case reiterated the duty of the Member States to abstain from any measure which could give rise to the non-compliance of the Community with an international treaty to which the Community is a party. Action or inaction of the Member States such as the incorrect implementation of direct and indirect EC legislation on climate change could jeopardise the position of the Community at the international level and therefore justify legal action against them on the basis of a breach of Article 10 TEC. Once again, Article 10 TEC would not form the basis for such legal action in the event that specific Community legislation exists. On the other hand, it could be the main legal basis of an infringement action where specific Community legislation is lacking in this respect.

The following three main obligations for the Member States in the fulfilment and compliance with the obligations established by the international climate regime can be derived from this study:

- Duty to take any reasonable effort;
- Duty to give preference to the EC and the EU15 in the exchange of GHG emission reduction units under the international emissions trading (duty to abstain);
- Duty of avoid any action or inaction which could jeopardise the participation of the European Community in the flexible mechanisms.

Chapter 8
Conclusions

It is commonly recognised that in the international community the EC has assumed a leading role in the definition and adoption of policies and measures aimed at the protection of the environment and in particular at the fight against global warming. It has been mentioned that at the time of writing, according to the latest available data on the level of the European greenhouse gas emission concentrations provided by the European Environment Agency, the compliance by the European Community and the Member States (EU15) with the Kyoto Protocol limitation and reduction commitments is far from being achieved. The need for concrete actions and measures aimed at curbing greenhouse gas emissions in the EU is a priority which can be partly achieved by using the flexible mechanisms (ET, JI and CDM). The non-compliance by the Community and the Member States with the limitation and reduction commitments is relevant both in terms of liability and responsibility of the EC and the Member States under international and European Community law, and in terms of the political and strategic message that the EC wants to convey at the international negotiations on the post-2012 climate regime. The international talks on the post-2012 commitments started at the 24th Session of the subsidiary bodies of the UNFCCC held in Bonn in May 2006 with the aim of defining new stringent and binding greenhouse gas emission reduction obligations for developed countries and in part also for those non-Annex I parties which have developed considerably in economic and industrial terms in the most recent years. The commitment of the EC towards the adoption of ambitious binding greenhouse gas emission reduction targets for industrialised countries in respect of the future commitment periods is demonstrated at the international level by the several pledges made by the EU delegation in this regard, either during the dialogue on long-term cooperative action to address climate change by enhancing the implementation of the UNFCCC or within the framework of the Ad Hoc Working Group on Further Commitments for Annex I parties under the Kyoto Protocol. Furthermore, at the European level, the EC position on the post-2012 phase has been highlighted in several documents and meetings. On many occasions, the European institutions have confirmed the intention to introduce new binding targets for the

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reduction of greenhouse gas emissions by industrialised countries by at least 20% by 2020 in comparison with 1990 levels. In this sense, the turning point is represented by the EU Presidency Conclusions of 8 and 9 March 2007 where the EU heads of state and government agreed on the following targets establishing the EU climate policy after 2012:

- Binding target for the Member States to reduce GHG emissions by at least 20% by 2020 in respect of 1990 levels;
- Binding target for all industrialised countries to reduce GHG emissions by 30% by 2020 if other developed countries agree;
- Overall objective for all developed countries to cut their GHG emissions by 60–80% by 2050.

The political Position of the EU towards global warming is backed from a legal viewpoint by the ambitious obligations which the EC and the Member States have under the Kyoto Protocol and at the European level. In this respect, the objectives and goals included in the EU Presidency Conclusions of March 2007 were transposed into a set of legislative proposals by the European Commission in January 2008 through the adoption of the integrated climate and energy package. The final compromise between the European Parliament and the Council of the EU over the package was reached on 17 December 2008, introducing the following binding obligations for the Member States:

- 20% reduction of greenhouse gas emissions in the EU by 2020;
- 20% increase in the share of renewable energies in the EU's final energy consumption by 2020;
- 20% increase in energy efficiency in the EU by 2020;
- 10% increase in the minimum target for biofuels used in transport by 2020.

The participation of the European Community and Member States in the international climate regime presents several interesting legal issues from the perspective of Community law. The Kyoto Protocol is an example of a mixed agreement by which the EC and the Member States are bound. It regulates a matter where the Community and the Member States have shared competence, and has been signed and ratified in a coordinated manner by the Community and the old Member States (EU15). Within the range of mixed agreements to which the Community and the Member States are parties, the Kyoto Protocol is unique in terms of the nature of the joint commitment of the EU and Member States to reduce their levels of greenhouse gas emissions and the accession in 2004 and 2007 of twelve new Member States.

Together with the international community, the EC and the EU15 negotiated the text of the UNFCCC and the Kyoto Protocol and signed and ratified both treaties in a separate but coordinated manner. More precisely, the EU and the EU15 agreed independently on these two international agreements and coordinated the submission of the required instruments of ratification. Specifically, the EC and the Member States have concurrent competence to conclude an international agreement and concurrent responsibility for the compliance with the obligations

arising from an international treaty. Accordingly, the consequences of the non-compliance by the EC and the Member States with the obligations of a mixed agreement by which they are bound are of relevance under EC law. In this book, the legal issues related to the participation of the Member States in the Kyoto Protocol and their compliance with its obligations have been addressed.

The Community and the Member States participate in the international climate regime as Annex I parties. They share the same rights and duties and act mainly in a common and coordinated manner. This is confirmed by the fact that the negotiations on the adoption and implementation of the Kyoto Protocol as well as on the definition of the post-2012 strategy are conducted in a coordinated way and with constant collaboration and interaction between the Member States and the European institutions.

As described in Chap. 6, the Kyoto Protocol has established the following three main sets of obligations for Annex I parties:

A. Monitoring, reporting and verification obligations under Articles 5(1)(2) and 7(1)(4) of the Kyoto Protocol;
B. Eligibility requirements under Articles 6, 12 and 17 of the Kyoto Protocol and the Marrakech Accords;
C. Limitation and reduction commitments (QELRCs) under Article 3(1) of the Kyoto Protocol.

The consequences of the non-compliance by Annex I parties with the above-mentioned obligations will be determined by the Compliance Committee of the Kyoto Protocol following the submission of a question of implementation by an Expert Review Team or by a party. The consequences of non-compliance with the Kyoto Protocol obligations are as follows:

- MRV obligations: submission of a plan addressing the reasons for non-compliance and containing detailed measures and a timetable to reinstate compliance;
- Adjustment and correction consequences;
- Eligibility requirements: suspension of eligibility to participate in the flexible mechanisms (eligibility is suspended whenever the branch determines the non-compliance by Annex I parties with the eligibility requirements and can be reinstated when the party demonstrates its compliance);
- Limitation and reduction commitments;
- Each tonne of emissions in excess multiplied by 1.3 to be deducted from the party's assigned amount for the second commitment period:
  - preparation of a detailed compliance action plan;
  - suspension and eventual reinstatement of the party's eligibility to transfer carbon units under Article 17 of the Kyoto Protocol.

The EC has adopted specific and detailed legislation aimed at the compliance with the Kyoto Protocol obligations. Since the early nineties, the commitment of the EU institutions and Member States towards the fight against climate change has been translated into advanced Community legislation and into the position of

the EU and Member States at the negotiations on the establishment of the international climate regime. In particular, the EC has adopted specific legislation to comply with the monitoring, reporting and verification obligations as well as with the eligibility requirements of the Kyoto Protocol and has set up a specific climate policy in response to the obligations established by the UNFCCC and the Kyoto Protocol. Policies and measures aimed at compliance with the limitation and reduction commitments of the Kyoto Protocol are among the strongest and most ambitious actions adopted by the EC and the Member States both within the sphere of the EU and at the international level. The European Climate Change Programme (Phases I and II) is at the foundation of EU climate policy and is at the origin of the targeted coordinated and common policies and measures (CCPMs) aimed at curbing greenhouse gas emissions in Europe. The CCPMs are discussed and shaped in several thematic working groups composed of representatives of the EU institutions, Member States' governments, NGOs and stakeholders.

8.1 Monitoring, Reporting and Verification Obligations

EC legislation aimed at ensuring compliance with the monitoring, reporting and verification obligations of the Kyoto Protocol consists of Decision 280/2004/EC amending Decision 99/296/EC concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol, Commission Decision 2005/166/EC identifying parameters for projecting future emissions as well as indicators for the measurement of progress towards GHG emission commitments, Commission Regulation 994/2008 for a standardised and secured system of registries pursuant to Directive 2003/87/EC, Decision 280/2004/EC and Commission Regulation 916/2007/EC amending Decision 280/2004/EC. Accordingly, on the basis of this legislation, the following obligations for the Community and the Member States have been established:

- By 15 January of each year, a report by the Member States to the European Commission on the assessment of actual progress and to enable the preparation of annual reports by the Community (Article 3(1) Decision 280/2004/EC);
- By 28 February of each year, preparation of a Community greenhouse gas inventory and Community greenhouse gas inventory report (Article 4(1) Decision 280/2004/EC);
- Preparation of the annual Community report and the Member States' reports on the demonstration of progress towards fulfilling their commitments under the UNFCCC and the Kyoto Protocol in accordance with Decision 2002/358/EC (Article 5(1) Decision 280/2004/EC);
- Preparation by the Commission of the annual report to the European Parliament and the Council on actual and projected emissions by sources and removals by sinks, policies and measures and on the use of mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol (Article 5(2) Decision 280/2004/EC);

- Establishment and maintenance of a Community and Member States' registry (Article 6(1) Decision 280/2004/EC);
- By 31 December 2006, preparation and submission by the Commission and the Member States of a report to the UNFCCC secretariat determining the assigned amounts (Article 7(1) Decision 280/2004/EC).

The annual greenhouse gas inventory of the EC prepared in accordance with the Kyoto Protocol requirements and Council Decision 280/2004/EC (Article 4(1)) is the only GHG inventory in the Kyoto Protocol covering a regional economic integration organisation and thus resulting from the collection of annual information on greenhouse gas inventories from the Member States). Pursuant to Article 5(2) of Council Decision 280/2004/EC, the European Commission shall monitor annually the actual and projected progress of the Member States in respect of the EC reduction commitments under the UNFCCC and the Kyoto Protocol. To this end, the Commission is required to prepare a progress evaluation report for the European Parliament and the Council (Article 5(1) Decision 280/2004/EC). The annual EC inventory is the basic information for the progress evaluation. Finally, on the basis of Article 3(2) of the Kyoto Protocol and the requirements of the Seventh and Eighth Conferences of Parties (Decisions 22/CP.7 and 25/CP.8) to the UNFCCC, Annex I parties are required to prepare, by 2005, a report demonstrating progress in the fulfilment of the Kyoto Protocol obligations. At the Community level, this is regulated under Article 5(3) of Council Decision 280/2004/EC, which requires the European Commission to prepare a report on demonstrable progress (RDP) achieved by the EC by 2005 on the basis of information from the Member States to be submitted by 15 June 2005. As of the year 2005, the progress evaluation report and the report on demonstrable progress coincide. Both the inventory report and the report on demonstrable progress are prepared by the European Commission, the correspondent authorities in the Member States and the European Environment Agency.

The Community registry is composed of the registries of the EU27. Apart from the registries of Malta and Cyprus—non-Annex I parties—, at the time of writing, the only registry not operational was that of Bulgaria. This delay has had important consequences for the EC registry system, since it prevented the CITL from being connected to the ITL and has therefore reduced the possibility for the EC, the Member States and private entities to trade Kyoto reduction units under IET, the EU ETS or the project-based mechanisms.

The initial report of the EC submitted to the UNFCCC secretariat on the basis of Article 7(4) of the Kyoto Protocol is clear on the issue of the EC's and Member States' commitments following the EU enlargement. The EC initial report referred to Article 4(4) of the Protocol and the fact that the alteration in the composition of the EC after the adoption of the Kyoto Protocol does not affect the Community's commitments under the Kyoto Protocol. In this respect, the calculation of the EC's assigned amount pertains to the EU15. However, the EC initial report includes information on all 27 Member States, including Cyprus and Malta, since the EU27 are all required to report to the Commission by 15 January each year on their

individual greenhouse gas inventories prepared in accordance with the UNFCCC reporting guidelines and with Decision 280/2004/EC.

The non-compliance by any of the EU25 with the eligibility requirements may directly or indirectly affect the eligibility of the Community. For instance, in accordance with the UNFCCC initial review report Bulgaria met these requirements with a significant delay in comparison with the other Member States. The connection of the CITL with the ITL was delayed because of the non-compliance by Bulgaria with the specific requirements as specified in Chap. 6, and this has delayed the possibility for the EC and the Member State to transfer carbon reduction units under international emissions trading. In this particular case, the non-compliance by Bulgaria with the eligibility criteria has not per se or directly affected the EC's compliance and consequently the EC's eligibility to participate in the flexible mechanisms. Nevertheless, indirectly it has limited the EC's and Member States' ability to acquire reduction units in the international carbon market (IET, JI, CDM). The fact that the European Community participates in the international climate regime as a single entity implies that differentiating between the EU15 and EU12 when addressing the monitoring, reporting and verification obligations, as well as the eligibility requirements is not possible. The case of the delayed connection between the ITL and the CITL shows that such a distinction may be even technically impossible in some cases since the CITL functions only in the event that all Member States are in compliance with their obligations.

8.2 Eligibility Requirements

The European Community is an Annex I party to the UNFCCC and therefore, like the Member States, eligible to participate in the flexible mechanisms. The EC and the EU15 share the greenhouse gas emission reduction commitment of 8% under the Kyoto Protocol as well as the right to participate in the flexible mechanisms of the Protocol. Article 22(2) of the UNFCCC and Article 24(2) of the Kyoto Protocol respectively state that 'the organization and the Member States shall not be entitled to exercise rights under this Protocol concurrently.' Since the Kyoto Protocol and the Marrakech Accords clearly define the right of Annex I parties to participate in the flexible mechanisms, and the Community and the Member States are included in Annex I, it seems reasonable to assume that the prohibition to concurrently exercise rights created by the Kyoto Protocol does not concern the right to participate in the flexible mechanisms and does not affect the EC's and Member States' power in this respect.

The first eligibility criterion, i.e., the requirement for Annex I parties to ratify the Kyoto Protocol, has been fulfilled by the Member States as required under Council Decision 2002/358/EC. This is also true of the new Member States which acceded to the EU after the adoption of that Decision and were obliged to ratify the Protocol in order to meet the enlargement requirements. The Assigned Amount Report of the European Union was adopted on 15 December 2006 by the European

Commission in compliance with criteria (b), calculation of the initial assigned amounts, and f), information on assigned amounts. The Commission Decision of 14 December 2006 determined the respective emission levels allocated to the Community and each of the Member States under the Kyoto Protocol pursuant to Council Decision 2002/358/EC. The amount of AAUs fixed in the Commission Decision of 14 December 2006 corresponds to the difference between the emission levels of the Community and the sum of emission levels of the Member States set in Annex II of Council Decision 2002/358/EC (Article 2 of Commission Decision 2006/944/EC). The calculation of the assigned amounts of the Community refers to the EU15 since the EU enlargement of 2004 and 2007 did not affect the joint reduction commitment of the EC under the Kyoto Protocol (Article 4). Regarding criteria (c), national system, (d), national registry, and (e), GHG inventory, only a few states, i.e., Bulgaria and Romania, reported some delays in their fulfilment and were therefore granted eligibility to participate in the flexible mechanisms later than the other Member States (Bulgaria on 25 November 2008 and Romania on 18 September 2008).

The failure by a Member State (any one of the EU27) to comply with the Kyoto Protocol obligations may have important consequences for the Community and the other Member States. In the case of the monitoring, reporting and verification obligations, non-compliance by the Member States with those requirements may result in (1) correction and adjustment consequences, and (2) failure to meet the eligibility criteria. At the time of writing, these consequences have been applied in two cases as indicated in Chap. 6: (1) the assigned amounts of the Netherlands and Greece had to be adjusted following the review of the initial reports submitted to the UNFCCC, and (2) as regards Greece, a question of implementation was submitted by the Compliance Committee in 2008.

8.3 Limitation and Reduction Commitments

The joint commitment of the EC and the Member States towards the reduction of greenhouse gas emissions by 8% compared to 1990 levels by 2012 is clearly defined by the Kyoto Protocol in Article 4. According to Article 4(4), the EU Bubble agreement included in Council Decision 2002/358/EC is fixed both in geographical and temporal terms: no changes due to an alteration in the composition of the European Community can be made in the EC's and EU15's joint commitment until the end of 2012. The twelve central and Eastern European countries that joined the EU in 2004 and 2007 are not considered part of the EU Bubble under the international climate regime.

According to the latest annual greenhouse gas inventory and inventory report of the European Environment Agency (EEA) available at the time of writing, the greenhouse gas emissions of the EU have fallen since 2005. The EEA Technical Report 6/2008 and the EEA Report 5/2008 confirmed this trend.

The EEA reports containing information on EU27 GHG emissions confirmed that at the time of writing the EC and the Member States (EU15 and Slovenia) are not on track with achieving the limitation and reduction commitments under the Kyoto Protocol and that, among others, the EC and the Member States need to implement the flexible mechanisms to meet those obligations. Thus, as some consequences of the non-compliance by Annex I parties with the Kyoto Protocol obligations determine the ineligibility to participate in the flexible mechanisms, it is important for the EC and the Member States to comply with both the monitoring, reporting and verification obligations and the eligibility requirements.

As to the EC's and Member States' compliance with the limitation and reduction commitments, the situation is as follows:

- The EC and EU15 need to make an additional effort to reach the 8% joint reduction commitment;
- The EC and EU15 must implement additional policies and measures to meet the joint reduction commitment;
- The EC and EU15 have to use the flexible mechanisms to meet the joint reduction commitment;
- The EU10, with the exception of Slovenia, are on track to meet their individual reduction commitments.

Non-compliance with the limitation and reduction commitments may affect the Community and the Member States in the post-2012 phase of the international climate regime. Units may be deducted from the parties' assigned amount for the second commitment period following the non-compliance by the EC and the Member States with the limitation and reduction commitments. This consequence would imply an additional burden for the EC and the Member States in respect of future reduction commitments; eventually, it could also affect the position and strategy of the EC and the Member States in the negotiations on the post-2012 phase *vis-à-vis* other parties and moreover influence the discussions on the new EU Burden Sharing Agreement.

8.4 Kyoto Protocol Obligations in the EU

The details of the EC's and Member States' responsibility in the event of non-compliance with their joint commitment to reduce greenhouse gas emissions have been clarified both under international law (Article 4 of the Kyoto Protocol) and under European law (EU Burden Sharing Agreement included in Council Decision 2002/358/EC). As noted in Chap. 6, the EC and the Member States can also be held responsible for non-compliance with the rules on monitoring, reporting and verification of greenhouse gas emissions and with the requirements for eligibility to participate in the flexible mechanisms.

Although the EC and the Member States operate in the international climate regime as parties to the Kyoto Protocol and the UNFCCC, compliance with the

Kyoto Protocol obligations is mainly ensured by adequate and specific policies and measures adopted in Brussels and implemented by the Member States. The result of the EU climate policy is reflected in the annual inventories of greenhouse gas emissions released by the European Environment Agency, reporting the aggregate and national data on the levels of greenhouse gas emissions in the EU. In respect of the new Member States' membership of the EU, one of the requirements regarding EU enlargement set by the Copenhagen criteria in 1993, namely implementation of the *acquis communautaire*, obliged the new Member States to ratify the Kyoto Protocol and the UNFCCC (Council Directive 2003/358/EC) and to contribute to the correct implementation and fulfilment of the obligations in those treaties by the Community.

The main legal question considered in this dissertation is to what extent and in what formation the Member States (EU15, EU12, EU25 or EU27) are responsible, under EC law, for a failure by the Community and the Member States to comply with the obligations created by the Kyoto Protocol.

The ratification and implementation of the UNFCCC and the Kyoto Protocol have been included in the *acquis communautaire* through Council Decision 94/69/EC and Council Decision 2002/358/EC. In respect of the new Member States' participation in the international climate regime, a few considerations should be highlighted:

- The new Member States have not negotiated those treaties together with the EU (at the time of the adoption of the Kyoto Protocol, the new Member States formed part of the CG11 negotiating group);
- The new Member States are are not party to the EU Burden Sharing Agreement;
- The new Member States have negotiated and agreed individual greenhouse gas emission reduction commitments under the Kyoto Protocol separately from the EU BSA;
- Article 4 of the Kyoto Protocol does not allow for modification of the joint commitment until the end of the first commitment period.

Article 4 of the Kyoto Protocol specifically addresses parties' commitments under Article 3. It does not make explicit reference to the monitoring, reporting and verification obligations and the eligibility requirements of the Protocol; nor did they come up during the negotiations on that Article. It therefore seems reasonable to affirm that the joint commitment of the Community and the Member States agreed within the framework of Article 4 of the Kyoto Protocol does not apply to the monitoring, reporting and verification obligations and the eligibility requirements. Thus, a distinction must be drawn between the joint commitment to reduce GHG emissions and the other two sets of obligations as regards the responsibility of the Member States for the compliance of the European Community with the Kyoto Protocol obligations.

According to this interpretation, in general, under Community law, the Member States are responsible for the non-compliance by the Community with the Kyoto Protocol obligations. This is due to the fact that the Member States are required to comply with the *acquis communautaire*, and the obligations of the Kyoto Protocol

are part of the *acquis*. This can also be deduced from Council Decision 2002/358/EC, which is an implementation and ratification Decision to be considered together with comitology Decision 2006/944/EC on the assigned amounts for the EC and the Member States and with monitoring Decision 280/2004/EC.

The difference between the EU15 and EU27 based on Article 4 of the Kyoto Protocol is limited to the limitation and reduction commitments. In this regard, it is relevant to mention both the EC Treaty and the jurisprudence of the ECJ. The EC Treaty, in Article 300(7), determines the binding nature in respect of the Community and the Member States of any agreement concluded under Article 300 TEC. The ECJ touched upon the issue of the division of responsibility between the Community and the Member States in case 1/78 where it declared that 'it is not necessary to set out or determine, as regards other Parties to the Convention, the division of powers in this respect between the Community and the Member States, particularly as it may change in the course of time.' In the *Kupferberg* case, the Court confirmed that the Member States must 'fulfil an obligation not only in relation to the non-member country concerned but also and above all in relation to the Community which has assumed responsibility for the due performance of the agreement.'

At this point, a more accurate and detailed analysis distinguishing between the obligations established by the Kyoto Protocol is needed in order to determine the different degree of responsibility of the EC and the Member States for compliance with the Kyoto Protocol obligations.

8.5 Greenhouse Gas Emissions Limitation and Reduction Commitments in the EU

In order to address the issue of responsibility highlighted above, it is necessary to start with the limitation and reduction commitments of the Kyoto Protocol.

In the event of the failure by the EC and the Member States to comply with the quantified emission limitation and reduction commitments under the Kyoto Protocol, the EC and the Member States in breach of those obligations will be declared liable, by the Compliance Committee, for the non-fulfilment of the Kyoto Protocol limitation and reduction commitments and be required to make up the difference between their emissions and the assigned amounts in the second commitment period, including through an additional deduction of 30%. The parties in non-compliance will also be required to submit an action plan indicating the strategy as well as policies and measures to restore compliance, and will be banned from participation in international emissions trading.

In the event of non-compliance by the Community and the Member States with the limitation and reduction commitments, Article 4 of the Kyoto Protocol distinguishes between the joint and the individual responsibility of members of a regional organisation. The compliance by the EC and the Member States with the

joint reduction commitment automatically excludes the liability of any of the EU15 as far as their individual reduction commitments are concerned. Responsibility for the failure to comply with the reduction obligations will be triggered only if the total combined level of GHG emission reductions is not achieved by the EC and the Member States due to the impossibility for the Member States to limit or reduce their greenhouse gas emissions in accordance with the Kyoto Protocol commitments. In that case, responsibility under international and European law may differ.

Under international law, the issue of responsibility of parties that have decided to be jointly bound by the limitation and reduction commitments of the Kyoto Protocol, namely the European Community and the Member States, is regulated in Article 4(5) and (6) of the Protocol which establishes joint responsibility of the EC and the Member States in the event of non-compliance. In such case, the rules of the Kyoto Protocol consider the EC and the Member States first equally responsible for the failure to comply with the joint reduction commitment and at the same time individually responsible for their own levels of GHG emissions. In the event that the EC and the EU15 do not achieve their total combined level of GHG emission reductions, the EC together with those EU15 countries that do not meet the individual limitation and reduction commitments are held responsible under Article 4(6) of the Kyoto Protocol and are therefore subject to the non-compliance procedure of the Kyoto Protocol described in Chap. 6. Thus, under international law, the Compliance Committee will apply to the Community and the respective Member States the consequences of non-compliance in the event that the 8% joint reduction commitment is not achieved. In that case, the EC and the EU15 will be held responsible for the failure to meet, respectively, the joint reduction commitment of 8% and the individual limitation and reduction commitments as set out in the EU Burden Sharing Agreement under Council Decision 2002/358/EC. The EC as a REIO and the EU15 in non-compliance will be excluded from participation in the flexible mechanisms as a consequence of the non-compliance procedure. The new Member States will not be affected internationally by the non-compliance of the EC and the old Member States and will therefore be entitled to participate in the flexible mechanisms, provided that they comply with their individual greenhouse gas emissions reduction commitments.

Under Community law, different considerations apply. The distribution of responsibility between the EC and the Member States for compliance with the obligations of the Kyoto Protocol is a matter that falls under Community law and in this area Article 4 of the Kyoto Protocol is of less influence. The relationship between the Community and the Member States is defined under Community law also in respect of an international agreement like the Kyoto Protocol. This is confirmed by the international climate regime, which refers to EC law for determination of the responsibilities of the Member States regarding the performance of their obligations under both the UNFCCC (Article 22(2)) and the Kyoto Protocol (Article 24(2) and (3)). Under EC law, the competences of the Community and the Member States concerning the Kyoto Protocol are defined in Annex III of Council Decision 2002/358/EC. Furthermore, in a number of cases the European Court of

Justice confirmed that the division of responsibility between the Community and the Member States is a domestic matter falling under Community law (cases 1/78 and 162/96).

Under EC law, the responsibility for non-compliance with the Kyoto Protocol obligations falls upon the EC and the EU15, but also to a certain extent upon the EU12. In the event of non-compliance with the obligation arising from the Burden Sharing Agreement included in Council Decision 2002/358/EC, i.e., the failure by the Community to meet its reduction commitment under international law, the Member States (EU15) are liable and therefore subject to the infringement procedure of the ECJ for failure to implement EC law correctly. The reduction commitment of the European Community laid down in Annex B of the Kyoto Protocol and transposed into EC law by means of Annex II of Council Decision 2002/358/EC applies to the Community and the Member States independently from the limitations created under international law by Article 4 of the Kyoto Protocol. The accession to the EU of twelve new Member States in 2004 and 2007 does not affect the joint commitment of the European Community and the EU15 under the Kyoto Protocol in terms of responsibility under international law. As to Community law, the new Member States are required, under Article 6 of the Act of Accession to the EU, to accede to the agreements or conventions by which the EC and the existing Member States are bound and to implement those treaties in accordance with the details and obligations negotiated by the EC and the existing Member States. Therefore, the new Member States assume a certain degree of responsibility as regards the compliance by the European Community with the Kyoto Protocol obligations. Affirming that the EU12 share with the EU15 the same level of responsibility in respect of the EC's joint GHG emission reduction commitment would probably be too extreme since Annex II of Council Decision 2002/358/EC (EU BSA) addresses only the EU15, and the same applies to Commission Decision 2006/944/EC of 14 December 2006 which determines the emission levels of the EC and the Member States. What is more arguable is the indirect responsibility of the EU12 under EC law, outside of the EU BSA, in the event of the failure by the Community to meet its GHG emission reduction commitment.

The new Member States may be held responsible for the failure by the EC to meet the reduction commitment under the Kyoto Protocol and therefore held liable under EC law for the breach of Article 10 TEC, the 'loyalty principle'; they may also be held liable for the failure to contribute to the correct implementation of international obligations arising from a treaty by which the EC is bound. The obligation of the Member States to have 'full regard to the provisions of Article 10 of the Treaty establishing the European Community' is recalled in Article 2 of Council Decision 2002/358/EC, which addresses the European Community as a whole and therefore the EU27. Further reference to the loyalty principle can be found in the preamble of that Decision. Recital 12 of the preamble stresses once again the responsibility of the Member States regarding the EC commitment, stating that 'the Community and its Member States have an obligation to take measures in order to enable the Community to fulfil its obligation under the

Protocol without prejudice to the responsibility of each Member State towards the Community and other Member States to fulfilling its own commitments.'

The relation between the EC and the EU15 and the new Member States as far as the limitation and reduction commitments are concerned is of great relevance to the performance of the EU in the international climate regime since the EU10 have a considerable GHG emissions reduction surplus which could contribute strongly to the fulfilment of the reduction obligations by the EC and the EU15. It is also true that the EU12 are not listed in Annex II of Council Decision 2002/358/EC and listed separately from the EU15 in the Commission Decision of 14 December 2006 determining the emission levels of the EC and the Member States. In this respect, one could refer to a sort of indirect responsibility of the EU12 in the event of failure by the Community to achieve its 8% reduction commitment. The responsibility of the EU12 may concern the failure to take appropriate measures to ensure the fulfilment of the obligations resulting from Community action under the Kyoto Protocol and the failure to abstain from any measure which could jeopardise the achievement of the Community's objectives.

8.6 Monitoring, Reporting and Verification Obligations and Eligibility Requirements in the EU

Article 4 of the Kyoto Protocol does not refer to the monitoring, reporting and verification obligations and the eligibility requirements. Although failure by the Community and the Member States to comply with the monitoring, reporting and verification obligations and the eligibility requirements may have a minor political impact in comparison with the failure to achieve the limitation and reduction commitments, the consequences applied by the Compliance Committee are of great relevance since they could affect the EC's and Member States' participation in the flexible mechanisms. The MRV obligations and the eligibility requirements apply to Annex I parties, and the Kyoto Protocol and Marrakech Accords do not make any specific reference to a regional economic integration organisation or to any possibility of a joint commitment, as is the case with the limitation and reduction commitments under Article 3(1) of the Kyoto Protocol. In this sense, the EC and the Member States included in the list of Annex I parties (EU25) are individually bound by the Kyoto Protocol. It therefore seems appropriate to affirm that as far as the above-mentioned obligations are concerned, the Kyoto Protocol treats the EC and the Member States as any other Annex I party in terms of responsibility for compliance.

In practice, the conclusion about the responsibility of the Member States for the failure to fulfil the MRV obligations and the eligibility requirements is slightly more complicated. The fulfilment of these obligations by the European Community is related to and depends in great part on the fulfilment of the same obligations by the Member States individually. This is due to the nature of those obligations, namely the collection of information about greenhouse gases and the establishment

of monitoring, reporting and verification mechanisms, which, in the case of the European Community, are simply the result of the aggregate fulfilment by the individual Member States. According to Community law, the greenhouse gas information and technical adjustments arising from the said obligations to the European Community include information and direct inputs from the Member States. The MRV obligations and the eligibility requirements are directly covered by EC legislation, and the system for monitoring and reporting as well as the registry requirements created under EC law are based on the 'full and effective cooperation and coordination' between the EC and the Member States (Article 8 of Decision 280/2004/EC). A situation of potential conflict and overlapping powers between the EC and the Member States may concern their right to use the flexible mechanisms. The 'concurrent exercise of rights' by the EC and the Member States under the UNFCCC and the Kyoto Protocol, as defined in Article 22(2) of the UNFCCC and Article 24(2) of the Kyoto Protocol, does not exclude the right of the Community as Annex I party to make use of the flexible mechanisms.

In that respect, the interests of the Community and the Member States may clash in two ways. As explained in Chap. 6, in the event the Member States do not fulfil the monitoring, reporting and verification obligations or do not meet the eligibility requirements, they are first held responsible under international law and European law for the breach of the implementing measures established by the European Community; secondly, the fulfilment of the same obligations by the European Community will be affected, in particular its eligibility to participate in the flexible mechanisms. The action or inaction by the Member States may jeopardise the eligibility of the EC as Annex I party to participate in the flexible mechanisms and therefore put at risk the achievement of the joint reduction commitment of the EC and the EU15. Indeed, the EC may consider the implementation of the flexible mechanisms, such as trading of assigned amount units under international emissions trading, as a last-minute option to solve the difficulties of the Member States in complying with their assigned amounts. As a consequence of the failure by the Member States to comply with the Kyoto Protocol MRV obligations and eligibility criteria, the EC would be prevented from exchanging assigned amount units under IET. In that case, the EC's capacity to act under international law in response to obligations arising from an international treaty to which the EC and the Member States are both committed would be hindered by the deficient implementation of those rules by the Member States. In other words, the failure by the Member States to act at the domestic level in order to comply with the international and European community obligations under the international climate regime would hamper the position of the EC at the international level.

Moreover, the failure by the EU27 to comply with the MRV obligations may affect the Community in the event of an adjustment to the national greenhouse gas inventory resulting from a dispute between a party and the expert review team (Article 5(2)) and a correction to the holdings of assigned amounts in case of a dispute between a party and the expert review team over the validity of a transaction (Article 7(4)). What the ERT could do is recommend an adjustment to the

EC GHG inventory in case the assigned amount and the commitment period reserve calculated by the Member States are not in accordance with the modalities for the accounting of assigned amounts under Article 7(4) of the Kyoto Protocol and Decision 11/CMP.1.

Any imperfections and failure on the part of the Member States to comply with the MRV obligations and eligibility requirements could affect the EC and provoke non-compliance by the EC with the Kyoto Protocol obligations. Such action or inaction by the Member States would result in a breach of EC legislation, namely Council Decision 2002/358/EC and the incorrect implementation of the Kyoto Protocol, Article 300(7) of the EC Treaty and all direct legislation adopted by the Community to comply with the MRV obligations and the eligibility requirements.

8.7 Article 10 EC Treaty

Pursuant to Article 10 TEC, the Member States shall ensure 'fulfilment of the obligations arising out of this Treaty or resulting from action taken by the institutions of the Community,' contribute to the 'achievement of the Community's tasks' and refrain from taking any measure which 'could jeopardise the attainment of the objectives of this Treaty.'

Article 10 TEC is explicitly recalled in Council Decision 2002/358/EC where Article 2 states that 'the European Community and its Member States shall fulfil their commitments under Article 3(1) of the Protocol jointly, in accordance with the provisions of Article 4 thereof, and with full regard to the provisions of Article 10 of the Treaty establishing the European Community.'

In the implementation of mixed agreements the difference between old and new Member States is not relevant from the perspective of Community law. The jurisprudence of the European Court of Justice on Article 10 TEC is clear in this respect. At the international level, the EC and the Member States should be able to speak with one voice from the negotiation to the implementation phase. Member States have a duty to cooperate with the EC in the negotiation, conclusion and fulfilment of mixed agreements and to ensure unity in the Community's position in international negotiations. In opinions 1/78 and 1/94 and case 25/94 the Court made clear that 'the obligation to cooperate flows from the requirement of unity in the international representation of the Community.'

Article 10 TEC establishes an obligation of cooperation between the Community and the Member States for the purpose of achieving the tasks and objectives of the European Community. Environmental protection is one of the main objectives of the activities of the European Union institutions and Member States (Articles 2, 3 and 4 of the EC Treaty). The fight against global warming and the mitigation and reduction of the impacts and adverse effects of climate change in the EU are among the main objectives and priorities of the European Community. This has been confirmed by, amongst others, the EU Presidency Conclusions of

March 2007, the draft of the EU Reform Treaty and the Treaty on the Functioning of the European Union.

Article 10 TEC can be invoked only in the event that secondary EC legislation is lacking or does not cover a specific issue to a sufficient extent. Article 10 will apply only if there is no *lex specialis* regulating the same matter, or, in other words, where a gap in Community legislation exists which can be filled by applying the principle of loyal cooperation.

In *Kupferberg*, the ECJ reiterated 'the duty [of the Member States] to abstain from any measure which could put the Community in a non-compliance situation with a treaty to which the Community is a party' and confirmed the duty of the Member States 'to ensure their uniform application throughout the Community'. Furthermore, in case 246/07, the Court considered the unilateral action of a Member State in respect of an international agreement to be in breach of the principle of loyal cooperation.

A few general duties for the Member States in the application of Article 10 TEC can be derived from the jurisprudence of the EU Courts on the subject and from the comparative law study of similar principles enshrined in the legal systems of the Member States, in particular the *Bundestreue* in Germany.

Three main obligations for the Member States in the fulfilment of the European Community and Member States obligations under the international climate regime have been identified:

- Duty to take any reasonable effort;
- Duty to give preference to the EC and the EU15 in the exchange of GHG emission reduction units under international emissions trading (duty to abstain);
- Duty to avoid any action or inaction which could jeopardise the participation of the European Community in the flexible mechanisms.

In respect of the monitoring, reporting and verification obligations and the eligibility requirements under the Kyoto Protocol, clear and direct legislation has been adopted by the Community, including Decision 2002/358/EC on the approval of the Kyoto Protocol by the European Community and the Member States, Decision 280/2004/EC concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol, Commission Regulation 994/2008/EC for a standardised and secured system of registries pursuant to Directive 2003/87/EC and Commission Regulation 916/2007/EC amending Decision 280/2004/EC. If a Member State is not in compliance with Community legislation, the European Commission is entitled to open an infringement procedure. Article 10 TEC is not applicable because of the principle of *lex specialis* prevailing over *lex generalis*. However, the failure by the Member States to correctly implement EC legislation in the area of monitoring, reporting and verification obligations and eligibility requirements may determine the non-compliance of the Community with the Kyoto Protocol as an Annex I party. In such case, although clear and direct legislation is in place at the Community level, the effects on the position of the EC *vis-à-vis* its international obligations as a result of the non-compliance by the Member States with Community secondary

legislation may be seen as a breach of the principle of loyal cooperation between the Community and the Member States in the implementation of an international agreement, thus representing an additional argument for opening an infringement procedure against the Member States.

As far as the limitation and reduction commitments are concerned, the role of the principle of loyal cooperation enshrined in Article 10 TEC is emphasised by the preamble and Article 2 of Council Decision 2002/358/EC. Furthermore, a gap in Community legislation may exist in respect of the reduction commitments as far as the EU12 are concerned. Council Decision 2002/358/EC does not mention the new Member States and therefore the reference to Article 10 TEC could be interpreted in the sense of the Community institutions filling that gap. The Member States 'shall facilitate the achievement of the Community's tasks' by assisting the Community in meeting its reduction target (−8%), either through domestic actions or via the implementation of flexible mechanisms, and 'shall abstain from any measures which could jeopardise' the compliance by the EC with the Kyoto Protocol reduction obligations.

8.8 New Member States

The above considerations apply to all Member States, including the new Member States that joined the EU in 2004 and 2007. What makes the participation of the new Member States in the Kyoto Protocol and their potential contribution to the reduction commitments of the Community very interesting is the large amount of 'hot air' or surplus of GHG emission reduction units (assigned amount units) at their disposal.

The new Member States are bound by the international obligations contracted by the European Community before their accession in accordance with Article 6(1) of the Act of Accession to the EU (2003). In particular, Article 6(2) of the Act of Accession clearly refers to those agreements and conventions under which the Community and the Member States have decided to act jointly. Therefore, the fact that the new Member States are not mentioned in Annex II to Council Decision 2002/358/EC does not exclude those states' participation in and commitment towards the obligations of the European Community under the international climate regime.

Although the new Member States have negotiated and agreed their GHG emission limitation and reduction commitments under the Kyoto Protocol independently from the EC, the principle of loyal cooperation obliges them to act in a way which does not jeopardise the ability of the EC and the Member States to meet the obligations of the Community under the EC Treaty or 'resulting from action taken by the institutions of the Community'.

In the *Kupferberg* case, the ECJ confirmed, as mentioned in Chap. 6, the direct effect of international agreements under EC law, that is to say, the fact that an international agreement is part of the Community legal system and, consequently,

that the Member States are responsible for the fulfilment of an obligation arising from that agreement not only on their own behalf but 'above all in relation to the Community which has assumed the responsibility for the due performance of the agreement.' The Member States' contribution to the achievement of the limitation and reduction commitments of the EC under the Kyoto Protocol is, in accordance with the position of the ECJ in the *Kupferberg* case, part of the Community legal system and therefore an obligation of the Member States under Community law.

At the time of writing, the inventories of the level of greenhouse gas emissions established by the European Environment Agency show a low probability that the new Member States, apart from Slovenia, are not in compliance with their limitation and reduction commitments under the Kyoto Protocol. The situation is different when considering the obligations in respect of the monitoring, reporting and verification obligations as well as the eligibility requirements for participation in the flexible mechanisms. As to the latter, not all new Member States are in compliance with these obligations. Consequently, they are excluded from participation in the international trading of assigned amount units, following the decision of the Compliance Committee. As this affects the eligibility of the EC as a whole, it may be considered a violation of Article 10 TEC by those Member States. In fact, the failure by these countries to comply with the Kyoto Protocol monitoring, reporting and verification obligations as well as with the eligibility requirements would exclude any possibility for the new Member States to contribute with their AAUs surplus to meeting the obligations of the EC under international law, namely those regarding the compliance with the quantified emission and limitation reduction commitments. The non-compliance by the new Member States with the monitoring, reporting and verification obligations and the eligibility requirements may affect the right of the EC to participate in the flexible mechanisms and may indirectly limit the EC's ability to exchange Kyoto units in the international market (IET, JI and CDM).

As to the limitation and reduction commitments of the Community and the EU15 under the Kyoto Protocol, the role of the new Member States has to be considered in relation to the GHG emission surplus and the potential transfer of AAUs from the new Member States to the EC and the EU15 via the international carbon market. The transfer of AAUs from the new Member States to other Annex I parties in order to achieve compliance with the Kyoto Protocol obligations usually takes place through a Memorandum of Understanding, namely a bilateral agreement between two sovereign states. Can the conclusion of an MoU by a new Member State with a non-EU15 state be considered an action which could jeopardise the achievement of the Community's objectives under international law? The existence of a limitation to the new Member States' freedom to transfer AAUs to any Annex I party other than the Community and the EU15 may be based on different arguments and mainly on the jurisprudence of the ECJ. Membership of the EU represents in itself a voluntary limitation to the sovereignty of the Member States, and, to a certain extent, a limitation to the right to enter into treaties with other states. Article 10 TEC requires the Member States to act in good faith with the aim of achieving the objectives of the Treaty. Therefore, the room for

manoeuvre as regards the conclusion of an agreement between a Member State and a non-EU country is limited to those actions which do not hinder the achievement of the Community's objectives and the compliance of the EC with its international obligations. In case 229/89, *Commission* v. *Belgium*, the ECJ stated that the Member States are obliged not to enter into negotiations with non-Member States or conclude any treaties where these could interfere with the Community's objectives. Furthermore, in case 471/98, *Commission* v. *Belgium*, the Court declared it contrary to Article 10 TEC if a Member State enters into bilateral air navigation agreements with a state non-member of the EU. According to the Court, the achievement of the Community's tasks and objectives would be 'compromised if Member States were able to enter into international commitments containing rules capable of affecting rules adopted by the Community or altering their scope.' In this case, Advocate General Tizzano confirmed that Member States and the Community institutions are required to cooperate in response to Article 10 TEC as regards the international agreements concluded under Community law. In the claim, the Commission stressed that 'by having individually negotiated, initialled and concluded, in 1995, and applied an open skies agreement with the United States of America in the field of transport, the Kingdom of Belgium has failed to fulfil its obligations under the EC Treaty.'

The reasoning of the Commission in this case and the parallel with the individual action of a Member State in respect of the negotiation, conclusion and application of a Memorandum of Understanding with another Member State regarding the transfer of AAUs seem reasonable and are of great relevance to the considerations developed in this book. Thus, the jurisprudence of the Court and the text of Article 10(2) TEC seem sufficient to provide a solid and valid legal argument to establish that the conclusion by a Member State of a cooperation agreement with another country on the sale of AAUs is a breach of Community law.

Actions or inactions of the Member States which could justify a legal action against the Member State for failure to comply with Article 10 TEC in the field of the obligations created by the Kyoto Protocol—both in terms of assisting the EC in meeting its limitation and reduction commitments and in terms of not jeopardising the fulfilment by the EC of those requirements—could be:

- Non-fulfilment and non-maintenance of the eligibility to participate in the flexible mechanisms;
- Incorrect implementation of EC legislation aimed at the achievement of the obligations of the Kyoto Protocol;
- Blocking the adoption of EC legislation that could contribute to the achievement of the EC's compliance with the limitation and reduction commitments under the Kyoto Protocol.

Under Community law, the consequence of a Member State's failure to comply with the Kyoto Protocol obligations is the initiation of an infringement procedure in accordance with Article 226 of the EC Treaty.

The distinction between the limitation and reduction commitments and the MRV obligations and eligibility requirements is evident when assessing the potential breach of EC law by the Member States. Regarding the limitation and reduction commitments and the failure by the Member States to meet their individual targets set in Council Decision 2002/358/EC, it concerns the incorrect application of an EC decision as well as the breach of a general principle of EC law, namely Article 10 TEC. In the case of the monitoring, reporting and verification obligations and eligibility requirements, it involves the failure by the Member States to implement existing and specific EC legislation, although a separate or parallel breach of Article 10 TEC cannot be excluded a priori. As far as the limitation and reduction commitments are concerned, although the details of the Burden Sharing Agreement are included in Council Decision 2002/358/EC, there is no specific EC legislation aimed directly at the achievement of the GHG emission limitation and reduction commitments agreed by the EC and the Member States under the Kyoto Protocol. On the other hand, this study has shown the existence of several pieces of EC legislation adopted to fulfil the monitoring, reporting and verification obligations as well as the eligibility requirements.

It may be concluded that in respect of the monitoring, reporting and verification obligations as well as the eligibility requirements, the European Community and the EU27 are, respectively, directly and indirectly responsible for the compliance with the MRV and eligibility requirements of the Kyoto Protocol and therefore potentially subject to the consequences of non-compliance determined by the Compliance Committee. Under European Community law, the EU27 are responsible for compliance with EC legislation on this matter. In this regard, Article 10 TEC is not applicable since there is secondary EC legislation in place. The possibility to apply Article 10 TEC is valid only in the event that failure by the Member States to comply with EC legislation triggers non-compliance by the Community with the Kyoto Protocol monitoring, reporting and verification obligations and therefore liability under international law.

In terms of the limitation and reduction commitments, under international law, the European Community and the EU15 are held responsible in the event that the 8% reduction commitment is not achieved. Under European Community law, the EU15 and the EU12 are, respectively, directly and indirectly (co-)responsible for the compliance of the European Community with the greenhouse gas emission limitation and reduction commitments of the Kyoto Protocol. Article 10 TEC may be applicable to the Member States in the case of the failure by the Community to comply with the 8% reduction commitments since secondary legislation is not clear enough and a gap in Community law may exist.

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UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

UNITED NATIONS
1992

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UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

The Parties to this Convention,

Acknowledging that change in the Earth's climate and its adverse effects are a common concern of humankind,

Concerned that human activities have been substantially increasing the atmospheric concentrations of greenhouse gases, that these increases enhance the natural greenhouse effect, and that this will result on average in an additional warming of the Earth's surface and atmosphere and may adversely affect natural ecosystems and humankind,

Noting that the largest share of historical and current global emissions of greenhouse gases has originated in developed countries, that per capita emissions in developing countries are still relatively low and that the share of global emissions originating in developing countries will grow to meet their social and development needs,

Aware of the role and importance in terrestrial and marine ecosystems of sinks and reservoirs of greenhouse gases,

Noting that there are many uncertainties in predictions of climate change, particularly with regard to the timing, magnitude and regional patterns thereof,

Acknowledging that the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response, in accordance with their common but differentiated responsibilities and respective capabilities and their social and economic conditions,

Recalling the pertinent provisions of the Declaration of the United Nations Conference on the Human Environment, adopted at Stockholm on 16 June 1972,

Recalling also that States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction,

Reaffirming the principle of sovereignty of States in international cooperation to address climate change,

Recognizing that States should enact effective environmental legislation, that environmental standards, management objectives and priorities should reflect the environmental and developmental context to which they apply, and that standards applied by some countries may be inappropriate and of unwarranted economic and social cost to other countries, in particular developing countries,

Recalling the provisions of General Assembly resolution 44/228 of 22 December 1989 on the United Nations Conference on Environment and Development, and resolutions 43/53 of 6 December 1988, 44/207 of 22 December 1989, 45/212 of 21 December 1990 and 46/169 of 19 December 1991 on protection of global climate for present and future generations of mankind,

Recalling also the provisions of General Assembly resolution 44/206 of 22 December 1989 on the possible adverse effects of sea-level rise on islands and coastal areas, particularly low-lying coastal areas and the pertinent provisions of General Assembly resolution 44/172 of 19 December 1989 on the implementation of the Plan of Action to Combat Desertification,

Recalling further the Vienna Convention for the Protection of the Ozone Layer, 1985, and the Montreal Protocol on Substances that Deplete the Ozone Layer, 1987, as adjusted and amended on 29 June 1990,

Noting the Ministerial Declaration of the Second World Climate Conference adopted on 7 November 1990,

Conscious of the valuable analytical work being conducted by many States on climate change and of the important contributions of the World Meteorological Organization, the United Nations Environment Programme and other organs, organizations and bodies of the United Nations system, as well as other international and intergovernmental bodies, to the exchange of results of scientific research and the coordination of research,

Recognizing that steps required to understand and address climate change will be environmentally, socially and economically most effective if they are based on relevant scientific, technical and economic considerations and continually re-evaluated in the light of new findings in these areas,

Recognizing that various actions to address climate change can be justified economically in their own right and can also help in solving other environmental problems,

Recognizing also the need for developed countries to take immediate action in a flexible manner on the basis of clear priorities, as a first step towards comprehensive response strategies at the global, national and, where agreed, regional levels that take into account all greenhouse gases, with due consideration of their relative contributions to the enhancement of the greenhouse effect,

Recognizing further that low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change,

Recognizing the special difficulties of those countries, especially developing countries, whose economies are particularly dependent on fossil fuel production, use and exportation, as a consequence of action taken on limiting greenhouse gas emissions,

Affirming that responses to climate change should be coordinated with social and economic development in an integrated manner with a view to avoiding adverse impacts on the latter, taking into full account the legitimate priority needs of developing countries for the achievement of sustained economic growth and the eradication of poverty,

Recognizing that all countries, especially developing countries, need access to resources required to achieve sustainable social and economic development and that, in order for developing countries to progress towards that goal, their energy consumption will need to grow taking into account the possibilities for achieving greater energy efficiency and for controlling greenhouse gas emissions in general, including through the application of new technologies on terms which make such an application economically and socially beneficial,

Determined to protect the climate system for present and future generations,

Have agreed as follows:

Article 1

DEFINITIONS*

For the purposes of this Convention:

1. "Adverse effects of climate change" means changes in the physical environment or biota resulting from climate change which have significant deleterious effects on the composition, resilience or productivity of natural and managed ecosystems or on the operation of socio-economic systems or on human health and welfare.

2. "Climate change" means a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.

3. "Climate system" means the totality of the atmosphere, hydrosphere, biosphere and geosphere and their interactions.

4. "Emissions" means the release of greenhouse gases and/or their precursors into the atmosphere over a specified area and period of time.

5. "Greenhouse gases" means those gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and re-emit infrared radiation.

6. "Regional economic integration organization" means an organization constituted by sovereign States of a given region which has competence in respect of matters governed by this Convention or its protocols and has been duly authorized, in accordance with its internal procedures, to sign, ratify, accept, approve or accede to the instruments concerned.

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* Titles of articles are included solely to assist the reader.

7. "Reservoir" means a component or components of the climate system where a greenhouse gas or a precursor of a greenhouse gas is stored.

8. "Sink" means any process, activity or mechanism which removes a greenhouse gas, an aerosol or a precursor of a greenhouse gas from the atmosphere.

9. "Source" means any process or activity which releases a greenhouse gas, an aerosol or a precursor of a greenhouse gas into the atmosphere.

Article 2

OBJECTIVE

The ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.

Article 3

PRINCIPLES

In their actions to achieve the objective of the Convention and to implement its provisions, the Parties shall be guided, inter alia, by the following:

1. The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof.

2. The specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, and of those Parties, especially developing country Parties, that would have to bear a disproportionate or abnormal burden under the Convention, should be given full consideration.

3. The Parties should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures, taking into account that policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost. To achieve this, such policies and measures should take into account different socio-economic contexts, be comprehensive, cover all relevant sources, sinks and reservoirs of greenhouse gases and adaptation, and comprise all economic sectors. Efforts to address climate change may be carried out cooperatively by interested Parties.

4. The Parties have a right to, and should, promote sustainable development. Policies and measures to protect the climate system against human-induced change should be appropriate for the specific conditions of each Party and should be integrated with national development programmes, taking into account that economic development is essential for adopting measures to address climate change.

5. The Parties should cooperate to promote a supportive and open international economic system that would lead to sustainable economic growth and development in all Parties, particularly developing country Parties, thus enabling them better to address the problems of climate change. Measures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade.

Article 4

COMMITMENTS

1. All Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, shall:

(a) Develop, periodically update, publish and make available to the Conference of the Parties, in accordance with Article 12, national inventories of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, using comparable methodologies to be agreed upon by the Conference of the Parties;

(b) Formulate, implement, publish and regularly update national and, where appropriate, regional programmes containing measures to mitigate climate change by addressing anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, and measures to facilitate adequate adaptation to climate change;

(c) Promote and cooperate in the development, application and diffusion, including transfer, of technologies, practices and processes that control, reduce or prevent anthropogenic emissions of greenhouse gases not controlled by the Montreal Protocol in all relevant sectors, including the energy, transport, industry, agriculture, forestry and waste management sectors;

(d) Promote sustainable management, and promote and cooperate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all greenhouse gases not controlled by the Montreal Protocol, including biomass, forests and oceans as well as other terrestrial, coastal and marine ecosystems;

(e) Cooperate in preparing for adaptation to the impacts of climate change; develop and elaborate appropriate and integrated plans for coastal zone management, water resources and agriculture, and for the protection and rehabilitation of areas, particularly in Africa, affected by drought and desertification, as well as floods;

(f) Take climate change considerations into account, to the extent feasible, in their relevant social, economic and environmental policies and actions, and employ appropriate methods, for example impact assessments, formulated and determined nationally, with a view to minimizing adverse effects on the economy, on public health and on the quality of the environment, of projects or measures undertaken by them to mitigate or adapt to climate change;

(g) Promote and cooperate in scientific, technological, technical, socio-economic and other research, systematic observation and development of data archives related to the climate system and intended to further the understanding and to reduce or eliminate the remaining uncertainties regarding the causes, effects, magnitude and timing of climate change and the economic and social consequences of various response strategies;

(h) Promote and cooperate in the full, open and prompt exchange of relevant scientific, technological, technical, socio-economic and legal information related to the climate system and climate change, and to the economic and social consequences of various response strategies;

(i) Promote and cooperate in education, training and public awareness related to climate change and encourage the widest participation in this process, including that of non-governmental organizations; and

(j) Communicate to the Conference of the Parties information related to implementation, in accordance with Article 12.

2. The developed country Parties and other Parties included in Annex I commit themselves specifically as provided for in the following:

(a) Each of these Parties shall adopt national[1] policies and take corresponding measures on the mitigation of climate change, by limiting its anthropogenic emissions of greenhouse gases and protecting and enhancing its greenhouse gas sinks and reservoirs. These policies and measures will demonstrate that developed countries are taking the lead in modifying longer-term trends in anthropogenic emissions consistent with the objective of the Convention, recognizing that the return by the end of the present decade to earlier levels of anthropogenic emissions of carbon dioxide and other greenhouse gases not controlled by the Montreal Protocol would contribute to such modification, and taking into account the differences in these Parties' starting points and approaches, economic structures and resource bases, the need to maintain strong and sustainable economic growth, available technologies and other individual circumstances, as well as the need for equitable and appropriate contributions by each of these Parties to the global effort regarding that objective. These Parties may implement such policies and measures jointly with other Parties and may assist other Parties in contributing to the achievement of the objective of the Convention and, in particular, that of this subparagraph;

[1] This includes policies and measures adopted by regional economic integration organizations.

(b) In order to promote progress to this end, each of these Parties shall communicate, within six months of the entry into force of the Convention for it and periodically thereafter, and in accordance with Article 12, detailed information on its policies and measures referred to in subparagraph (a) above, as well as on its resulting projected anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol for the period referred to in subparagraph (a), with the aim of returning individually or jointly to their 1990 levels these anthropogenic emissions of carbon dioxide and other greenhouse gases not controlled by the Montreal Protocol. This information will be reviewed by the Conference of the Parties, at its first session and periodically thereafter, in accordance with Article 7;

(c) Calculations of emissions by sources and removals by sinks of greenhouse gases for the purposes of subparagraph (b) above should take into account the best available scientific knowledge, including of the effective capacity of sinks and the respective contributions of such gases to climate change. The Conference of the Parties shall consider and agree on methodologies for these calculations at its first session and review them regularly thereafter;

(d) The Conference of the Parties shall, at its first session, review the adequacy of subparagraphs (a) and (b) above. Such review shall be carried out in the light of the best available scientific information and assessment on climate change and its impacts, as well as relevant technical, social and economic information. Based on this review, the Conference of the Parties shall take appropriate action, which may include the adoption of amendments to the commitments in subparagraphs (a) and (b) above. The Conference of the Parties, at its first session, shall also take decisions regarding criteria for joint implementation as indicated in subparagraph (a) above. A second review of subparagraphs (a) and (b) shall take place not later than 31 December 1998, and thereafter at regular intervals determined by the Conference of the Parties, until the objective of the Convention is met;

(e) Each of these Parties shall:

(i) coordinate as appropriate with other such Parties, relevant economic and administrative instruments developed to achieve the objective of the Convention; and

(ii) identify and periodically review its own policies and practices which encourage activities that lead to greater levels of anthropogenic emissions of greenhouse gases not controlled by the Montreal Protocol than would otherwise occur;

(f) The Conference of the Parties shall review, not later than 31 December 1998, available information with a view to taking decisions regarding such amendments to the lists in Annexes I and II as may be appropriate, with the approval of the Party concerned;

(g) Any Party not included in Annex I may, in its instrument of ratification, acceptance, approval or accession, or at any time thereafter, notify the Depositary that it intends to be bound by subparagraphs (a) and (b) above. The Depositary shall inform the other signatories and Parties of any such notification.

3. The developed country Parties and other developed Parties included in Annex II shall provide new and additional financial resources to meet the agreed full costs incurred by developing country Parties in complying with their obligations under Article 12, paragraph 1. They shall also provide such financial resources, including for the transfer of technology, needed by the developing country Parties to meet the agreed full incremental costs of implementing measures that are covered by paragraph 1 of this Article and that are agreed between a developing country Party and the international entity or entities referred to in Article 11, in accordance with that Article. The implementation of these commitments shall take into account the need for adequacy and predictability in the flow of funds and the importance of appropriate burden sharing among the developed country Parties.

4. The developed country Parties and other developed Parties included in Annex II shall also assist the developing country Parties that are particularly vulnerable to the adverse effects of climate change in meeting costs of adaptation to those adverse effects.

5. The developed country Parties and other developed Parties included in Annex II shall take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies and know-how to other Parties, particularly developing country Parties, to enable them to implement the provisions of the Convention. In this process, the developed country Parties shall support the development and enhancement of endogenous capacities and technologies of developing country Parties. Other Parties and organizations in a position to do so may also assist in facilitating the transfer of such technologies.

6. In the implementation of their commitments under paragraph 2 above, a certain degree of flexibility shall be allowed by the Conference of the Parties to the Parties included in Annex I undergoing the process of transition to a market economy, in order to enhance the ability of these Parties to address climate change, including with regard to the historical level of anthropogenic emissions of greenhouse gases not controlled by the Montreal Protocol chosen as a reference.

7. The extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country Parties of their commitments under the Convention related to financial resources and transfer of technology and will take fully into account that economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties.

8. In the implementation of the commitments in this Article, the Parties shall give full consideration to what actions are necessary under the Convention, including actions related to funding, insurance and the transfer of technology, to meet the specific needs and concerns of developing country Parties arising from the adverse effects of climate change and/or the impact of the implementation of response measures, especially on:

(a) Small island countries;

(b) Countries with low-lying coastal areas;

(c) Countries with arid and semi-arid areas, forested areas and areas liable to forest decay;

(d) Countries with areas prone to natural disasters;

(e) Countries with areas liable to drought and desertification;

(f) Countries with areas of high urban atmospheric pollution;

(g) Countries with areas with fragile ecosystems, including mountainous ecosystems;

(h) Countries whose economies are highly dependent on income generated from the production, processing and export, and/or on consumption of fossil fuels and associated energy-intensive products; and

(i) Landlocked and transit countries.

Further, the Conference of the Parties may take actions, as appropriate, with respect to this paragraph.

9. The Parties shall take full account of the specific needs and special situations of the least developed countries in their actions with regard to funding and transfer of technology.

10. The Parties shall, in accordance with Article 10, take into consideration in the implementation of the commitments of the Convention the situation of Parties, particularly developing country Parties, with economies that are vulnerable to the adverse effects of the implementation of measures to respond to climate change. This applies notably to Parties with economies that are highly dependent on income generated from the production, processing and export, and/or consumption of fossil fuels and associated energy-intensive products and/or the use of fossil fuels for which such Parties have serious difficulties in switching to alternatives.

Article 5

RESEARCH AND SYSTEMATIC OBSERVATION

In carrying out their commitments under Article 4, paragraph 1 (g), the Parties shall:

(a) Support and further develop, as appropriate, international and intergovernmental programmes and networks or organizations aimed at defining, conducting, assessing and financing research, data collection and systematic observation, taking into account the need to minimize duplication of effort;

(b) Support international and intergovernmental efforts to strengthen systematic observation and national scientific and technical research capacities and capabilities, particularly in developing countries, and to promote access to, and the exchange of, data and analyses thereof obtained from areas beyond national jurisdiction; and

(c) Take into account the particular concerns and needs of developing countries and cooperate in improving their endogenous capacities and capabilities to participate in the efforts referred to in subparagraphs (a) and (b) above.

Article 6

EDUCATION, TRAINING AND PUBLIC AWARENESS

In carrying out their commitments under Article 4, paragraph 1 (i), the Parties shall:

(a) Promote and facilitate at the national and, as appropriate, subregional and regional levels, and in accordance with national laws and regulations, and within their respective capacities:

(i) the development and implementation of educational and public awareness programmes on climate change and its effects;

(ii) public access to information on climate change and its effects;

(iii) public participation in addressing climate change and its effects and developing adequate responses; and

(iv) training of scientific, technical and managerial personnel;

(b) Cooperate in and promote, at the international level, and, where appropriate, using existing bodies:

(i) the development and exchange of educational and public awareness material on climate change and its effects; and

(ii) the development and implementation of education and training programmes, including the strengthening of national institutions and the exchange or secondment of personnel to train experts in this field, in particular for developing countries.

Article 7

CONFERENCE OF THE PARTIES

1. A Conference of the Parties is hereby established.

2. The Conference of the Parties, as the supreme body of this Convention, shall keep under regular review the implementation of the Convention and any related legal instruments that the Conference of the Parties may adopt, and shall make, within its mandate, the decisions necessary to promote the effective implementation of the Convention. To this end, it shall:

(a) Periodically examine the obligations of the Parties and the institutional arrangements under the Convention, in the light of the objective of the Convention, the experience gained in its implementation and the evolution of scientific and technological knowledge;

(b) Promote and facilitate the exchange of information on measures adopted by the Parties to address climate change and its effects, taking into account the differing circumstances, responsibilities and capabilities of the Parties and their respective commitments under the Convention;

(c) Facilitate, at the request of two or more Parties, the coordination of measures adopted by them to address climate change and its effects, taking into account the differing circumstances, responsibilities and capabilities of the Parties and their respective commitments under the Convention;

(d) Promote and guide, in accordance with the objective and provisions of the Convention, the development and periodic refinement of comparable methodologies, to be agreed on by the Conference of the Parties, inter alia, for preparing inventories of greenhouse gas emissions by sources and removals by sinks, and for evaluating the effectiveness of measures to limit the emissions and enhance the removals of these gases;

(e) Assess, on the basis of all information made available to it in accordance with the provisions of the Convention, the implementation of the Convention by the Parties, the overall effects of the measures taken pursuant to the Convention, in particular environmental, economic and social effects as well as their cumulative impacts and the extent to which progress towards the objective of the Convention is being achieved;

(f) Consider and adopt regular reports on the implementation of the Convention and ensure their publication;

(g) Make recommendations on any matters necessary for the implementation of the Convention;

(h) Seek to mobilize financial resources in accordance with Article 4, paragraphs 3, 4 and 5, and Article 11;

(i) Establish such subsidiary bodies as are deemed necessary for the implementation of the Convention;

(j) Review reports submitted by its subsidiary bodies and provide guidance to them;

(k) Agree upon and adopt, by consensus, rules of procedure and financial rules for itself and for any subsidiary bodies;

(l) Seek and utilize, where appropriate, the services and cooperation of, and information provided by, competent international organizations and intergovernmental and non-governmental bodies; and

(m) Exercise such other functions as are required for the achievement of the objective of the Convention as well as all other functions assigned to it under the Convention.

3. The Conference of the Parties shall, at its first session, adopt its own rules of procedure as well as those of the subsidiary bodies established by the Convention, which shall include decision-making procedures for matters not already covered by decision-making procedures stipulated in the Convention. Such procedures may include specified majorities required for the adoption of particular decisions.

4. The first session of the Conference of the Parties shall be convened by the interim secretariat referred to in Article 21 and shall take place not later than one year after the date of entry into force of the Convention. Thereafter, ordinary sessions of the Conference of the Parties shall be held every year unless otherwise decided by the Conference of the Parties.

5. Extraordinary sessions of the Conference of the Parties shall be held at such other times as may be deemed necessary by the Conference, or at the written request of any Party, provided that, within six months of the request being communicated to the Parties by the secretariat, it is supported by at least one third of the Parties.

6. The United Nations, its specialized agencies and the International Atomic Energy Agency, as well as any State member thereof or observers thereto not Party to the Convention, may be represented at sessions of the Conference of the Parties as observers. Any body or agency, whether national or international, governmental or non-governmental, which is qualified in matters covered by the Convention, and which has informed the secretariat of its wish to be represented at a session of the Conference of the Parties as an observer, may be so admitted unless at least one third of the Parties present object. The admission and participation of observers shall be subject to the rules of procedure adopted by the Conference of the Parties.

Article 8

SECRETARIAT

1. A secretariat is hereby established.

2. The functions of the secretariat shall be:

(a) To make arrangements for sessions of the Conference of the Parties and its subsidiary bodies established under the Convention and to provide them with services as required;

(b) To compile and transmit reports submitted to it;

(c) To facilitate assistance to the Parties, particularly developing country Parties, on request, in the compilation and communication of information required in accordance with the provisions of the Convention;

(d) To prepare reports on its activities and present them to the Conference of the Parties;

(e) To ensure the necessary coordination with the secretariats of other relevant international bodies;

(f) To enter, under the overall guidance of the Conference of the Parties, into such administrative and contractual arrangements as may be required for the effective discharge of its functions; and

(g) To perform the other secretariat functions specified in the Convention and in any of its protocols and such other functions as may be determined by the Conference of the Parties.

3. The Conference of the Parties, at its first session, shall designate a permanent secretariat and make arrangements for its functioning.

Article 9

SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE

1. A subsidiary body for scientific and technological advice is hereby established to provide the Conference of the Parties and, as appropriate, its other subsidiary bodies with timely information and advice on scientific and technological matters relating to the Convention. This body shall be open to participation by all Parties and shall be multidisciplinary. It shall comprise government representatives competent in the relevant field of expertise. It shall report regularly to the Conference of the Parties on all aspects of its work.

2. Under the guidance of the Conference of the Parties, and drawing upon existing competent international bodies, this body shall:

(a) Provide assessments of the state of scientific knowledge relating to climate change and its effects;

(b) Prepare scientific assessments on the effects of measures taken in the implementation of the Convention;

(c) Identify innovative, efficient and state-of-the-art technologies and know-how and advise on the ways and means of promoting development and/or transferring such technologies;

(d) Provide advice on scientific programmes, international cooperation in research and development related to climate change, as well as on ways and means of supporting endogenous capacity-building in developing countries; and

(e) Respond to scientific, technological and methodological questions that the Conference of the Parties and its subsidiary bodies may put to the body.

3. The functions and terms of reference of this body may be further elaborated by the Conference of the Parties.

Article 10

SUBSIDIARY BODY FOR IMPLEMENTATION

1. A subsidiary body for implementation is hereby established to assist the Conference of the Parties in the assessment and review of the effective implementation of the Convention. This body shall be open to participation by all Parties and comprise government representatives who are experts on matters related to climate change. It shall report regularly to the Conference of the Parties on all aspects of its work.

2. Under the guidance of the Conference of the Parties, this body shall:

(a) Consider the information communicated in accordance with Article 12, paragraph 1, to assess the overall aggregated effect of the steps taken by the Parties in the light of the latest scientific assessments concerning climate change;

(b) Consider the information communicated in accordance with Article 12, paragraph 2, in order to assist the Conference of the Parties in carrying out the reviews required by Article 4, paragraph 2 (d); and

(c) Assist the Conference of the Parties, as appropriate, in the preparation and implementation of its decisions.

Article 11

FINANCIAL MECHANISM

1. A mechanism for the provision of financial resources on a grant or concessional basis, including for the transfer of technology, is hereby defined. It shall function under the guidance of and be accountable to the Conference of the Parties, which shall decide on its policies, programme priorities and eligibility criteria related to this Convention. Its operation shall be entrusted to one or more existing international entities.

2. The financial mechanism shall have an equitable and balanced representation of all Parties within a transparent system of governance.

3. The Conference of the Parties and the entity or entities entrusted with the operation of the financial mechanism shall agree upon arrangements to give effect to the above paragraphs, which shall include the following:

(a) Modalities to ensure that the funded projects to address climate change are in conformity with the policies, programme priorities and eligibility criteria established by the Conference of the Parties;

(b) Modalities by which a particular funding decision may be reconsidered in light of these policies, programme priorities and eligibility criteria;

(c) Provision by the entity or entities of regular reports to the Conference of the Parties on its funding operations, which is consistent with the requirement for accountability set out in paragraph 1 above; and

(d) Determination in a predictable and identifiable manner of the amount of funding necessary and available for the implementation of this Convention and the conditions under which that amount shall be periodically reviewed.

4. The Conference of the Parties shall make arrangements to implement the above-mentioned provisions at its first session, reviewing and taking into account the interim arrangements referred to in Article 21, paragraph 3, and shall decide whether these interim arrangements shall be maintained. Within four years thereafter, the Conference of the Parties shall review the financial mechanism and take appropriate measures.

5. The developed country Parties may also provide and developing country Parties avail themselves of, financial resources related to the implementation of the Convention through bilateral, regional and other multilateral channels.

Article 12

COMMUNICATION OF INFORMATION RELATED TO IMPLEMENTATION

1. In accordance with Article 4, paragraph 1, each Party shall communicate to the Conference of the Parties, through the secretariat, the following elements of information:

(a) A national inventory of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, to the extent its capacities permit, using comparable methodologies to be promoted and agreed upon by the Conference of the Parties;

(b) A general description of steps taken or envisaged by the Party to implement the Convention; and

(c) Any other information that the Party considers relevant to the achievement of the objective of the Convention and suitable for inclusion in its communication, including, if feasible, material relevant for calculations of global emission trends.

2. Each developed country Party and each other Party included in Annex I shall incorporate in its communication the following elements of information:

(a) A detailed description of the policies and measures that it has adopted to implement its commitment under Article 4, paragraphs 2 (a) and 2 (b); and

(b) A specific estimate of the effects that the policies and measures referred to in subparagraph (a) immediately above will have on anthropogenic emissions by its sources and removals by its sinks of greenhouse gases during the period referred to in Article 4, paragraph 2 (a).

3. In addition, each developed country Party and each other developed Party included in Annex II shall incorporate details of measures taken in accordance with Article 4, paragraphs 3, 4 and 5.

4. Developing country Parties may, on a voluntary basis, propose projects for financing, including specific technologies, materials, equipment, techniques or practices that would be needed to implement such projects, along with, if possible, an estimate of all incremental costs, of the reductions of emissions and increments of removals of greenhouse gases, as well as an estimate of the consequent benefits.

5. Each developed country Party and each other Party included in Annex I shall make its initial communication within six months of the entry into force of the Convention for that Party. Each Party not so listed shall make its initial communication within three years of the entry into force of the Convention for that Party, or of the availability of financial resources in accordance with Article 4, paragraph 3. Parties that are least developed countries may make their initial communication at their discretion. The frequency of subsequent communications by all Parties shall be determined by the Conference of the Parties, taking into account the differentiated timetable set by this paragraph.

6. Information communicated by Parties under this Article shall be transmitted by the secretariat as soon as possible to the Conference of the Parties and to any subsidiary bodies concerned. If necessary, the procedures for the communication of information may be further considered by the Conference of the Parties.

7. From its first session, the Conference of the Parties shall arrange for the provision to developing country Parties of technical and financial support, on request, in compiling and communicating information under this Article, as well as in identifying the technical and financial needs associated with proposed projects and response measures under Article 4. Such support may be provided by other Parties, by competent international organizations and by the secretariat, as appropriate.

8. Any group of Parties may, subject to guidelines adopted by the Conference of the Parties, and to prior notification to the Conference of the Parties, make a joint communication in fulfilment of their obligations under this Article, provided that such a communication includes information on the fulfilment by each of these Parties of its individual obligations under the Convention.

9. Information received by the secretariat that is designated by a Party as confidential, in accordance with criteria to be established by the Conference of the Parties, shall be aggregated by the secretariat to protect its confidentiality before being made available to any of the bodies involved in the communication and review of information.

10. Subject to paragraph 9 above, and without prejudice to the ability of any Party to make public its communication at any time, the secretariat shall make communications by Parties under this Article publicly available at the time they are submitted to the Conference of the Parties.

Article 13

RESOLUTION OF QUESTIONS REGARDING IMPLEMENTATION

The Conference of the Parties shall, at its first session, consider the establishment of a multilateral consultative process, available to Parties on their request, for the resolution of questions regarding the implementation of the Convention.

Article 14

SETTLEMENT OF DISPUTES

1. In the event of a dispute between any two or more Parties concerning the interpretation or application of the Convention, the Parties concerned shall seek a settlement of the dispute through negotiation or any other peaceful means of their own choice.

2. When ratifying, accepting, approving or acceding to the Convention, or at any time thereafter, a Party which is not a regional economic integration organization may declare in a written instrument submitted to the Depositary that, in respect of any dispute concerning the interpretation or application of the Convention, it recognizes as compulsory ipso facto and without special agreement, in relation to any Party accepting the same obligation:

(a) Submission of the dispute to the International Court of Justice; and/or

(b) Arbitration in accordance with procedures to be adopted by the Conference of the Parties as soon as practicable, in an annex on arbitration.

A Party which is a regional economic integration organization may make a declaration with like effect in relation to arbitration in accordance with the procedures referred to in subparagraph (b) above.

3. A declaration made under paragraph 2 above shall remain in force until it expires in accordance with its terms or until three months after written notice of its revocation has been deposited with the Depositary.

4. A new declaration, a notice of revocation or the expiry of a declaration shall not in any way affect proceedings pending before the International Court of Justice or the arbitral tribunal, unless the parties to the dispute otherwise agree.

5. Subject to the operation of paragraph 2 above, if after twelve months following notification by one Party to another that a dispute exists between them, the Parties concerned have not been able to settle their dispute through the means mentioned in paragraph 1 above, the dispute shall be submitted, at the request of any of the parties to the dispute, to conciliation.

6. A conciliation commission shall be created upon the request of one of the parties to the dispute. The commission shall be composed of an equal number of members appointed by each party concerned and a chairman chosen jointly by the members appointed by each party. The commission shall render a recommendatory award, which the parties shall consider in good faith.

7. Additional procedures relating to conciliation shall be adopted by the Conference of the Parties, as soon as practicable, in an annex on conciliation.

8. The provisions of this Article shall apply to any related legal instrument which the Conference of the Parties may adopt, unless the instrument provides otherwise.

Article 15

AMENDMENTS TO THE CONVENTION

1. Any Party may propose amendments to the Convention.

2. Amendments to the Convention shall be adopted at an ordinary session of the Conference of the Parties. The text of any proposed amendment to the Convention shall be communicated to the Parties by the secretariat at least six months before the meeting at which it is proposed for adoption. The secretariat shall also communicate proposed amendments to the signatories to the Convention and, for information, to the Depositary.

3. The Parties shall make every effort to reach agreement on any proposed amendment to the Convention by consensus. If all efforts at consensus have been exhausted, and no agreement reached, the amendment shall as a last resort be adopted by a three-fourths majority vote of the Parties present and voting at the meeting. The adopted amendment shall be communicated by the secretariat to the Depositary, who shall circulate it to all Parties for their acceptance.

4. Instruments of acceptance in respect of an amendment shall be deposited with the Depositary. An amendment adopted in accordance with paragraph 3 above shall enter into force for those Parties having accepted it on the ninetieth day after the date of receipt by the Depositary of an instrument of acceptance by at least three fourths of the Parties to the Convention.

5. The amendment shall enter into force for any other Party on the ninetieth day after the date on which that Party deposits with the Depositary its instrument of acceptance of the said amendment.

6. For the purposes of this Article, "Parties present and voting" means Parties present and casting an affirmative or negative vote.

Article 16

ADOPTION AND AMENDMENT OF ANNEXES TO THE CONVENTION

1. Annexes to the Convention shall form an integral part thereof and, unless otherwise expressly provided, a reference to the Convention constitutes at the same time a reference to any annexes thereto. Without prejudice to the provisions of Article 14, paragraphs 2 (b) and 7, such annexes shall be restricted to lists, forms and any other material of a descriptive nature that is of a scientific, technical, procedural or administrative character.

2. Annexes to the Convention shall be proposed and adopted in accordance with the procedure set forth in Article 15, paragraphs 2, 3 and 4.

3. An annex that has been adopted in accordance with paragraph 2 above shall enter into force for all Parties to the Convention six months after the date of the communication by the Depositary to such Parties of the adoption of the annex, except for those Parties that have notified the Depositary, in writing, within that period of their non-acceptance of the annex. The annex shall enter into force for Parties which withdraw their notification of non-acceptance on the ninetieth day after the date on which withdrawal of such notification has been received by the Depositary.

4. The proposal, adoption and entry into force of amendments to annexes to the Convention shall be subject to the same procedure as that for the proposal, adoption and entry into force of annexes to the Convention in accordance with paragraphs 2 and 3 above.

5. If the adoption of an annex or an amendment to an annex involves an amendment to the Convention, that annex or amendment to an annex shall not enter into force until such time as the amendment to the Convention enters into force.

Article 17

PROTOCOLS

1. The Conference of the Parties may, at any ordinary session, adopt protocols to the Convention.

2. The text of any proposed protocol shall be communicated to the Parties by the secretariat at least six months before such a session.

3. The requirements for the entry into force of any protocol shall be established by that instrument.

4. Only Parties to the Convention may be Parties to a protocol.

5. Decisions under any protocol shall be taken only by the Parties to the protocol concerned.

Article 18

RIGHT TO VOTE

1. Each Party to the Convention shall have one vote, except as provided for in paragraph 2 below.

2. Regional economic integration organizations, in matters within their competence, shall exercise their right to vote with a number of votes equal to the number of their member States that are Parties to the Convention. Such an organization shall not exercise its right to vote if any of its member States exercises its right, and vice versa.

Article 19

DEPOSITARY

The Secretary-General of the United Nations shall be the Depositary of the Convention and of protocols adopted in accordance with Article 17.

Article 20

SIGNATURE

This Convention shall be open for signature by States Members of the United Nations or of any of its specialized agencies or that are Parties to the Statute of the International Court of Justice and by regional economic integration organizations at Rio de Janeiro, during the United Nations Conference on Environment and Development, and thereafter at United Nations Headquarters in New York from 20 June 1992 to 19 June 1993.

Article 21

INTERIM ARRANGEMENTS

1. The secretariat functions referred to in Article 8 will be carried out on an interim basis by the secretariat established by the General Assembly of the United Nations in its resolution 45/212 of 21 December 1990, until the completion of the first session of the Conference of the Parties.

2. The head of the interim secretariat referred to in paragraph 1 above will cooperate closely with the Intergovernmental Panel on Climate Change to ensure that the Panel can respond to the need for objective scientific and technical advice. Other relevant scientific bodies could also be consulted.

3. The Global Environment Facility of the United Nations Development Programme, the United Nations Environment Programme and the International Bank for Reconstruction and Development shall be the international entity entrusted with the operation of the financial mechanism referred to in Article 11 on an interim basis. In this connection, the Global Environment Facility should be appropriately restructured and its membership made universal to enable it to fulfil the requirements of Article 11.

Article 22

RATIFICATION, ACCEPTANCE, APPROVAL OR ACCESSION

1. The Convention shall be subject to ratification, acceptance, approval or accession by States and by regional economic integration organizations. It shall be open for accession from the day after the date on which the Convention is closed for signature. Instruments of ratification, acceptance, approval or accession shall be deposited with the Depositary.

2. Any regional economic integration organization which becomes a Party to the Convention without any of its member States being a Party shall be bound by all the obligations under the Convention. In the case of such organizations, one or more of whose member States is a Party to the Convention, the organization and its member States shall decide on their respective responsibilities for the performance of their obligations under the Convention. In such cases, the organization and the member States shall not be entitled to exercise rights under the Convention concurrently.

3. In their instruments of ratification, acceptance, approval or accession, regional economic integration organizations shall declare the extent of their competence with respect to the matters governed by the Convention. These organizations shall also inform the Depositary, who shall in turn inform the Parties, of any substantial modification in the extent of their competence.

Article 23

ENTRY INTO FORCE

1. The Convention shall enter into force on the ninetieth day after the date of deposit of the fiftieth instrument of ratification, acceptance, approval or accession.

2. For each State or regional economic integration organization that ratifies, accepts or approves the Convention or accedes thereto after the deposit of the fiftieth instrument of ratification, acceptance, approval or accession, the Convention shall enter into force on the ninetieth day after the date of deposit by such State or regional economic integration organization of its instrument of ratification, acceptance, approval or accession.

3. For the purposes of paragraphs 1 and 2 above, any instrument deposited by a regional economic integration organization shall not be counted as additional to those deposited by States members of the organization.

Article 24

RESERVATIONS

No reservations may be made to the Convention.

Article 25

WITHDRAWAL

1. At any time after three years from the date on which the Convention has entered into force for a Party, that Party may withdraw from the Convention by giving written notification to the Depositary.

2. Any such withdrawal shall take effect upon expiry of one year from the date of receipt by the Depositary of the notification of withdrawal, or on such later date as may be specified in the notification of withdrawal.

3. Any Party that withdraws from the Convention shall be considered as also having withdrawn from any protocol to which it is a Party.

Article 26

AUTHENTIC TEXTS

The original of this Convention, of which the Arabic, Chinese, English, French, Russian and Spanish texts are equally authentic, shall be deposited with the Secretary-General of the United Nations.

IN WITNESS WHEREOF the undersigned, being duly authorized to that effect, have signed this Convention.

DONE at New York this ninth day of May one thousand nine hundred and ninety-two.

Annex I

Australia
Austria
Belarus[a]
Belgium
Bulgaria[a]
Canada
Croatia[a] *
Czech Republic[a] *
Denmark
European Economic Community
Estonia[a]
Finland
France
Germany
Greece
Hungary[a]
Iceland
Ireland
Italy
Japan
Latvia[a]
Liechtenstein*
Lithuania[a]
Luxembourg
Monaco*
Netherlands
New Zealand
Norway
Poland[a]
Portugal
Romania[a]
Russian Federation[a]
Slovakia[a] *
Slovenia[a] *
Spain
Sweden
Switzerland
Turkey
Ukraine[a]
United Kingdom of Great Britain and Northern Ireland
United States of America

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[a] Countries that are undergoing the process of transition to a market economy.

* *Publisher's note*: Countries added to Annex I by an amendment that entered into force on 13 August 1998, pursuant to decision 4/CP.3 adopted at COP.3.

Annex II

Australia
Austria
Belgium
Canada
Denmark
European Economic Community
Finland
France
Germany
Greece
Iceland
Ireland
Italy
Japan
Luxembourg
Netherlands
New Zealand
Norway
Portugal
Spain
Sweden
Switzerland
United Kingdom of Great Britain and Northern Ireland
United States of America

Publisher's note: Turkey was deleted from Annex II by an amendment that entered into force 28 June 2002, pursuant to decision 26/CP.7 adopted at COP.7.

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KYOTO PROTOCOL TO THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

UNITED NATIONS

1998

KYOTO PROTOCOL TO THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

The Parties to this Protocol,

Being Parties to the United Nations Framework Convention on Climate Change, hereinafter referred to as "the Convention",

In pursuit of the ultimate objective of the Convention as stated in its Article 2,

Recalling the provisions of the Convention,

Being guided by Article 3 of the Convention,

Pursuant to the Berlin Mandate adopted by decision 1/CP.1 of the Conference of the Parties to the Convention at its first session,

Have agreed as follows:

Article 1

For the purposes of this Protocol, the definitions contained in Article 1 of the Convention shall apply. In addition:

1. "Conference of the Parties" means the Conference of the Parties to the Convention.

2. "Convention" means the United Nations Framework Convention on Climate Change, adopted in New York on 9 May 1992.

3. "Intergovernmental Panel on Climate Change" means the Intergovernmental Panel on Climate Change established in 1988 jointly by the World Meteorological Organization and the United Nations Environment Programme.

4. "Montreal Protocol" means the Montreal Protocol on Substances that Deplete the Ozone Layer, adopted in Montreal on 16 September 1987 and as subsequently adjusted and amended.

5. "Parties present and voting" means Parties present and casting an affirmative or negative vote.

6. "Party" means, unless the context otherwise indicates, a Party to this Protocol.

7. "Party included in Annex I" means a Party included in Annex I to the Convention, as may be amended, or a Party which has made a notification under Article 4, paragraph 2 (g), of the Convention.

Article 2

1. Each Party included in Annex I, in achieving its quantified emission limitation and reduction commitments under Article 3, in order to promote sustainable development, shall:

(a) Implement and/or further elaborate policies and measures in accordance with its national circumstances, such as:

(i) Enhancement of energy efficiency in relevant sectors of the national economy;

(ii) Protection and enhancement of sinks and reservoirs of greenhouse gases not controlled by the Montreal Protocol, taking into account its commitments under relevant international environmental agreements; promotion of sustainable forest management practices, afforestation and reforestation;

(iii) Promotion of sustainable forms of agriculture in light of climate change considerations;

(iv) Research on, and promotion, development and increased use of, new and renewable forms of energy, of carbon dioxide sequestration technologies and of advanced and innovative environmentally sound technologies;

(v) Progressive reduction or phasing out of market imperfections, fiscal incentives, tax and duty exemptions and subsidies in all greenhouse gas emitting sectors that run counter to the objective of the Convention and application of market instruments;

(vi) Encouragement of appropriate reforms in relevant sectors aimed at promoting policies and measures which limit or reduce emissions of greenhouse gases not controlled by the Montreal Protocol;

(vii) Measures to limit and/or reduce emissions of greenhouse gases not controlled by the Montreal Protocol in the transport sector;

(viii) Limitation and/or reduction of methane emissions through recovery and use in waste management, as well as in the production, transport and distribution of energy;

(b) Cooperate with other such Parties to enhance the individual and combined effectiveness of their policies and measures adopted under this Article, pursuant to Article 4, paragraph 2 (e) (i), of the Convention. To this end, these Parties shall take steps to share their experience and exchange information on such policies and measures, including developing ways of improving their comparability, transparency and effectiveness. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session or as soon as practicable thereafter, consider ways to facilitate such cooperation, taking into account all relevant information.

2. The Parties included in Annex I shall pursue limitation or reduction of emissions of greenhouse gases not controlled by the Montreal Protocol from aviation and marine bunker fuels, working through the International Civil Aviation Organization and the International Maritime Organization, respectively.

3. The Parties included in Annex I shall strive to implement policies and measures under this Article in such a way as to minimize adverse effects, including the adverse effects of climate change, effects on international trade, and social, environmental and economic impacts on other Parties, especially developing country Parties and in particular those identified in Article 4, paragraphs 8 and 9, of the Convention, taking into account Article 3 of the Convention. The Conference of the Parties serving as the meeting of the Parties to this Protocol may take further action, as appropriate, to promote the implementation of the provisions of this paragraph.

4. The Conference of the Parties serving as the meeting of the Parties to this Protocol, if it decides that it would be beneficial to coordinate any of the policies and measures in paragraph 1 (a) above, taking into account different national circumstances and potential effects, shall consider ways and means to elaborate the coordination of such policies and measures.

Article 3

1. The Parties included in Annex I shall, individually or jointly, ensure that their aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases listed in Annex A do not exceed their assigned amounts, calculated pursuant to their quantified emission limitation and reduction commitments inscribed in Annex B and in accordance with the provisions of this Article, with a view to reducing their overall emissions of such gases by at least 5 per cent below 1990 levels in the commitment period 2008 to 2012.

2. Each Party included in Annex I shall, by 2005, have made demonstrable progress in achieving its commitments under this Protocol.

3. The net changes in greenhouse gas emissions by sources and removals by sinks resulting from direct human-induced land-use change and forestry activities, limited to afforestation, reforestation and deforestation since 1990, measured as verifiable changes in carbon stocks in each commitment period, shall be used to meet the commitments under this Article of each Party included in Annex I. The greenhouse gas emissions by sources and removals by sinks associated with those activities shall be reported in a transparent and verifiable manner and reviewed in accordance with Articles 7 and 8.

4. Prior to the first session of the Conference of the Parties serving as the meeting of the Parties to this Protocol, each Party included in Annex I shall provide, for consideration by the Subsidiary Body for Scientific and Technological Advice, data to establish its level of carbon stocks in 1990 and to enable an estimate to be made of its changes in carbon stocks in subsequent years. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session or as soon as practicable thereafter, decide upon modalities, rules and guidelines as to how, and which, additional human-induced activities related to changes in greenhouse gas emissions by sources and removals by sinks in the agricultural soils and the land-use change and forestry categories shall be added to, or subtracted from, the assigned amounts for Parties included in Annex I, taking into account uncertainties, transparency in reporting, verifiability, the methodological work of the Intergovernmental Panel on Climate Change, the advice provided by the Subsidiary Body for Scientific and Technological Advice in accordance with Article 5 and the decisions of the Conference of the Parties. Such a decision shall apply in the second and subsequent commitment periods. A Party may choose to apply such a decision on these additional human-induced activities for its first commitment period, provided that these activities have taken place since 1990.

5. The Parties included in Annex I undergoing the process of transition to a market economy whose base year or period was established pursuant to decision 9/CP.2 of the Conference of the Parties at its second session shall use that base year or period for the implementation of their commitments under this Article. Any other Party included in Annex I undergoing the process of transition to a market economy which has not yet submitted its first national communication under Article 12 of the Convention may also notify the Conference of the Parties serving as the meeting of the Parties to this Protocol that it intends to use an historical base year or period other than 1990 for the implementation of its commitments under this Article. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall decide on the acceptance of such notification.

6. Taking into account Article 4, paragraph 6, of the Convention, in the implementation of their commitments under this Protocol other than those under this Article, a certain degree of flexibility shall be allowed by the Conference of the Parties serving as the meeting of the Parties to this Protocol to the Parties included in Annex I undergoing the process of transition to a market economy.

7. In the first quantified emission limitation and reduction commitment period, from 2008 to 2012, the assigned amount for each Party included in Annex I shall be equal to the percentage inscribed for it in Annex B of its aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases listed in Annex A in 1990, or the base year or period determined in accordance with paragraph 5 above, multiplied by five. Those Parties included in Annex I for whom land-use change and forestry constituted a net source of greenhouse gas emissions in 1990 shall include in their 1990 emissions base year or period the aggregate anthropogenic carbon dioxide equivalent emissions by sources minus removals by sinks in 1990 from land-use change for the purposes of calculating their assigned amount.

8. Any Party included in Annex I may use 1995 as its base year for hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride, for the purposes of the calculation referred to in paragraph 7 above.

9. Commitments for subsequent periods for Parties included in Annex I shall be established in amendments to Annex B to this Protocol, which shall be adopted in accordance with the provisions of Article 21, paragraph 7. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall initiate the consideration of such commitments at least seven years before the end of the first commitment period referred to in paragraph 1 above.

10. Any emission reduction units, or any part of an assigned amount, which a Party acquires from another Party in accordance with the provisions of Article 6 or of Article 17 shall be added to the assigned amount for the acquiring Party.

11. Any emission reduction units, or any part of an assigned amount, which a Party transfers to another Party in accordance with the provisions of Article 6 or of Article 17 shall be subtracted from the assigned amount for the transferring Party.

12. Any certified emission reductions which a Party acquires from another Party in accordance with the provisions of Article 12 shall be added to the assigned amount for the acquiring Party.

13. If the emissions of a Party included in Annex I in a commitment period are less than its assigned amount under this Article, this difference shall, on request of that Party, be added to the assigned amount for that Party for subsequent commitment periods.

14. Each Party included in Annex I shall strive to implement the commitments mentioned in paragraph 1 above in such a way as to minimize adverse social, environmental and economic impacts on developing country Parties, particularly those identified in Article 4, paragraphs 8 and 9, of the Convention. In line with relevant decisions of the Conference of the Parties on the implementation of those paragraphs, the Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session, consider what actions are necessary to minimize the adverse effects of climate change and/or the impacts of response measures on Parties referred to in those paragraphs. Among the issues to be considered shall be the establishment of funding, insurance and transfer of technology.

Article 4

1. Any Parties included in Annex I that have reached an agreement to fulfil their commitments under Article 3 jointly, shall be deemed to have met those commitments provided that their total combined aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases listed in Annex A do not exceed their assigned amounts calculated pursuant to their quantified emission limitation and reduction commitments inscribed in Annex B and in accordance with the provisions of Article 3. The respective emission level allocated to each of the Parties to the agreement shall be set out in that agreement.

2. The Parties to any such agreement shall notify the secretariat of the terms of the agreement on the date of deposit of their instruments of ratification, acceptance or approval of this Protocol, or accession thereto. The secretariat shall in turn inform the Parties and signatories to the Convention of the terms of the agreement.

3. Any such agreement shall remain in operation for the duration of the commitment period specified in Article 3, paragraph 7.

4. If Parties acting jointly do so in the framework of, and together with, a regional economic integration organization, any alteration in the composition of the organization after adoption of this Protocol shall not affect existing commitments under this Protocol. Any alteration in the composition of the organization shall only apply for the purposes of those commitments under Article 3 that are adopted subsequent to that alteration.

5. In the event of failure by the Parties to such an agreement to achieve their total combined level of emission reductions, each Party to that agreement shall be responsible for its own level of emissions set out in the agreement.

6. If Parties acting jointly do so in the framework of, and together with, a regional economic integration organization which is itself a Party to this Protocol, each member State of that regional economic integration organization individually, and together with the regional economic integration organization acting in accordance with Article 24, shall, in the event of failure to achieve the total combined level of emission reductions, be responsible for its level of emissions as notified in accordance with this Article.

Article 5

1. Each Party included in Annex I shall have in place, no later than one year prior to the start of the first commitment period, a national system for the estimation of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol. Guidelines for such national systems, which shall incorporate the methodologies specified in paragraph 2 below, shall be decided upon by the Conference of the Parties serving as the meeting of the Parties to this Protocol at its first session.

2. Methodologies for estimating anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol shall be those accepted by the Intergovernmental Panel on Climate Change and agreed upon by the Conference of the Parties at its third session. Where such methodologies are not used, appropriate adjustments shall be applied according to methodologies agreed upon by the Conference of the Parties serving as the meeting of the Parties to this Protocol at its first session. Based on the work of, *inter alia*, the Intergovernmental Panel on Climate Change and advice provided by the Subsidiary Body for Scientific and Technological Advice, the Conference of the Parties serving as the meeting of the Parties to this Protocol shall regularly review and, as appropriate, revise such methodologies and adjustments, taking fully into account any relevant decisions by the Conference of the Parties. Any revision to methodologies or adjustments shall be used only for the purposes of ascertaining compliance with commitments under Article 3 in respect of any commitment period adopted subsequent to that revision.

3. The global warming potentials used to calculate the carbon dioxide equivalence of anthropogenic emissions by sources and removals by sinks of greenhouse gases listed in Annex A shall be those accepted by the Intergovernmental Panel on Climate Change and agreed upon by the Conference of the Parties at its third session. Based on the work of, *inter alia*, the Intergovernmental Panel on Climate Change and advice provided by the Subsidiary Body for Scientific and Technological Advice, the Conference of the Parties serving as the meeting of the Parties to this Protocol shall regularly review and, as appropriate, revise the global warming potential of each such greenhouse gas, taking fully into account any relevant decisions by the Conference of the Parties. Any revision to a global warming potential shall apply only to commitments under Article 3 in respect of any commitment period adopted subsequent to that revision.

Article 6

1. For the purpose of meeting its commitments under Article 3, any Party included in Annex I may transfer to, or acquire from, any other such Party emission reduction units resulting from projects aimed at reducing anthropogenic emissions by sources or enhancing anthropogenic removals by sinks of greenhouse gases in any sector of the economy, provided that:

(a) Any such project has the approval of the Parties involved;

(b) Any such project provides a reduction in emissions by sources, or an enhancement of removals by sinks, that is additional to any that would otherwise occur;

(c) It does not acquire any emission reduction units if it is not in compliance with its obligations under Articles 5 and 7; and

(d) The acquisition of emission reduction units shall be supplemental to domestic actions for the purposes of meeting commitments under Article 3.

2. The Conference of the Parties serving as the meeting of the Parties to this Protocol may, at its first session or as soon as practicable thereafter, further elaborate guidelines for the implementation of this Article, including for verification and reporting.

3. A Party included in Annex I may authorize legal entities to participate, under its responsibility, in actions leading to the generation, transfer or acquisition under this Article of emission reduction units.

4. If a question of implementation by a Party included in Annex I of the requirements referred to in this Article is identified in accordance with the relevant provisions of Article 8, transfers and acquisitions of emission reduction units may continue to be made after the question has been identified, provided that any such units may not be used by a Party to meet its commitments under Article 3 until any issue of compliance is resolved.

Article 7

1. Each Party included in Annex I shall incorporate in its annual inventory of anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol, submitted in accordance with the relevant decisions of the Conference of the Parties, the necessary supplementary information for the purposes of ensuring compliance with Article 3, to be determined in accordance with paragraph 4 below.

2. Each Party included in Annex I shall incorporate in its national communication, submitted under Article 12 of the Convention, the supplementary information necessary to demonstrate compliance with its commitments under this Protocol, to be determined in accordance with paragraph 4 below.

3. Each Party included in Annex I shall submit the information required under paragraph 1 above annually, beginning with the first inventory due under the Convention for the first year of the commitment period after this Protocol has entered into force for that Party. Each such Party shall submit the information required under paragraph 2 above as part of the first national communication due under the Convention after this Protocol has entered into force for it and after the adoption of guidelines as provided for in paragraph 4 below. The frequency of subsequent submission of information required under this Article shall be determined by the Conference of the Parties serving as the meeting of the Parties to this Protocol, taking into account any timetable for the submission of national communications decided upon by the Conference of the Parties.

4. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall adopt at its first session, and review periodically thereafter, guidelines for the preparation of the information required under this Article, taking into account guidelines for the preparation of

national communications by Parties included in Annex I adopted by the Conference of the Parties. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall also, prior to the first commitment period, decide upon modalities for the accounting of assigned amounts.

Article 8

1. The information submitted under Article 7 by each Party included in Annex I shall be reviewed by expert review teams pursuant to the relevant decisions of the Conference of the Parties and in accordance with guidelines adopted for this purpose by the Conference of the Parties serving as the meeting of the Parties to this Protocol under paragraph 4 below. The information submitted under Article 7, paragraph 1, by each Party included in Annex I shall be reviewed as part of the annual compilation and accounting of emissions inventories and assigned amounts. Additionally, the information submitted under Article 7, paragraph 2, by each Party included in Annex I shall be reviewed as part of the review of communications.

2. Expert review teams shall be coordinated by the secretariat and shall be composed of experts selected from those nominated by Parties to the Convention and, as appropriate, by intergovernmental organizations, in accordance with guidance provided for this purpose by the Conference of the Parties.

3. The review process shall provide a thorough and comprehensive technical assessment of all aspects of the implementation by a Party of this Protocol. The expert review teams shall prepare a report to the Conference of the Parties serving as the meeting of the Parties to this Protocol, assessing the implementation of the commitments of the Party and identifying any potential problems in, and factors influencing, the fulfilment of commitments. Such reports shall be circulated by the secretariat to all Parties to the Convention. The secretariat shall list those questions of implementation indicated in such reports for further consideration by the Conference of the Parties serving as the meeting of the Parties to this Protocol.

4. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall adopt at its first session, and review periodically thereafter, guidelines for the review of implementation of this Protocol by expert review teams taking into account the relevant decisions of the Conference of the Parties.

5. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, with the assistance of the Subsidiary Body for Implementation and, as appropriate, the Subsidiary Body for Scientific and Technological Advice, consider:

(a) The information submitted by Parties under Article 7 and the reports of the expert reviews thereon conducted under this Article; and

(b) Those questions of implementation listed by the secretariat under paragraph 3 above, as well as any questions raised by Parties.

6. Pursuant to its consideration of the information referred to in paragraph 5 above, the Conference of the Parties serving as the meeting of the Parties to this Protocol shall take decisions on any matter required for the implementation of this Protocol.

Article 9

1. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall periodically review this Protocol in the light of the best available scientific information and assessments on climate change and its impacts, as well as relevant technical, social and economic information. Such reviews shall be coordinated with pertinent reviews under the Convention, in particular those required by Article 4, paragraph 2 (d), and Article 7, paragraph 2 (a), of the Convention. Based on these reviews, the Conference of the Parties serving as the meeting of the Parties to this Protocol shall take appropriate action.

2. The first review shall take place at the second session of the Conference of the Parties serving as the meeting of the Parties to this Protocol. Further reviews shall take place at regular intervals and in a timely manner.

Article 10

All Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, without introducing any new commitments for Parties not included in Annex I, but reaffirming existing commitments under Article 4, paragraph 1, of the Convention, and continuing to advance the implementation of these commitments in order to achieve sustainable development, taking into account Article 4, paragraphs 3, 5 and 7, of the Convention, shall:

(a) Formulate, where relevant and to the extent possible, cost-effective national and, where appropriate, regional programmes to improve the quality of local emission factors, activity data and/or models which reflect the socio-economic conditions of each Party for the preparation and periodic updating of national inventories of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, using comparable methodologies to be agreed upon by the Conference of the Parties, and consistent with the guidelines for the preparation of national communications adopted by the Conference of the Parties;

(b) Formulate, implement, publish and regularly update national and, where appropriate, regional programmes containing measures to mitigate climate change and measures to facilitate adequate adaptation to climate change:

(i) Such programmes would, *inter alia*, concern the energy, transport and industry sectors as well as agriculture, forestry and waste management. Furthermore, adaptation technologies and methods for improving spatial planning would improve adaptation to climate change; and

(ii) Parties included in Annex I shall submit information on action under this Protocol, including national programmes, in accordance with Article 7; and other Parties shall seek to include in their national communications, as appropriate, information on programmes which contain measures that the Party believes contribute to addressing climate change and its adverse impacts, including the abatement of increases in greenhouse gas emissions, and enhancement of and removals by sinks, capacity building and adaptation measures;

(c) Cooperate in the promotion of effective modalities for the development, application and diffusion of, and take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies, know-how, practices and processes pertinent to climate change, in particular to developing countries, including the formulation of policies and programmes for the effective transfer of environmentally sound technologies that are publicly owned or in the public domain and the creation of an enabling environment for the private sector, to promote and enhance the transfer of, and access to, environmentally sound technologies;

(d) Cooperate in scientific and technical research and promote the maintenance and the development of systematic observation systems and development of data archives to reduce uncertainties related to the climate system, the adverse impacts of climate change and the economic and social consequences of various response strategies, and promote the development and strengthening of endogenous capacities and capabilities to participate in international and intergovernmental efforts, programmes and networks on research and systematic observation, taking into account Article 5 of the Convention;

(e) Cooperate in and promote at the international level, and, where appropriate, using existing bodies, the development and implementation of education and training programmes, including the strengthening of national capacity building, in particular human and institutional capacities and the exchange or secondment of personnel to train experts in this field, in particular for developing countries, and facilitate at the national level public awareness of, and public access to information on, climate change. Suitable modalities should be developed to implement these activities through the relevant bodies of the Convention, taking into account Article 6 of the Convention;

(f) Include in their national communications information on programmes and activities undertaken pursuant to this Article in accordance with relevant decisions of the Conference of the Parties; and

(g) Give full consideration, in implementing the commitments under this Article, to Article 4, paragraph 8, of the Convention.

Article 11

1. In the implementation of Article 10, Parties shall take into account the provisions of Article 4, paragraphs 4, 5, 7, 8 and 9, of the Convention.

2. In the context of the implementation of Article 4, paragraph 1, of the Convention, in accordance with the provisions of Article 4, paragraph 3, and Article 11 of the Convention, and through the entity or entities entrusted with the operation of the financial mechanism of the Convention, the developed country Parties and other developed Parties included in Annex II to the Convention shall:

(a) Provide new and additional financial resources to meet the agreed full costs incurred by developing country Parties in advancing the implementation of existing commitments under Article 4, paragraph 1 (a), of the Convention that are covered in Article 10, subparagraph (a); and

(b) Also provide such financial resources, including for the transfer of technology, needed by the developing country Parties to meet the agreed full incremental costs of advancing the implementation of existing commitments under Article 4, paragraph 1, of the Convention that are covered by Article 10 and that are agreed between a developing country Party and the international entity or entities referred to in Article 11 of the Convention, in accordance with that Article.

The implementation of these existing commitments shall take into account the need for adequacy and predictability in the flow of funds and the importance of appropriate burden sharing among developed country Parties. The guidance to the entity or entities entrusted with the operation of the financial mechanism of the Convention in relevant decisions of the Conference of the Parties, including those agreed before the adoption of this Protocol, shall apply *mutatis mutandis* to the provisions of this paragraph.

3. The developed country Parties and other developed Parties in Annex II to the Convention may also provide, and developing country Parties avail themselves of, financial resources for the implementation of Article 10, through bilateral, regional and other multilateral channels.

Article 12

1. A clean development mechanism is hereby defined.

2. The purpose of the clean development mechanism shall be to assist Parties not included in Annex I in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3.

3. Under the clean development mechanism:

(a) Parties not included in Annex I will benefit from project activities resulting in certified emission reductions; and

(b) Parties included in Annex I may use the certified emission reductions accruing from such project activities to contribute to compliance with part of their quantified emission limitation and reduction commitments under Article 3, as determined by the Conference of the Parties serving as the meeting of the Parties to this Protocol.

4. The clean development mechanism shall be subject to the authority and guidance of the Conference of the Parties serving as the meeting of the Parties to this Protocol and be supervised by an executive board of the clean development mechanism.

5. Emission reductions resulting from each project activity shall be certified by operational entities to be designated by the Conference of the Parties serving as the meeting of the Parties to this Protocol, on the basis of:

(a) Voluntary participation approved by each Party involved;

(b) Real, measurable, and long-term benefits related to the mitigation of climate change; and

(c) Reductions in emissions that are additional to any that would occur in the absence of the certified project activity.

6. The clean development mechanism shall assist in arranging funding of certified project activities as necessary.

7. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session, elaborate modalities and procedures with the objective of ensuring transparency, efficiency and accountability through independent auditing and verification of project activities.

8. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall ensure that a share of the proceeds from certified project activities is used to cover administrative expenses as well as to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation.

9. Participation under the clean development mechanism, including in activities mentioned in paragraph 3 (a) above and in the acquisition of certified emission reductions, may involve private and/or public entities, and is to be subject to whatever guidance may be provided by the executive board of the clean development mechanism.

10. Certified emission reductions obtained during the period from the year 2000 up to the beginning of the first commitment period can be used to assist in achieving compliance in the first commitment period.

Article 13

1. The Conference of the Parties, the supreme body of the Convention, shall serve as the meeting of the Parties to this Protocol.

2. Parties to the Convention that are not Parties to this Protocol may participate as observers in the proceedings of any session of the Conference of the Parties serving as the meeting of the Parties to this Protocol. When the Conference of the Parties serves as the meeting of the Parties to this Protocol, decisions under this Protocol shall be taken only by those that are Parties to this Protocol.

3. When the Conference of the Parties serves as the meeting of the Parties to this Protocol, any member of the Bureau of the Conference of the Parties representing a Party to the Convention but, at that time, not a Party to this Protocol, shall be replaced by an additional member to be elected by and from amongst the Parties to this Protocol.

4. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall keep under regular review the implementation of this Protocol and shall make, within its mandate, the decisions necessary to promote its effective implementation. It shall perform the functions assigned to it by this Protocol and shall:

(a) Assess, on the basis of all information made available to it in accordance with the provisions of this Protocol, the implementation of this Protocol by the Parties, the overall effects of the measures taken pursuant to this Protocol, in particular environmental, economic and social effects as well as their cumulative impacts and the extent to which progress towards the objective of the Convention is being achieved;

(b) Periodically examine the obligations of the Parties under this Protocol, giving due consideration to any reviews required by Article 4, paragraph 2 (d), and Article 7, paragraph 2, of the Convention, in the light of the objective of the Convention, the experience gained in its implementation and the evolution of scientific and technological knowledge, and in this respect consider and adopt regular reports on the implementation of this Protocol;

(c) Promote and facilitate the exchange of information on measures adopted by the Parties to address climate change and its effects, taking into account the differing circumstances, responsibilities and capabilities of the Parties and their respective commitments under this Protocol;

(d) Facilitate, at the request of two or more Parties, the coordination of measures adopted by them to address climate change and its effects, taking into account the differing circumstances, responsibilities and capabilities of the Parties and their respective commitments under this Protocol;

(e) Promote and guide, in accordance with the objective of the Convention and the provisions of this Protocol, and taking fully into account the relevant decisions by the Conference of the Parties, the development and periodic refinement of comparable methodologies for the effective implementation of this Protocol, to be agreed on by the Conference of the Parties serving as the meeting of the Parties to this Protocol;

(f) Make recommendations on any matters necessary for the implementation of this Protocol;

(g) Seek to mobilize additional financial resources in accordance with Article 11, paragraph 2;

(h) Establish such subsidiary bodies as are deemed necessary for the implementation of this Protocol;

(i) Seek and utilize, where appropriate, the services and cooperation of, and information provided by, competent international organizations and intergovernmental and non-governmental bodies; and

(j) Exercise such other functions as may be required for the implementation of this Protocol, and consider any assignment resulting from a decision by the Conference of the Parties.

5. The rules of procedure of the Conference of the Parties and financial procedures applied under the Convention shall be applied *mutatis mutandis* under this Protocol, except as may be otherwise decided by consensus by the Conference of the Parties serving as the meeting of the Parties to this Protocol.

6. The first session of the Conference of the Parties serving as the meeting of the Parties to this Protocol shall be convened by the secretariat in conjunction with the first session of the Conference of the Parties that is scheduled after the date of the entry into force of this Protocol. Subsequent ordinary sessions of the Conference of the Parties serving as the meeting of the Parties to this Protocol shall be held every year and in conjunction with ordinary sessions of the Conference of the Parties, unless otherwise decided by the Conference of the Parties serving as the meeting of the Parties to this Protocol.

7. Extraordinary sessions of the Conference of the Parties serving as the meeting of the Parties to this Protocol shall be held at such other times as may be deemed necessary by the Conference of the Parties serving as the meeting of the Parties to this Protocol, or at the written request of any Party, provided that, within six months of the request being communicated to the Parties by the secretariat, it is supported by at least one third of the Parties.

8. The United Nations, its specialized agencies and the International Atomic Energy Agency, as well as any State member thereof or observers thereto not party to the Convention, may be represented at sessions of the Conference of the Parties serving as the meeting of the Parties to this Protocol as observers. Any body or agency, whether national or international, governmental or non-governmental, which is qualified in matters covered by this Protocol and which has informed the secretariat of its wish to be represented at a session of the Conference of the Parties serving as the meeting of the Parties to this Protocol as an observer, may be so admitted unless at least one third of the Parties present object. The admission and participation of observers shall be subject to the rules of procedure, as referred to in paragraph 5 above.

Article 14

1. The secretariat established by Article 8 of the Convention shall serve as the secretariat of this Protocol.

2. Article 8, paragraph 2, of the Convention on the functions of the secretariat, and Article 8, paragraph 3, of the Convention on arrangements made for the functioning of the secretariat, shall apply *mutatis mutandis* to this Protocol. The secretariat shall, in addition, exercise the functions assigned to it under this Protocol.

Article 15

1. The Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation established by Articles 9 and 10 of the Convention shall serve as, respectively, the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation of this Protocol. The provisions relating to the functioning of these two bodies under the Convention shall apply *mutatis mutandis* to this Protocol. Sessions of the meetings of the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation of this Protocol shall be held in conjunction with the meetings of, respectively, the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation of the Convention.

2. Parties to the Convention that are not Parties to this Protocol may participate as observers in the proceedings of any session of the subsidiary bodies. When the subsidiary bodies serve as the subsidiary bodies of this Protocol, decisions under this Protocol shall be taken only by those that are Parties to this Protocol.

3. When the subsidiary bodies established by Articles 9 and 10 of the Convention exercise their functions with regard to matters concerning this Protocol, any member of the Bureaux of those subsidiary bodies representing a Party to the Convention but, at that time, not a party to this Protocol, shall be replaced by an additional member to be elected by and from amongst the Parties to this Protocol.

Article 16

The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, as soon as practicable, consider the application to this Protocol of, and modify as appropriate, the multilateral consultative process referred to in Article 13 of the Convention, in the light of any relevant decisions that may be taken by the Conference of the Parties. Any multilateral consultative process that may be applied to this Protocol shall operate without prejudice to the procedures and mechanisms established in accordance with Article 18.

Article 17

The Conference of the Parties shall define the relevant principles, modalities, rules and guidelines, in particular for verification, reporting and accountability for emissions trading. The Parties included in Annex B may participate in emissions trading for the purposes of fulfilling their commitments under Article 3. Any such trading shall be supplemental to domestic actions for the purpose of meeting quantified emission limitation and reduction commitments under that Article.

Article 18

The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session, approve appropriate and effective procedures and mechanisms to determine and to address cases of non-compliance with the provisions of this Protocol, including through the development of an indicative list of consequences, taking into account the cause, type, degree and frequency of non-compliance. Any procedures and mechanisms under this Article entailing binding consequences shall be adopted by means of an amendment to this Protocol.

Article 19

The provisions of Article 14 of the Convention on settlement of disputes shall apply *mutatis mutandis* to this Protocol.

Article 20

1. Any Party may propose amendments to this Protocol.

2. Amendments to this Protocol shall be adopted at an ordinary session of the Conference of the Parties serving as the meeting of the Parties to this Protocol. The text of any proposed amendment to this Protocol shall be communicated to the Parties by the secretariat at least

six months before the meeting at which it is proposed for adoption. The secretariat shall also communicate the text of any proposed amendments to the Parties and signatories to the Convention and, for information, to the Depositary.

3. The Parties shall make every effort to reach agreement on any proposed amendment to this Protocol by consensus. If all efforts at consensus have been exhausted, and no agreement reached, the amendment shall as a last resort be adopted by a three-fourths majority vote of the Parties present and voting at the meeting. The adopted amendment shall be communicated by the secretariat to the Depositary, who shall circulate it to all Parties for their acceptance.

4. Instruments of acceptance in respect of an amendment shall be deposited with the Depositary. An amendment adopted in accordance with paragraph 3 above shall enter into force for those Parties having accepted it on the ninetieth day after the date of receipt by the Depositary of an instrument of acceptance by at least three fourths of the Parties to this Protocol.

5. The amendment shall enter into force for any other Party on the ninetieth day after the date on which that Party deposits with the Depositary its instrument of acceptance of the said amendment.

Article 21

1. Annexes to this Protocol shall form an integral part thereof and, unless otherwise expressly provided, a reference to this Protocol constitutes at the same time a reference to any annexes thereto. Any annexes adopted after the entry into force of this Protocol shall be restricted to lists, forms and any other material of a descriptive nature that is of a scientific, technical, procedural or administrative character.

2. Any Party may make proposals for an annex to this Protocol and may propose amendments to annexes to this Protocol.

3. Annexes to this Protocol and amendments to annexes to this Protocol shall be adopted at an ordinary session of the Conference of the Parties serving as the meeting of the Parties to this Protocol. The text of any proposed annex or amendment to an annex shall be communicated to the Parties by the secretariat at least six months before the meeting at which it is proposed for adoption. The secretariat shall also communicate the text of any proposed annex or amendment to an annex to the Parties and signatories to the Convention and, for information, to the Depositary.

4. The Parties shall make every effort to reach agreement on any proposed annex or amendment to an annex by consensus. If all efforts at consensus have been exhausted, and no agreement reached, the annex or amendment to an annex shall as a last resort be adopted by a three-fourths majority vote of the Parties present and voting at the meeting. The adopted annex or amendment to an annex shall be communicated by the secretariat to the Depositary, who shall circulate it to all Parties for their acceptance.

5. An annex, or amendment to an annex other than Annex A or B, that has been adopted in accordance with paragraphs 3 and 4 above shall enter into force for all Parties to this Protocol six months after the date of the communication by the Depositary to such Parties of the adoption of the annex or adoption of the amendment to the annex, except for those Parties that have

notified the Depositary, in writing, within that period of their non-acceptance of the annex or amendment to the annex. The annex or amendment to an annex shall enter into force for Parties which withdraw their notification of non-acceptance on the ninetieth day after the date on which withdrawal of such notification has been received by the Depositary.

6. If the adoption of an annex or an amendment to an annex involves an amendment to this Protocol, that annex or amendment to an annex shall not enter into force until such time as the amendment to this Protocol enters into force.

7. Amendments to Annexes A and B to this Protocol shall be adopted and enter into force in accordance with the procedure set out in Article 20, provided that any amendment to Annex B shall be adopted only with the written consent of the Party concerned.

Article 22

1. Each Party shall have one vote, except as provided for in paragraph 2 below.

2. Regional economic integration organizations, in matters within their competence, shall exercise their right to vote with a number of votes equal to the number of their member States that are Parties to this Protocol. Such an organization shall not exercise its right to vote if any of its member States exercises its right, and vice versa.

Article 23

The Secretary-General of the United Nations shall be the Depositary of this Protocol.

Article 24

1. This Protocol shall be open for signature and subject to ratification, acceptance or approval by States and regional economic integration organizations which are Parties to the Convention. It shall be open for signature at United Nations Headquarters in New York from 16 March 1998 to 15 March 1999. This Protocol shall be open for accession from the day after the date on which it is closed for signature. Instruments of ratification, acceptance, approval or accession shall be deposited with the Depositary.

2. Any regional economic integration organization which becomes a Party to this Protocol without any of its member States being a Party shall be bound by all the obligations under this Protocol. In the case of such organizations, one or more of whose member States is a Party to this Protocol, the organization and its member States shall decide on their respective responsibilities for the performance of their obligations under this Protocol. In such cases, the organization and the member States shall not be entitled to exercise rights under this Protocol concurrently.

3. In their instruments of ratification, acceptance, approval or accession, regional economic integration organizations shall declare the extent of their competence with respect to the matters governed by this Protocol. These organizations shall also inform the Depositary, who shall in turn inform the Parties, of any substantial modification in the extent of their competence.

Article 25

1. This Protocol shall enter into force on the ninetieth day after the date on which not less than 55 Parties to the Convention, incorporating Parties included in Annex I which accounted in total for at least 55 per cent of the total carbon dioxide emissions for 1990 of the Parties included in Annex I, have deposited their instruments of ratification, acceptance, approval or accession.

2. For the purposes of this Article, "the total carbon dioxide emissions for 1990 of the Parties included in Annex I" means the amount communicated on or before the date of adoption of this Protocol by the Parties included in Annex I in their first national communications submitted in accordance with Article 12 of the Convention.

3. For each State or regional economic integration organization that ratifies, accepts or approves this Protocol or accedes thereto after the conditions set out in paragraph 1 above for entry into force have been fulfilled, this Protocol shall enter into force on the ninetieth day following the date of deposit of its instrument of ratification, acceptance, approval or accession.

4. For the purposes of this Article, any instrument deposited by a regional economic integration organization shall not be counted as additional to those deposited by States members of the organization.

Article 26

No reservations may be made to this Protocol.

Article 27

1. At any time after three years from the date on which this Protocol has entered into force for a Party, that Party may withdraw from this Protocol by giving written notification to the Depositary.

2. Any such withdrawal shall take effect upon expiry of one year from the date of receipt by the Depositary of the notification of withdrawal, or on such later date as may be specified in the notification of withdrawal.

3. Any Party that withdraws from the Convention shall be considered as also having withdrawn from this Protocol.

Article 28

The original of this Protocol, of which the Arabic, Chinese, English, French, Russian and Spanish texts are equally authentic, shall be deposited with the Secretary-General of the United Nations.

DONE at Kyoto this eleventh day of December one thousand nine hundred and ninety-seven.

IN WITNESS WHEREOF the undersigned, being duly authorized to that effect, have affixed their signatures to this Protocol on the dates indicated.

Annex A

Greenhouse gases

Carbon dioxide (C02)
Methane (CH4)
Nitrous oxide (N20)
Hydrofluorocarbons (HFCs)
Perfluorocarbons (PFCs)
Sulphur hexafluoride (SF6)

Sectors/source categories

Energy

- Fuel combustion
  - Energy industries
  - Manufacturing industries and construction
  - Transport
  - Other sectors
  - Other
- Fugitive emissions from fuels
  - Solid fuels
  - Oil and natural gas
  - Other

Industrial processes

- Mineral products
- Chemical industry
- Metal production
- Other production
- Production of halocarbons and sulphur hexafluoride
- Consumption of halocarbons and sulphur hexafluoride
- Other

Solvent and other product use

Agriculture

- Enteric fermentation
- Manure management
- Rice cultivation
- Agricultural soils
- Prescribed burning of savannas
- Field burning of agricultural residues
- Other

Waste

- Solid waste disposal on land
- Wastewater handling
- Waste incineration
- Other

Annex B

Party	Quantified emission limitation or reduction commitment (percentage of base year or period)
Australia	108
Austria	92
Belgium	92
Bulgaria*	92
Canada	94
Croatia*	95
Czech Republic*	92
Denmark	92
Estonia*	92
European Community	92
Finland	92
France	92
Germany	92
Greece	92
Hungary*	94
Iceland	110
Ireland	92
Italy	92
Japan	94
Latvia*	92
Liechtenstein	92
Lithuania*	92
Luxembourg	92
Monaco	92
Netherlands	92
New Zealand	100
Norway	101
Poland*	94
Portugal	92
Romania*	92
Russian Federation*	100
Slovakia*	92
Slovenia*	92
Spain	92
Sweden	92
Switzerland	92
Ukraine*	100
United Kingdom of Great Britain and Northern Ireland	92
United States of America	93

* Countries that are undergoing the process of transition to a market economy.

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CONFERENCE OF THE PARTIES SERVING AS THE
MEETING OF THE PARTIES TO THE KYOTO PROTOCOL

Report of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol on its first session, held at Montreal from 28 November to 10 December 2005

Addendum

Part Two: Action taken by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its first session

CONTENTS

Decisions adopted by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol

Decision 2/CMP.1

Principles, nature and scope of the mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol

The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,

Recalling decision 1/CP.3, in particular paragraphs 5 (b), (c) and (e),

Further recalling decisions 7/CP.4, 8/CP.4, 9/CP.4, 14/CP.5, 5/CP.6 containing the Bonn Agreements on the implementation of the Buenos Aires Plan of Action, 11/CP.7, 16/CP.7, 17/CP.7, 18/CP.7, 19/CP.7, 20/CP.7, 21/CP.7, 22/CP.7, 23/CP.7 and 24/CP.7, as appropriate,

Recalling also the preamble to the Convention,

Recognizing that, in using the mechanisms, Parties shall be guided by the objective and principles contained in Articles 2 and 3 and by Article 4, paragraph 7, of the Convention,

Further recognizing that the Kyoto Protocol has not created or bestowed any right, title or entitlement to emissions of any kind on Parties included in Annex I,

Emphasizing that the Parties included in Annex I shall implement domestic action in accordance with national circumstances and with a view to reducing emissions in a manner conducive to narrowing per capita differences between developed and developing country Parties while working towards achievement of the ultimate objective of the Convention,

Further emphasizing that environmental integrity is to be achieved through sound modalities, rules *and* guidelines for the mechanisms, sound and strong principles and rules governing land use, land-use change and forestry activities, and a strong compliance regime,

Aware of its decisions 3/CMP.1, 9/CMP.1, 11/CMP.1, 13/CMP.1, 15/CMP.1, 16/CMP.1, 19/CMP.1, 20/CMP.1, and 22/CMP.1 and decision 24/CP.7,

1. *Decides* that the use of the mechanisms shall be supplemental to domestic action and that domestic action shall thus constitute a significant element of the effort made by each Party included in Annex I to meet its quantified emission limitation and reduction commitments under Article 3, paragraph 1;

2. *Requests* the Parties included in Annex I to provide relevant information in relation to paragraph 1 above, in accordance with Article 7 of the Kyoto Protocol, for review under its Article 8;

3. *Decides* that the provision of such information shall take into account reporting on demonstrable progress as contained in decision 15/CMP.1;

4. *Requests* the facilitative branch of the Compliance Committee to address questions of implementation with respect to paragraphs 2 and 3 above;

5. *Decides* that the eligibility to participate in the mechanisms by a Party included in Annex I shall be dependent on its compliance with methodological and reporting requirements under Article 5, paragraphs 1 and 2, and Article 7, paragraphs 1 and 4, of the Kyoto Protocol. Oversight of this provision will be provided by the enforcement branch of the Compliance Committee, in accordance with the procedures and mechanisms relating to compliance as contained in decision 24/CP.7, assuming approval of such procedures and mechanisms by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol in decision form in addition to any amendment entailing legally binding consequences, noting that it is the prerogative of the Conference of the Parties serving as the meeting of

the Parties to the Kyoto Protocol to decide on the legal form of the procedures and mechanisms relating to compliance;

6. *Decides* that certified emission reductions, emission reduction units and assigned amount units under Articles 6, 12 and 17, as well as removal units resulting from activities under Article 3, paragraphs 3 and 4, may be used to meet commitments under Article 3, paragraph 1, of the Parties included in Annex I, and can be added as provided for in Article 3, paragraphs 10, 11 and 12, of the Kyoto Protocol and in conformity with the provisions contained in decision 13/CMP.1, and that emission reduction units, assigned amount units and removal units can be subtracted as provided for in Article 3, paragraphs 10 and 11, and in conformity with the provisions contained in decision 13/CMP.1, without altering the quantified emission limitation and reduction commitments inscribed in Annex B to the Kyoto Protocol.

2nd plenary meeting
30 November 2005

Decision 3/CMP.1

Modalities and procedures for a clean development mechanism as defined in Article 12 of the Kyoto Protocol

The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,

Recalling the provisions of Articles 3 and 12 of the Kyoto Protocol,

Bearing in mind that, in accordance with Article 12, the purpose of the clean development mechanism is to assist Parties not included in Annex I to the Convention in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3 of the Kyoto Protocol,

Aware of its decisions 2/CMP.1, 9/CMP.1, 11/CMP.1, 13/CMP.1, 15/CMP.1, 16/CMP.1, 19/CMP.1, 20/CMP.1, and 22/CMP.1, and decisions 2/CP.7 and 24/CP.7,

Cognizant of decision 17/CP.7 on modalities and procedures for a clean development mechanism as defined in Article 12 of the Kyoto Protocol,

1. *Decides* to confirm, and give full effect to any actions taken pursuant to, decision 17/CP.7 and to any other relevant decisions by the Conference of the Parties, as appropriate;

2. *Adopts* the modalities and procedures for a clean development mechanism contained in the annex below;

3. *Invites* the Executive Board to review the simplified modalities, procedures and the definitions of small-scale project activities referred to in paragraph 6 (c) of decision 17/CP.7 and, if necessary, make appropriate recommendations to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol;

4. *Decides further* that any future revision of the modalities and procedures for a clean development mechanism shall be decided in accordance with the rules of procedure of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, as applied. The first review shall be carried out no later than one year after the end of the first commitment period, based on recommendations by the Executive Board and by the Subsidiary Body for Implementation drawing on technical advice from the Subsidiary Body for Scientific and Technological Advice, as needed. Further reviews shall be carried out periodically thereafter. Any revision of the decision shall not affect clean development mechanism project activities already registered.

ANNEX

Modalities and procedures for a clean development mechanism

A. Definitions

1. For the purposes of the present annex the definitions contained in Article 1[1] and the provisions of Article 14 shall apply. Furthermore:

(a) An "emission reduction unit" or "ERU" is a unit issued pursuant to the relevant provisions in the annex to decision 13/CMP.1 and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5;

(b) A "certified emission reduction" or "CER" is a unit issued pursuant to Article 12 and requirements thereunder, as well as the relevant provisions in these modalities and procedures, and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5;

(c) An "assigned amount unit" or "AAU" is a unit issued pursuant to the relevant provisions in the annex to decision 13/CMP.1 and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5;

(d) A "removal unit" or "RMU" is a unit issued pursuant to the relevant provisions in the annex to decision 13/CMP.1 and is equal to one metric tonne of carbon dioxide equivalent, calculated using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5;

(e) "Stakeholders" means the public, including individuals, groups or communities affected, or likely to be affected, by the proposed clean development mechanism project activity.

B. Role of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol

2. The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (COP/MOP) shall have authority over and provide guidance to the clean development mechanism (CDM).

3. The COP/MOP shall provide guidance to the Executive Board by taking decisions on:

(a) The recommendations made by the Executive Board on its rules of procedure;

(b) The recommendations made by the Executive Board, in accordance with provisions of decision 17/CP.7, the present annex and relevant decisions of the COP/MOP;

(c) The designation of operational entities accredited by the Executive Board in accordance with Article 12, paragraph 5, and accreditation standards contained in appendix A below.

4. The COP/MOP shall further:

(a) Review annual reports of the Executive Board;

[1] In the context of this annex, "Article" refers to an Article of the Kyoto Protocol, unless otherwise specified.

(b) Review the regional and subregional distribution of designated operational entities and take appropriate decisions to promote accreditation of such entities from developing country Parties;[2]

(c) Review the regional and subregional distribution of CDM project activities with a view to identifying systematic or systemic barriers to their equitable distribution and take appropriate decisions, based, inter alia, on a report by the Executive Board;

(d) Assist in arranging funding of CDM project activities, as necessary.

C. Executive Board

5. The Executive Board shall supervise the CDM, under the authority and guidance of the COP/MOP, and be fully accountable to the COP/MOP. In this context, the Executive Board shall:

(a) Make recommendations to the COP/MOP on further modalities and procedures for the CDM, as appropriate;

(b) Make recommendations to the COP/MOP on any amendments or additions to rules of procedure for the Executive Board contained in the present annex, as appropriate;

(c) Report on its activities to each session of the COP/MOP;

(d) Approve new methodologies relating to, inter alia, baselines, monitoring plans and project boundaries in accordance with the provisions of appendix C below;

(e) Review provisions with regard to simplified modalities, procedures and the definitions of small-scale project activities and make recommendations to the COP/MOP;

(f) Be responsible for the accreditation of operational entities, in accordance with accreditation standards contained in appendix A below, and make recommendations to the COP/MOP for the designation of operational entities, in accordance with Article 12, paragraph 5. This responsibility includes:

(i) Decisions on re-accreditation, suspension and withdrawal of accreditation;

(ii) Operationalization of accreditation procedures and standards;

(g) Review the accreditation standards in appendix A below and make recommendations to the COP/MOP for consideration, as appropriate;

(h) Report to the COP/MOP on the regional and subregional distribution of CDM project activities with a view to identifying systematic or systemic barriers to their equitable distribution;

(i) Make publicly available relevant information, submitted to it for this purpose, on proposed CDM project activities in need of funding and on investors seeking opportunities, in order to assist in arranging funding of CDM project activities, as necessary;

(j) Make any technical reports commissioned available to the public and provide a period of at least eight weeks for public comments on draft methodologies and guidance before documents are finalized and any recommendations are submitted to the COP/MOP for their consideration;

[2] In the context of this annex, "Party" refers to a Party to the Kyoto Protocol, unless otherwise specified.

(k) Develop, maintain and make publicly available a repository of approved rules, procedures, methodologies and standards;

(l) Develop and maintain the CDM registry as defined in appendix D below;

(m) Develop and maintain a publicly available database of CDM project activities containing information on registered project design documents, comments received, verification reports, its decisions as well as information on all CERs issued;

(n) Address issues relating to observance of modalities and procedures for the CDM by project participants and/or operational entities, and report on them to the COP/MOP;

(o) Elaborate and recommend to the COP/MOP for adoption at its next session procedures for conducting the reviews referred to in paragraphs 41 and 65 below including, inter alia, procedures to facilitate consideration of information from Parties, stakeholders and UNFCCC accredited observers. Until their adoption by the COP/MOP, the procedures shall be applied provisionally;

(p) Carry out any other functions ascribed to it in decision 17/CP.7, the present annex and relevant decisions of the COP/MOP.

6. Information obtained from CDM project participants marked as proprietary or confidential shall not be disclosed without the written consent of the provider of the information, except as required by national law. Information used to determine additionality as defined in paragraph 43 below, to describe the baseline methodology and its application, and to support an environmental impact assessment referred to in paragraph 37 (c) below, shall not be considered as proprietary or confidential.

7. The Executive Board shall comprise 10 members from Parties to the Kyoto Protocol, as follows: one member from each of the five United Nations regional groups, two other members from the Parties included in Annex I, two other members from the Parties not included in Annex I, and one representative of the small island developing States, taking into account the current practice in the Bureau of the Conference of the Parties.

8. Members, including alternate members, of the Executive Board shall:

(a) Be nominated by the relevant constituencies referred to in paragraph 7 above and be elected by the COP/MOP. Vacancies shall be filled in the same way;

(b) Be elected for a period of two years and be eligible to serve a maximum of two consecutive terms. Terms as alternate members do not count. Five members and five alternate members shall be elected initially for a term of three years and five members and five alternate members for a term of two years. Thereafter, the COP/MOP shall elect, every year, five new members, and five new alternate members, for a term of two years. Appointment pursuant to paragraph 11 below shall count as one term. The members, and alternate members, shall remain in office until their successors are elected;

(c) Possess appropriate technical and/or policy expertise and shall act in their personal capacity. The cost of participation of members, and of alternate members, from developing country Parties and other Parties eligible under UNFCCC practice shall be covered by the budget for the Executive Board;

(d) Be bound by the rules of procedure of the Executive Board;

(e) Take a written oath of service witnessed by the Executive Secretary of the UNFCCC or his/her authorized representative before assuming his or her duties;

(f) Have no pecuniary or financial interest in any aspect of a CDM project activity or any designated operational entity;

(g) Subject to their responsibilities to the Executive Board, not disclose any confidential or proprietary information coming to their knowledge by reason of their duties for the Executive Board. The duty of the member, including alternate member, not to disclose confidential information constitutes an obligation in respect of that member, and alternate member, and shall remain an obligation after the expiration or termination of that member's function for the Executive Board.

9. The COP/MOP shall elect an alternate for each member of the Executive Board based on the criteria in paragraphs 7 and 8 above. The nomination by a constituency of a candidate member shall be accompanied by a nomination for a candidate alternate member from the same constituency.

10. The Executive Board may suspend and recommend to the COP/MOP the termination of the membership of a particular member, including an alternate member, for cause including, inter alia, breach of the conflict of interest provisions, breach of the confidentiality provisions, or failure to attend two consecutive meetings of the Executive Board without proper justification.

11. If a member, or an alternate member, of the Executive Board resigns or is otherwise unable to complete the assigned term of office or to perform the functions of that office, the Executive Board may decide, bearing in mind the proximity of the next session of the COP/MOP, to appoint another member, or an alternate member, from the same constituency to replace the said member for the remainder of that member's mandate.

12. The Executive Board shall elect its own Chair and Vice-Chair, with one being a member from a Party included in Annex I and the other being from a Party not included in Annex I. The positions of Chair and Vice-Chair shall alternate annually between a member from a Party included in Annex I and a member from a Party not included in Annex I.

13. The Executive Board shall meet as necessary but no less than three times a year, bearing in mind the provisions of paragraph 41 below. All documentation for Executive Board meetings shall be made available to alternate members.

14. At least two thirds of the members of the Executive Board, representing a majority of members from Parties included in Annex I and a majority of members from Parties not included in Annex I, must be present to constitute a quorum.

15. Decisions by the Executive Board shall be taken by consensus, whenever possible. If all efforts at reaching a consensus have been exhausted and no agreement has been reached, decisions shall be taken by a three-fourths majority of the members present and voting at the meeting. Members abstaining from voting shall be considered as not voting.

16. Meetings of the Executive Board shall be open to attendance, as observers, by all Parties and by all UNFCCC accredited observers and stakeholders, except where otherwise decided by the Executive Board.

17. The full text of all decisions of the Executive Board shall be made publicly available. The working language of the Executive Board shall be English. Decisions shall be made available in all six official languages of the United Nations.

18. The Executive Board may establish committees, panels or working groups to assist it in the performance of its functions. The Executive Board shall draw on the expertise necessary to perform its

functions, including from the UNFCCC roster of experts. In this context, it shall take fully into account the consideration of regional balance.

19. The secretariat shall service the Executive Board.

D. Accreditation and designation of operational entities

20. The Executive Board shall:

(a) Accredit operational entities which meet the accreditation standards contained in appendix A below;

(b) Recommend the designation of operational entities to the COP/MOP;

(c) Maintain a publicly available list of all designated operational entities;

(d) Review whether each designated operational entity continues to comply with the accreditation standards contained in appendix A below and on this basis confirm whether to reaccredit each operational entity every three years;

(e) Conduct spot-checking at any time and, on the basis of the results, decide to conduct the above-mentioned review, if warranted.

21. The Executive Board may recommend to the COP/MOP to suspend or withdraw the designation of a designated operational entity if it has carried out a review and found that the entity no longer meets the accreditation standards or applicable provisions in decisions of the COP/MOP. The Executive Board may recommend the suspension or withdrawal of designation only after the designated operational entity has had the possibility of a hearing. The suspension or withdrawal is with immediate effect, on a provisional basis, once the Executive Board has made a recommendation, and remains in effect pending a final decision by the COP/MOP. The affected entity shall be notified, immediately and in writing, once the Executive Board has recommended its suspension or withdrawal. The recommendation by the Executive Board and the decision by the COP/MOP on such a case shall be made public.

22. Registered project activities shall not be affected by the suspension or withdrawal of designation of a designated operational entity unless significant deficiencies are identified in the relevant validation, verification or certification report for which the entity was responsible. In this case, the Executive Board shall decide whether a different designated operational entity shall be appointed to review, and where appropriate correct, such deficiencies. If such a review reveals that excess CERs were issued, the designated operational entity whose accreditation has been withdrawn or suspended shall acquire and transfer, within 30 days of the end of review, an amount of reduced tonnes of carbon dioxide equivalent equal to the excess CERs issued, as determined by the Executive Board, to a cancellation account maintained in the CDM registry by the Executive Board.

23. Any suspension or withdrawal of a designated operational entity that adversely affects registered project activities shall be recommended by the Executive Board only after the affected project participants have had the possibility of a hearing.

24. Any costs relating to the review referred to in paragraph 22 above shall be borne by the designated operational entity whose designation has been withdrawn or suspended.

25. The Executive Board may seek assistance in performing the functions in paragraph 20 above, in accordance with the provisions of paragraph 18 above.

E. Designated operational entities

26. Designated operational entities shall be accountable to the COP/MOP through the Executive Board and shall comply with the modalities and procedures in decision 17/CP.7, the present annex and relevant decisions of the COP/MOP and the Executive Board.

27. A designated operational entity shall:

(a) Validate proposed CDM project activities;

(b) Verify and certify reductions in anthropogenic emissions by sources of greenhouse gases;

(c) Comply with applicable laws of the Parties hosting CDM project activities when carrying out its functions referred to in subparagraph (e) below;

(d) Demonstrate that it, and its subcontractors, have no real or potential conflict of interest with the participants in the CDM project activities for which it has been selected to carry out validation or verification and certification functions;

(e) Perform one of the following functions relating to a given CDM project activity: validation or verification and certification. Upon request, the Executive Board may, however, allow a single designated operational entity to perform all these functions within a single CDM project activity;

(f) Maintain a publicly available list of all CDM project activities for which it has carried out validation, verification and certification;

(g) Submit an annual activity report to the Executive Board;

(h) Make information obtained from CDM project participants publicly available, as required by the Executive Board. Information marked as proprietary or confidential shall not be disclosed without the written consent of the provider of the information, except as required by national law. Information used to determine additionality as defined in paragraph 43 below, to describe the baseline methodology and its application, and to support an environmental impact assessment referred to in paragraph 37 (c) below, shall not be considered as proprietary or confidential.

F. Participation requirements

28. Participation in a CDM project activity is voluntary.

29. Parties participating in the CDM shall designate a national authority for the CDM.

30. A Party not included in Annex I may participate in a CDM project activity if it is a Party to the Kyoto Protocol.

31. Subject to the provisions of paragraph 32 below, a Party included in Annex I with a commitment inscribed in Annex B is eligible to use CERs, issued in accordance with the relevant provisions, to contribute to compliance with part of its commitment under Article 3, paragraph 1, if it is in compliance with the following eligibility requirements:

(a) It is a Party to the Kyoto Protocol;

(b) Its assigned amount pursuant to Article 3, paragraphs 7 and 8, has been calculated and recorded in accordance with decision 13/CMP.1;

(c) It has in place a national system for the estimation of anthropogenic emissions by sources and anthropogenic removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, in accordance with Article 5, paragraph 1, and the requirements in the guidelines decided thereunder;

(d) It has in place a national registry in accordance with Article 7, paragraph 4, and the requirements in the guidelines decided thereunder;

(e) It has submitted annually the most recent required inventory, in accordance with Article 5, paragraph 2, and Article 7, paragraph 1, and the requirements in the guidelines decided thereunder, including the national inventory report and the common reporting format. For the first commitment period, the quality assessment needed for the purpose of determining eligibility to use the mechanisms shall be limited to the parts of the inventory pertaining to emissions of greenhouse gases from sources/sector categories from Annex A to the Kyoto Protocol and the submission of the annual inventory on sinks;

(f) It submits the supplementary information on assigned amount in accordance with Article 7, paragraph 1, and the requirements in the guidelines decided thereunder and makes any additions to, and subtractions from, assigned amount pursuant to Article 3, paragraphs 7 and 8, including for the activities under Article 3, paragraphs 3 and 4, in accordance with Article 7, paragraph 4, and the requirements in the guidelines decided thereunder.

32. A Party included in Annex I with a commitment inscribed in Annex B shall be considered:

(a) To meet the eligibility requirements referred to in paragraph 31 above after 16 months have elapsed since the submission of its report to facilitate the calculation of its assigned amount pursuant to Article 3, paragraphs 7 and 8, and to demonstrate its capacity to account for its emissions and assigned amount, in accordance with the modalities adopted for the accounting of assigned amount under Article 7, paragraph 4, unless the enforcement branch of the compliance committee finds in accordance with decision 24/CP.7 that the Party does not meet these requirements, or, at an earlier date, if the enforcement branch of the Compliance Committee has decided that it is not proceeding with any questions of implementation relating to these requirements indicated in reports of the expert review teams under Article 8 of the Kyoto Protocol, and has transmitted this information to the secretariat;

(b) To continue to meet the eligibility requirements referred to in paragraph 31 above unless and until the enforcement branch of the Compliance Committee decides that the Party does not meet one or more of the eligibility requirements, has suspended the Party's eligibility, and has transmitted this information to the secretariat.

33. A Party that authorizes private and/or public entities to participate in Article 12 project activities shall remain responsible for the fulfilment of its obligations under the Kyoto Protocol and shall ensure that such participation is consistent with the present annex. Private and/or public entities may only transfer and acquire CERs if the authorizing Party is eligible to do so at that time.

34. The secretariat shall maintain publicly accessible lists of:

(a) Parties not included in Annex I which are Parties to the Kyoto Protocol;

(b) Parties included in Annex I that do not meet the requirements in paragraph 31 above or have been suspended.

G. Validation and registration

35. Validation is the process of independent evaluation of a project activity by a designated operational entity against the requirements of the CDM as set out in decision 17/CP.7, the present annex and relevant decisions of the COP/MOP, on the basis of the project design document, as outlined in appendix B below.

36. Registration is the formal acceptance by the Executive Board of a validated project as a CDM project activity. Registration is the prerequisite for the verification, certification and issuance of CERs relating to that project activity.

37. The designated operational entity selected by project participants to validate a project activity, being under a contractual arrangement with them, shall review the project design document and any supporting documentation to confirm that the following requirements have been met:

(a) The participation requirements as set out in paragraphs 28–30 above are satisfied

(b) Comments by local stakeholders have been invited, a summary of the comments received has been provided, and a report to the designated operational entity on how due account was taken of any comments has been received

(c) Project participants have submitted to the designated operational entity documentation on the analysis of the environmental impacts of the project activity, including transboundary impacts and, if those impacts are considered significant by the project participants or the host Party, have undertaken an environmental impact assessment in accordance with procedures as required by the host Party

(d) The project activity is expected to result in a reduction in anthropogenic emissions by sources of greenhouse gases that are additional to any that would occur in the absence of the proposed project activity, in accordance with paragraphs 43–52 below

(e) The baseline and monitoring methodologies comply with requirements pertaining to:

(i) Methodologies previously approved by the Executive Board; or

(ii) Modalities and procedures for establishing a new methodology, as set out in paragraph 38 below

(f) Provisions for monitoring, verification and reporting are in accordance with decision 17/CP.7, the present annex and relevant decisions of the COP/MOP

(g) The project activity conforms to all other requirements for CDM project activities in decision 17/CP.7, the present annex and relevant decisions by the COP/MOP and the Executive Board.

38. If the designated operational entity determines that the project activity intends to use a new baseline or monitoring methodology, as referred to in paragraph 37 (e) (ii) above, it shall, prior to a submission for registration of this project activity, forward the proposed methodology, together with the

draft project design document, including a description of the project and identification of the project participants, to the Executive Board for review. The Executive Board shall expeditiously, if possible at its next meeting but not later than four months, review the proposed new methodology in accordance with the modalities and procedures of the present annex. Once approved by the Executive Board it shall make the approved methodology publicly available along with any relevant guidance and the designated operational entity may proceed with the validation of the project activity and submit the project design document for registration. In the event that the COP/MOP requests the revision of an approved methodology, no CDM project activity may use this methodology. The project participants shall revise the methodology, as appropriate, taking into consideration any guidance received.

39. A revision of a methodology shall be carried out in accordance with the modalities and procedures for establishing new methodologies as set out in paragraph 38 above. Any revision to an approved methodology shall only be applicable to project activities registered subsequent to the date of revision and shall not affect existing registered project activities during their crediting periods.

40. The designated operational entity shall:

(a) Prior to the submission of the validation report to the Executive Board, have received from the project participants written approval of voluntary participation from the designated national authority of each Party involved, including confirmation by the host Party that the project activity assists it in achieving sustainable development;

(b) In accordance with provisions on confidentiality contained in paragraph 27 (h) above, make publicly available the project design document;

(c) Receive, within 30 days, comments on the validation requirements from Parties, stakeholders and UNFCCC accredited non-governmental organizations and make them publicly available;

(d) After the deadline for receipt of comments, make a determination as to whether, on the basis of the information provided and taking into account the comments received, the project activity should be validated;

(e) Inform project participants of its determination on the validation of the project activity. Notification to the project participants will include:

(i) Confirmation of validation and date of submission of the validation report to the Executive Board; or

(ii) An explanation of reasons for non-acceptance if the project activity, as documented, is judged not to fulfil the requirements for validation;

(f) Submit to the Executive Board, if it determines the proposed project activity to be valid, a request for registration in the form of a validation report including the project design document, the written approval of the host Party as referred to in subparagraph (a) above, and an explanation of how it has taken due account of comments received;

(g) Make this validation report publicly available upon transmission to the Executive Board.

41. The registration by the Executive Board shall be deemed final eight weeks after the date of receipt by the Executive Board of the request for registration, unless a Party involved in the project activity or at least three members of the Executive Board request a review of the proposed CDM project activity. The review by the Executive Board shall be made in accordance with the following provisions:

(a) It shall be related to issues associated with the validation requirements

(b) It shall be finalized no later than at the second meeting following the request for review, with the decision and the reasons for it being communicated to the project participants and the public.

42. A proposed project activity that is not accepted may be reconsidered for validation and subsequent registration, after appropriate revisions, provided that it follows the procedures and meets the requirements for validation and registration, including those relating to public comments.

43. A CDM project activity is additional if anthropogenic emissions of greenhouse gases by sources are reduced below those that would have occurred in the absence of the registered CDM project activity.

44. The baseline for a CDM project activity is the scenario that reasonably represents the anthropogenic emissions by sources of greenhouse gases that would occur in the absence of the proposed project activity. A baseline shall cover emissions from all gases, sectors and source categories listed in Annex A within the project boundary. A baseline shall be deemed to reasonably represent the anthropogenic emissions by sources that would occur in the absence of the proposed project activity if it is derived using a baseline methodology referred to in paragraphs 37 and 38 above.

45. A baseline shall be established:

(a) By project participants in accordance with provisions for the use of approved and new methodologies, contained in decision 17/CP.7, the present annex and relevant decisions of the COP/MOP;

(b) In a transparent and conservative manner regarding the choice of approaches, assumptions, methodologies, parameters, data sources, key factors and additionality, and taking into account uncertainty;

(c) On a project-specific basis;

(d) In the case of small-scale CDM project activities which meet the criteria specified in decision 17/CP.7 and relevant decisions by the COP/MOP, in accordance with simplified procedures developed for such activities;

(e) Taking into account relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the project sector.

46. The baseline may include a scenario where future anthropogenic emissions by sources are projected to rise above current levels, due to the specific circumstances of the host Party.

47. The baseline shall be defined in a way that CERs cannot be earned for decreases in activity levels outside the project activity or due to force majeure.

48. In choosing a baseline methodology for a project activity, project participants shall select from among the following approaches the one deemed most appropriate for the project activity, taking into account any guidance by the Executive Board, and justify the appropriateness of their choice:

(a) Existing actual or historical emissions, as applicable, or

(b) Emissions from a technology that represents an economically attractive course of action, taking into account barriers to investment, or

(c) The average emissions of similar project activities undertaken in the previous five years, in similar social, economic, environmental and technological circumstances, and whose performance is among the top 20 per cent of their category.

49. Project participants shall select a crediting period for a proposed project activity from one of the following alternative approaches:

(a) A maximum of seven years which may be renewed at most two times, provided that, for each renewal, a designated operational entity determines and informs the Executive Board that the original project baseline is still valid or has been updated taking account of new data where applicable; or

(b) A maximum of 10 years with no option of renewal.

50. Reductions in anthropogenic emissions by sources shall be adjusted for leakage in accordance with the monitoring and verification provisions in paragraphs 59 and 62 (f) below, respectively.

51. Leakage is defined as the net change of anthropogenic emissions by sources of greenhouse gases which occurs outside the project boundary, and which is measurable and attributable to the CDM project activity.

52. The project boundary shall encompass all anthropogenic emissions by sources of greenhouse gases under the control of the project participants that are significant and reasonably attributable to the CDM project activity.

H. Monitoring

53. Project participants shall include, as part of the project design document, a monitoring plan that provides for:

(a) The collection and archiving of all relevant data necessary for estimating or measuring anthropogenic emissions by sources of greenhouse gases occurring within the project boundary during the crediting period;

(b) The collection and archiving of all relevant data necessary for determining the baseline of anthropogenic emissions by sources of greenhouse gases within the project boundary during the crediting period;

(c) The identification of all potential sources of, and the collection and archiving of data on, increased anthropogenic emissions by sources of greenhouse gases outside the project boundary that are significant and reasonably attributable to the project activity during the crediting period;

(d) The collection and archiving of information relevant to the provisions in paragraph 37 (c) above;

(e) Quality assurance and control procedures for the monitoring process;

(f) Procedures for the periodic calculation of the reductions of anthropogenic emissions by sources by the proposed CDM project activity, and for leakage effects;

(g) Documentation of all steps involved in the calculations referred to in paragraph 53 (c) and (f) above.

54. A monitoring plan for a proposed project activity shall be based on a previously approved monitoring methodology or a new methodology, in accordance with paragraphs 37 and 38 above, that:

(a) Is determined by the designated operational entity as appropriate to the circumstances of the proposed project activity and has been successfully applied elsewhere;

(b) Reflects good monitoring practice appropriate to the type of project activity.

55. For small-scale CDM project activities meeting the criteria specified in decision 17/CP.7 and relevant decisions by the COP/MOP, project participants may use simplified modalities and procedures for small-scale projects.

56. Project participants shall implement the monitoring plan contained in the registered project design document.

57. Revisions, if any, to the monitoring plan to improve its accuracy and/or completeness of information shall be justified by project participants and shall be submitted for validation to a designated operational entity.

58. The implementation of the registered monitoring plan and its revisions, as applicable, shall be a condition for verification, certification and the issuance of CERs.

59. Subsequent to the monitoring and reporting of reductions in anthropogenic emissions, CERs resulting from a CDM project activity during a specified time period shall be calculated, applying the registered methodology, by subtracting the actual anthropogenic emissions by sources from baseline emissions and adjusting for leakage.

60. The project participants shall provide to the designated operational entity, contracted by the project participants to perform the verification, a monitoring report in accordance with the registered monitoring plan set out in paragraph 53 above for the purpose of verification and certification.

I. Verification and certification

61. Verification is the periodic independent review and ex post determination by the designated operational entity of the monitored reductions in anthropogenic emissions by sources of greenhouse gases that have occurred as a result of a registered CDM project activity during the verification period. Certification is the written assurance by the designated operational entity that, during a specified time period, a project activity achieved the reductions in anthropogenic emissions by sources of greenhouse gases as verified.

62. In accordance with the provisions on confidentiality in paragraph 27 (h) above, the designated operational entity contracted by the project participants to perform the verification shall make the monitoring report publicly available, and shall:

(a) Determine whether the project documentation provided is in accordance with the requirements of the registered project design document and relevant provisions of decision 17/CP.7, the present annex and relevant decisions of the COP/MOP;

(b) Conduct on-site inspections, as appropriate, that may comprise, inter alia, a review of performance records, interviews with project participants and local stakeholders, collection of measurements, observation of established practices and testing of the accuracy of monitoring equipment;

(c) If appropriate, use additional data from other sources;

(d) Review monitoring results and verify that the monitoring methodologies for the estimation of reductions in anthropogenic emissions by sources have been applied correctly and their documentation is complete and transparent;

(e) Recommend to the project participants appropriate changes to the monitoring methodology for any future crediting period, if necessary;

(f) Determine the reductions in anthropogenic emissions by sources of greenhouse gases that would not have occurred in the absence of the CDM project activity, based on the data and information derived under subparagraph (a) above and obtained under subparagraph (b) and/or (c) above, as appropriate, using calculation procedures consistent with those contained in the registered project design document and in the monitoring plan;

(g) Identify and inform the project participants of any concerns relating to the conformity of the actual project activity and its operation with the registered project design document. Project participants shall address the concerns and supply relevant additional information;

(h) Provide a verification report to the project participants, the Parties involved and the Executive Board. The report shall be made publicly available.

63. The designated operational entity shall, based on its verification report, certify in writing that, during the specified time period, the project activity achieved the verified amount of reductions in anthropogenic emissions by sources of greenhouse gases that would not have occurred in the absence of the CDM project activity. It shall inform the project participants, Parties involved and the Executive Board of its certification decision in writing immediately upon completion of the certification process and make the certification report publicly available.

J. Issuance of certified emission reductions

64. The certification report shall constitute a request for issuance to the Executive Board of CERs equal to the verified amount of reductions of anthropogenic emissions by sources of greenhouse gases.

65. The issuance shall be considered final 15 days after the date of receipt of the request for issuance, unless a Party involved in the project activity or at least three members of the Executive Board request a review of the proposed issuance of CERs. Such a review shall be limited to issues of fraud, malfeasance or incompetence of the designated operational entities and be conducted as follows:

(a) Upon receipt of a request for such a review, the Executive Board, at its next meeting, shall decide on its course of action. If it decides that the request has merit it shall perform a review and decide whether the proposed issuance of CERs should be approved;

(b) The Executive Board shall complete its review within 30 days following its decision to perform the review;

(c) The Executive Board shall inform the project participants of the outcome of the review, and make public its decision regarding the approval of the proposed issuance of CERs and the reasons for it.

66. Upon being instructed by the Executive Board to issue CERs for a CDM project activity, the CDM registry administrator, working under the authority of the Executive Board, shall, promptly, issue the specified quantity of CERs into the pending account of the Executive Board in the CDM registry, in accordance with appendix D below. Upon such issuance, the CDM registry administrator shall promptly:

(a) Forward the quantity of CERs corresponding to the share of proceeds to cover administrative expenses and to assist in meeting costs of adaptation, respectively, in

accordance with Article 12, paragraph 8, to the appropriate accounts in the CDM registry for the management of the share of proceeds;

(b) Forward the remaining CERs to the registry accounts of Parties and project participants involved, in accordance with their request.

APPENDIX A

Standards for the accreditation of operational entities

1. An operational entity shall:

(a) Be a legal entity (either a domestic legal entity or an international organization) and provide documentation of this status;

(b) Employ a sufficient number of persons having the necessary competence to perform validation, verification and certification functions relating to the type, range and volume of work performed, under a responsible senior executive;

(c) Have the financial stability, insurance coverage and resources required for its activities;

(d) Have sufficient arrangements to cover legal and financial liabilities arising from its activities;

(e) Have documented internal procedures for carrying out its functions including, among others, procedures for the allocation of responsibility within the organization and for handling complaints. These procedures shall be made publicly available;

(f) Have, or have access to, the necessary expertise to carry out the functions specified in modalities and procedures of the CDM and relevant decisions by the COP/MOP, in particular knowledge and understanding of:

(i) The modalities and procedures and guidelines for the operation of the CDM, and relevant decisions of the COP/MOP and of the Executive Board;

(ii) Issues, in particular environmental, relevant to validation, verification and certification of CDM project activities, as appropriate;

(iii) The technical aspects of CDM project activities relevant to environmental issues, including expertise in the setting of baselines and monitoring of emissions;

(iv) Relevant environmental auditing requirements and methodologies;

(v) Methodologies for accounting of anthropogenic emissions by sources;

(vi) Regional and sectoral aspects;

(g) Have a management structure that has overall responsibility for performance and implementation of the entity's functions, including quality assurance procedures, and all relevant decisions relating to validation, verification and certification. The applicant operational entity shall make available:

(i) The names, qualifications, experience and terms of reference of senior management personnel such as the senior executive, board members, senior officers and other relevant personnel;

(ii) An organization chart showing lines of authority, responsibility and allocation of functions stemming from senior management;

(iii) Its quality assurance policy and procedures;

(iv) Administrative procedures, including document control;

(v) Its policy and procedures for the recruitment and training of operational entity personnel, for ensuring their competence for all necessary functions for validation, verification and certification functions, and for monitoring their performance;

(vi) Its procedures for handling complaints, appeals and disputes;

(h) Not have pending any judicial process for malpractice, fraud and/or other activity incompatible with its functions as a designated operational entity.

2. An applicant operational entity shall meet the following operational requirements:

(a) Work in a credible, independent, non-discriminatory and transparent manner, complying with applicable national law and meeting, in particular, the following requirements:

(i) An applicant operational entity shall have a documented structure, which safeguards impartiality, including provisions to ensure impartiality of its operations

(ii) If it is part of a larger organization, and where parts of that organization are, or may become, involved in the identification, development or financing of any CDM project activity, the applicant operational entity shall:

– Make a declaration of all the organization's actual and planned involvement in CDM project activities, if any, indicating which part of the organization is involved and in which particular CDM project activities;

– Clearly define the links with other parts of the organization, demonstrating that no conflicts of interest exist;

– Demonstrate that no conflict of interest exists between its functions as an operational entity and any other functions that it may have, and demonstrate how business is managed to minimize any identified risk to impartiality. The demonstration shall cover all sources of conflict of interest, whether they arise from within the applicant operational entity or from the activities of related bodies;

– Demonstrate that it, together with its senior management and staff, is not involved in any commercial, financial or other processes which might influence its judgement or endanger trust in its independence of judgement and integrity in relation to its activities, and that it complies with any rules applicable in this respect;

(b) Have adequate arrangements to safeguard confidentiality of the information obtained from CDM project participants in accordance with provisions contained in the present annex.

APPENDIX B

Project design document

1. The provisions of this appendix shall be interpreted in accordance with the annex above on modalities and procedures for a CDM.

2. The purpose of this appendix is to outline the information required in the project design document. A project activity shall be described in detail taking into account the provisions of the annex on modalities and procedures for a CDM, in particular, section G on validation and registration and section H on monitoring, in a project design document which shall include the following:

(a) A description of the project comprising the project purpose, a technical description of the project, including how technology will be transferred, if any, and a description and justification of the project boundary

(b) A proposed baseline methodology in accordance with the annex on modalities and procedures for a CDM including, in the case of the:

(i) Application of an approved methodology:

– Statement of which approved methodology has been selected

– Description of how the approved methodology will be applied in the context of the project

(ii) Application of a new methodology:

– Description of the baseline methodology and justification of choice, including an assessment of strengths and weaknesses of the methodology

– Description of key parameters, data sources and assumptions used in the baseline estimate, and assessment of uncertainties

– Projections of baseline emissions

– Description of how the baseline methodology addresses potential leakage

(iii) Other considerations, such as a description of how national and/or sectoral policies and circumstances have been taken into account and an explanation of how the baseline was established in a transparent and conservative manner

(c) Statement of the estimated operational lifetime of the project and which crediting period was selected

(d) Description of how the anthropogenic emissions of greenhouse gases by sources are reduced below those that would have occurred in the absence of the registered CDM project activity

(e) Environmental impacts:

(i) Documentation on the analysis of the environmental impacts, including transboundary impacts

(ii) If impacts are considered significant by the project participants or the host Party: conclusions and all references to support documentation of an environmental impact assessment that has been undertaken in accordance with the procedures as required by the host Party

(f) Information on sources of public funding for the project activity from Parties included in Annex I which shall provide an affirmation that such funding does not result in a diversion of official development assistance and is separate from and is not counted towards the financial obligations of those Parties

(g) Stakeholder comments, including a brief description of the process, a summary of the comments received, and a report on how due account was taken of any comments received

(h) Monitoring plan:

(i) Identification of data needs and data quality with regard to accuracy, comparability, completeness and validity

(ii) Methodologies to be used for data collection and monitoring including quality assurance and quality control provisions for monitoring, collecting and reporting

(iii) In the case of a new monitoring methodology, provide a description of the methodology, including an assessment of strengths and weaknesses of the methodology and whether or not it has been applied successfully elsewhere

(i) Calculations:

(i) Description of formulae used to calculate and estimate anthropogenic emissions by sources of greenhouse gases of the CDM project activity within the project boundary

(ii) Description of formulae used to calculate and to project leakage, defined as: the net change of anthropogenic emissions by sources of greenhouse gases which occurs outside the CDM project activity boundary, and that is measurable and attributable to the CDM project activity

(iii) The sum of (i) and (ii) above representing the CDM project activity emissions

(iv) Description of formulae used to calculate and to project the anthropogenic emissions by sources of greenhouse gases of the baseline

(v) Description of formulae used to calculate and to project leakage

(vi) The sum of (iv) and (v) above representing the baseline emissions

(vii) Difference between (vi) and (iii) above representing the emission reductions of the CDM project activity

(j) References to support the above, if any.

APPENDIX C

Terms of reference for establishing guidelines on baselines and monitoring methodologies

The Executive Board, drawing on experts in accordance with the modalities and procedures for a CDM, shall develop and recommend to the COP/MOP, inter alia:

(a) General guidance on methodologies relating to baselines and monitoring consistent with the principles set out in those modalities and procedures in order to:

(i) Elaborate the provisions relating to baseline and monitoring methodologies contained in decision 17/CP.7, the annex above and relevant decisions of the COP/MOP;

(ii) Promote consistency, transparency and predictability;

(iii) Provide rigour to ensure that net reductions in anthropogenic emissions are real and measurable, and an accurate reflection of what has occurred within the project boundary;

(iv) Ensure applicability in different geographical regions and to those project categories which are eligible in accordance with decision 17/CP.7 and relevant decisions of the COP/MOP;

(v) Address the additionality requirement of Article 12, paragraph 5 (c), and paragraph 43 of the above annex;

(b) Specific guidance in the following areas:

(i) Definition of project categories (e.g. based on sector, subsector, project type, technology, geographic area) that show common methodological characteristics for baseline setting, and/or monitoring, including guidance on the level of geographic aggregation, taking into account data availability

(ii) Baseline methodologies deemed to reasonably represent what would have occurred in the absence of a project activity

(iii) Monitoring methodologies that provide an accurate measure of actual reductions in anthropogenic emissions as a result of the project activity, taking into account the need for consistency and cost-effectiveness

(iv) Decision trees and other methodological tools, where appropriate, to guide choices in order to ensure that the most appropriate methodologies are selected, taking into account relevant circumstances

(v) The appropriate level of standardization of methodologies to allow a reasonable estimation of what would have occurred in the absence of a project activity wherever possible and appropriate. Standardization should be conservative in order to prevent any overestimation of reductions in anthropogenic emissions

(vi) Determination of project boundaries including accounting for all greenhouse gases that should be included as a part of the baseline, and monitoring.

Relevance of leakage and recommendations for establishing appropriate project boundaries and methods for the ex post evaluation of the level of leakage

(vii) Accounting for applicable national policies and specific national or regional circumstances, such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the sector relevant to the project activity

(viii) The breadth of the baseline, e.g. how the baseline makes comparisons between the technology/fuel used and other technologies/fuels in the sector

(c) In developing the guidance in (a) and (b) above, the Executive Board shall take into account:

(i) Current practices in the host country or an appropriate region, and observed trends;

(ii) Least cost technology for the activity or project category.

APPENDIX D

Clean development mechanism registry requirements

1. The Executive Board shall establish and maintain a CDM registry to ensure the accurate accounting of the issuance, holding, transfer and acquisition of CERs by Parties not included in Annex I. The Executive Board shall identify a registry administrator to maintain the registry under its authority.

2. The CDM registry shall be in the form of a standardized electronic database which contains, inter alia, common data elements relevant to the issuance, holding, transfer and acquisition of CERs. The structure and data formats of the CDM registry shall conform to technical standards to be adopted by the COP/MOP for the purpose of ensuring the accurate, transparent and efficient exchange of data between national registries, the CDM registry and the international transaction log.

3. The CDM registry shall have the following accounts:

(a) One pending account for the Executive Board, into which CERs are issued before being transferred to other accounts

(b) At least one holding account for each Party not included in Annex I hosting a CDM project activity or requesting an account

(c) At least one account for the purpose of cancelling ERUs, CERs, AAUs and RMUs equal to excess CERs issued, as determined by the Executive Board, where the accreditation of a designated operational entity has been withdrawn or suspended

(d) At least one account for the purpose of holding and transferring CERs corresponding to the share of proceeds to cover administrative expenses and to assist in meeting costs of adaptation in accordance with Article 12, paragraph 8. Such an account may not otherwise acquire CERs.

4. Each CER shall be held in only one account in one registry at a given time.

5. Each account within the CDM registry shall have a unique account number comprising the following elements:

(a) Party/organization identifier: the Party for which the account is maintained, using the two-letter country code defined by the International Organization for Standardization (ISO 3166), or, in the cases of the pending account and an account for managing the CERs corresponding to the share of proceeds, the Executive Board or another appropriate organization

(b) A unique number: a number unique to that account for the Party or organization for which the account is maintained.

6. Upon being instructed by the Executive Board to issue CERs for a CDM project activity, the registry administrator shall, in accordance with the transaction procedures set out in decision 13/CMP.1:

(a) Issue the specified quantity of CERs into a pending account of the Executive Board;

(b) Forward the quantity of CERs corresponding to the share of proceeds to cover administrative expenses and to assist in meeting costs of adaptation, in accordance with Article 12, paragraph 8, to the appropriate accounts in the CDM registry for holding and transferring such CERs;

(c) Forward the remaining CERs to the registry accounts of project participants and Parties involved, in accordance with their request.

7. Each CER shall have a unique serial number comprising the following elements:

(a) Commitment period: the commitment period for which the CER is issued

(b) Party of origin: the Party which hosted the CDM project activity, using the two-letter country code defined by ISO 3166

(c) Type: this shall identify the unit as a CER

(d) Unit: a number unique to the CER for the identified commitment period and Party of origin

(e) Project identifier: a number unique to the CDM project activity for the Party of origin.

8. Where the accreditation of a designated operational entity has been withdrawn or suspended, ERUs, CERs, AAUs and/or RMUs equal to the excess CERs issued, as determined by the Executive Board, shall be transferred to a cancellation account in the CDM registry. Such ERUs, CERs, AAUs and RMUs may not be further transferred or used for the purpose of demonstrating the compliance of a Party with its commitment under Article 3, paragraph 1.

9. The CDM registry shall make non-confidential information publicly available and provide a publicly accessible user interface through the Internet that allows interested persons to query and view it.

10. The information referred to in paragraph 9 above shall include up-to-date information, for each account number in the registry, on the following:

(a) Account name: the holder of the account

(b) Representative identifier: the representative of the account holder, using the Party/organization identifier (the two-letter country code defined by ISO 3166) and a number unique to that representative for that Party or organization

(c) Representative name and contact information: the full name, mailing address, telephone number, facsimile number and e-mail address of the representative of the account holder.

11. The information referred to in paragraph 9 above shall include the following CDM project activity information, for each project identifier against which the CERs have been issued:

(a) Project name: a unique name for the CDM project activity

(b) Project location: the Party and town or region in which the CDM project activity is located

(c) Years of CER issuance: the years in which CERs have been issued as a result of the CDM project activity

(d) Operational entities: the operational entities involved in the validation, verification and certification of the CDM project activity

(e) Reports: downloadable electronic versions of documentation to be made publicly available in accordance with the provisions of the present annex.

12. The information referred to in paragraph 9 above shall include the following holding and transaction information relevant to the CDM registry, by serial number, for each calendar year (defined according to Greenwich Mean Time):

(a) The total quantity of CERs in each account at the beginning of the year

(b) The total quantity of CERs issued

(c) The total quantity of CERs transferred and the identity of the acquiring accounts and registries

(d) The total quantity of ERUs, CERs, AAUs and RMUs cancelled in accordance with paragraph 8 above

(e) Current holdings of CERs in each account.

2nd plenary meeting
30 November 2005

Decision 4/CMP.1

Guidance relating to the clean development mechanism

The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,

Aware of its decisions 2/CMP.1 and 3/CMP.1 and its annex,

Cognizant of decisions 15/CP.7, 17/CP.7 and its annex, 19/CP.7 and its annex, 21/CP.8 and its annexes, 18/CP.9 and its annexes, 19/CP.9 and its annex, 12/CP.10 and its annex, and 14/CP.10 and its annex,

Decides to confirm and give full effect to any actions taken pursuant to decisions 21/CP.8, 18/CP.9 and 12/CP.10, and their annexes:

(a) Annex I, containing the rules of procedure of the Executive Board;

(b) Annex II, containing the simplified modalities and procedures for small-scale clean development mechanism project activities;

(c) Annex III, containing the procedures for review as referred to in paragraph 41 of the modalities and procedures of the clean development mechanism;

(d) Annex IV, containing the procedures for review referred to in paragraph 65 of the modalities and procedures of the clean development mechanism.

Decision 5/CMP.1

Modalities and procedures for afforestation and reforestation project activities under the clean development mechanism in the first commitment period of the Kyoto Protocol

The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,

Aware of its decisions 2/CMP.1, 3/CMP.1, 13/CMP.1, 15/CMP.1,16/CMP.1, 17/CMP.1, 19/CMP.1, 20/CMP.1, and 22/CMP.1,

Cognizant of decisions 11/CP.7, 15/CP.7, 17/CP.7, 19/CP.7, 20/CP.7, 21/CP.7, 22/CP.7, 23/CP.7, 21/CP.8, 22/CP.8, 13/CP.9, 18/CP.9 and its annex II, and 19/CP.9,

1. *Decides* to confirm and give full effect to any actions taken pursuant to decision 19/CP.9;

2. *Adopts* the modalities and procedures for afforestation and reforestation project activities under the clean development mechanism contained in the annex to this decision, for the first commitment period of the Kyoto Protocol;

3. *Decides* that the treatment of land use, land-use change and forestry project activities under the clean development mechanism in future commitment periods shall be decided as part of the negotiations on the second commitment period and that any revision of the decision shall not affect afforestation and reforestation project activities under the clean development mechanism registered prior to the end of the first commitment period;

4. *Decides* to periodically review the modalities and procedures for afforestation and reforestation project activities under the clean development mechanism, and that the first review shall be carried out no later than one year before the end of the first commitment period, based on recommendations by the Executive Board of the clean development mechanism and by the Subsidiary Body for Implementation, drawing on technical advice from the Subsidiary Body for Scientific and Technological Advice, as needed.

Decision 7/CMP.1

Further guidance relating to the clean development mechanism

The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,

Mindful of the objective of the Convention as set out in its Article 2,

Recalling the provisions of Articles 3 and 12 of the Kyoto Protocol,

Recalling decisions 2/CP.7, 15/CP.7, 17/CP.7, 21/CP.8, 18/CP.9, 19/CP.9, 12/CP.10 and 14/CP.10 *and* their annexes,

Cognizant of decisions 2/CMP.1, 3/CMP.1 and its annexes, 5/CMP.1, 6/CMP.1, 4/CMP.1 and its annexes, 8/CMP.1, and 29/CMP.1,

Expressing appreciation to the Conference of the Parties for exercising authority over the clean development mechanism in the period from December 2001 until 29 November 2005,

Recognizing the accelerated progress in the implementation of the clean development mechanism, notably since the entry into force of the Kyoto Protocol on 16 February 2005,

Welcoming the fact that 90 Parties, among them 72 developing country Parties, have so far established designated national authorities,

Reminding Parties wishing to participate in clean development mechanism project activities of the need to identify a designated national authority,

Conscious of the importance of well-functioning designated operational entities and the need to further promote the accreditation of such entities from developing countries,

Recognizing the need to ensure the continuation of the clean development mechanism beyond 2012,

Fully aware of the need to take measures to further strengthen the clean development mechanism to allow it to meet its purposes as stated in Article 12 of the Kyoto Protocol by enhancing its institutions to facilitate efficiency, cost-effectiveness, consistency and transparency of decision-making,

Noting the importance of the issue of ensuring privileges and immunities for members and alternate members of the Executive Board of the clean development mechanism and its panels, committees and working groups,

Stressing the importance of constituencies nominating members and alternate members who have the required qualifications and sufficient time to perform functions, as indicated in a management plan for the clean development mechanism, to serve on the Executive Board of the clean development mechanism in order to ensure that the Board has expertise, including on financial and regulatory matters and executive decision-making,

Stressing the importance of the participation of Executive Board members and alternate members in the work of the Board and of their full compliance with the Board's rules of procedure, as contained in annex I to decision 4/CMP.1, especially with regard to conflict of interest, breach of confidentiality and attendance,

Further stressing the need to enable all members and alternate members of the Executive Board to attend its meetings and informal consultations, for a duration and as frequently as required by the process, without relying on their employers to bear the costs of travel and subsistence,

Appreciating that the fulfilment of functions requires from members and alternate members of the Executive Board significant effort and time and that the extent of meeting time required per year is the key criterion for remuneration applicable to the Executive Board,

Concerned about the lack of adequate and predictable funding during the prompt start phase and the impact thereof on the level of support services for the work of the clean development mechanism,

Noting the need to ensure adequate and predictable funding for the future,

Expressing deep appreciation to Parties that have so far contributed to funding the work of the clean development mechanism,

Conscious of the need to ensure that a share of the proceeds from clean development mechanism project activities is used to cover administrative expenses,

Stressing the importance of consistency and transparency in funding requests and in the reporting of resources allocated to support services for the work of the clean development mechanism,

General

1. *Takes note* with appreciation of the annual report (2004–2005) of the Executive Board of the clean development mechanism and its addendum, including of progress made during the prompt start of the clean development mechanism under the authority of the Conference of the Parties during the period from December 2001 to 29 November 2005 on the issuance of the first certified emission reductions; the registration of 43 clean development mechanism project activities; the accreditation/designation of operational entities; the approval of 50 baseline and monitoring methodologies, including eight consolidations; and improvements in the clean development mechanism registry;

2. *Designates* as operational entities those entities that have been accredited, and provisionally designated, as operational entities by the Executive Board to carry out sector-specific validation functions and/or sector-specific verification functions as listed in annex I to document FCCC/KP/CMP/2005/4/Add.1;

3. *Adopts*, in response to the request contained in decision 14/CP.10, the simplified baseline and monitoring methodologies for small-scale afforestation and reforestation project activities under the clean development mechanism as contained in annex II to document FCCC/KP/CMP/2005/4/Add.1;

4. *Decides* that project activities that started in the period between 1 January 2000 and 18 November 2004 and have not yet requested registration but have either submitted a new methodology or have requested validation by a designated operational entity by 31 December 2005 can request retroactive credits if they are registered by the Executive Board by 31 December 2006 at the latest;

5. *Requests* the secretariat to organize, in conjunction with the twenty-fourth session of the Subsidiary Body for Scientific and Technological Advice (May 2006), a workshop on considering carbon dioxide capture and storage as clean development mechanism project activities, taking into account issues relating to project boundary, leakage and permanence;

6. *Invites* Parties to provide to the secretariat, by 13 February 2006, submissions on the consideration of carbon dioxide capture and storage as clean development mechanism project activities,

taking into account issues relating to project boundary, leakage and permanence, and on issues to be considered at the workshop referred to in paragraph 5;

7. *Requests* the Executive Board to consider proposals for new methodologies for carbon dioxide capture and storage as clean development mechanism project activities with a view to making recommendations to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, at its second session, on methodological issues, in particular with regard to project boundary, leakage and permanence;

8. *Decides* to consider, at its second session, submissions by Parties, the report of the workshop and the recommendations by the Executive Board as referred to in paragraphs 5, 6 and 7 with a view to adopting a decision on guidance to the Executive Board of the clean development mechanism on how to consider carbon dioxide capture and storage as clean development mechanism project activities, taking into account issues relating to project boundary, leakage and permanence;

Governance

9. *Commends* the Executive Board for the development of a management plan for the clean development mechanism pursuant to decision 12/CP.10 and for the implementation of measures already undertaken, within available resources, to streamline procedures and processes, and provide for enhanced dialogue with designated national authorities, feedback to project proponents and information to stakeholders and the general public;

10. *Requests* the Executive Board, with a view to reporting to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its second session, to keep the management plan for the clean development mechanism under review and make adjustments as necessary to continue ensuring the efficient, cost-effective and transparent functioning of the clean development mechanism by, inter alia:

(a) Identifying and implementing, wherever warranted and compatible with the principles and the purpose of the clean development mechanism, further measures aimed at strengthening the clean development mechanism and its responsiveness to the needs of Parties and stakeholders;

(b) Adopting appropriate management indicators;

(c) Providing a breakdown of the level of resources allocated to the provision of services identified by the Executive Board in its management plan, in particular with relation to costs and geographic distribution of staff and consultancies;

11. *Requests* the Executive Board:

(a) To develop a catalogue of, and user's guide to, its decisions, including on clarifications and guidance provided, to facilitate accessibility to information;

(b) To ensure that decisions by the Board and recommendations by its panels, committees and working groups are accompanied by appropriate explanations in the reports of these bodies;

12. *Requests* the Executive Board to emphasize its executive and supervisory role over a strengthened support structure which includes panels on methodologies and accreditation, teams supporting registration of project activities and issuance of certified emission reductions, working groups

on afforestation and reforestation and on small-scale projects, designated operational entities and a strengthened secretariat servicing this system;

13. *Decides* that the executive and supervisory role of the Executive Board over the clean development mechanism includes:

(a) General management and organization of its work, including the establishment of panels, committees and working groups;

(b) Definition of the services and administrative support functions required by the Executive Board and its panels, committees and working groups, and the financial resources to support this work;

14. *Commends* the secretariat for the provision of services to the Executive Board and the public, including up-to-date information on procedural requirements and operational achievements via the UNFCCC CDM website;

15. *Requests* the secretariat to maintain and strengthen its clean development mechanism section dedicated to supporting the Executive Board through the provision of services as defined by the Executive Board;

16. *Decides* that the services provided by the secretariat to the Executive Board should include:

(a) Preparation of draft decisions for the Executive Board and draft recommendations for its panels and working groups, including the development of options and proposals;

(b) Publication and maintenance of a catalogue of the decisions of the Executive Board, recommendations of the panels and working groups, and preparatory work;

(c) Provision of advice and the procurement of external expert advice for the Executive Board and its panels and working groups;

(d) Provision of services and support functions to facilitate the work of the Executive Board and its committees, panels and working groups in accordance with the prevailing rules and regulations of the secretariat;

17. *Requests* the secretariat to make appropriate arrangements, effective 1 January 2006, to remunerate members and alternate members of the Executive Board through an increased daily subsistence allowance that is 40 per cent more than the standard rate, not to exceed USD 5,000 per year, bearing in mind that this is not so much an adequate compensation for their services as an acknowledgement of the substantial sacrifice of time and financial interest on their part;

18. *Requests* the secretariat to adjust UNFCCC practices so that the costs of travel and the daily subsistence allowance of all members and alternate members of the Executive Board would be covered from the part of the Trust Fund for Supplementary Activities dedicated to funding work on the clean development mechanism;

Methodologies and additionality

19. *Requests* the Board to report to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, at its second session, on further progress with respect to guidelines on baseline and monitoring methodologies, as referred to in appendix C to the modalities and procedures for a clean development mechanism;

20. *Decides* that a local/regional/national policy or standard cannot be considered as a clean development mechanism project activity, but that project activities under a programme of activities can be registered as a single clean development mechanism project activity provided that approved baseline and monitoring methodologies are used that, inter alia, define the appropriate boundary, avoid double-counting and account for leakage, ensuring that the emission reductions are real, measurable and verifiable, and additional to any that would occur in the absence of the project activity;

21. *Recognizes* that large-scale project activities under the clean development mechanism can be bundled if they are validated and registered as one clean development mechanism project activity and invites the Executive Board to provide further clarification if needed;

22. *Recognizes and encourages* initiatives on methodology development by Parties and entities and invites further efforts from intergovernmental organizations, non-governmental organizations, industry and others;

23. *Encourages* project participants to develop, and the Executive Board to approve, more methodologies with broad applicability conditions to increase the validity and use of approved methodologies;

24. *Requests* the Executive Board to expand its efforts:

(a) To broaden the applicability of approved methodologies;

(b) To prepare consolidated methodologies that, wherever possible, cover the full range of methodological approaches and applicability conditions as in the underlying approved methodologies;

(c) To provide clear guidance on small deviations from approved methodologies;

25. *Requests* the Executive Board to make a call for public input, in accordance with paragraphs 43 to 45 of the modalities and procedures for a clean development mechanism, on:

(a) New proposals to demonstrate additionality, including options to combine the selection of the baseline scenario and the demonstration of additionality;

(b) Proposals to improve the "tool for the demonstration and assessment of additionality";

26. *Requests* the Board to consider, at or before its twenty-fourth meeting, such proposals with a view to including approved approaches for the demonstration of additionality in baseline methodologies and reporting in its annual report to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its second session;

27. *Encourages* project participants to submit new proposals to demonstrate additionality through the existing process of proposing new methodologies;

28. *Confirms* that, as stipulated in decision 12/CP.10, the use of the "tool for the demonstration and assessment of additionality" is not mandatory for project participants, and that in all cases the project participants may propose alternative methods to demonstrate additionality for consideration by the Executive Board, including those cases where the "tool for the demonstration and assessment of additionality" is attached to an approved methodology;

29. *Welcomes* the public call launched by the Executive Board for "alternative methods for calculating emission reductions for small-scale project activities that propose the switch from non-renewable to renewable biomass";

30. *Requests* the Board to develop, as a priority, a simplified methodology "for calculating emission reductions for small-scale project activities that propose the switch from non-renewable to renewable biomass";

31. *Invites* the Executive Board to review the simplified modalities, procedures and definitions of small-scale project activities referred to in paragraph 6 (c) of decision 17/CP.7 and, if necessary, make appropriate recommendations to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its second session;

Regional distribution and capacity-building

32. *Requests* Parties to submit to the secretariat, by 31 May 2006, their views on systematic or systemic barriers to the equitable distribution of clean development mechanism project activities and options to address these barriers, for consideration by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its second session;

33. *Requests* the Executive Board, taking into consideration the submissions by Parties referred to in paragraph 32, to report to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its second session:

(a) Information on the regional and subregional distribution of clean development mechanism project activities with a view to identifying systematic or systemic barriers to their equitable distribution;

(b) Options to address issues referred to in the paragraph 33 (a);

34. *Reiterates* the request to Parties included in Annex I to the Convention to continue with measures to assist Parties not included in Annex I to the Convention, in particular the least developed countries and small island developing States among them, with building capacity in order to facilitate their participation in the clean development mechanism, taking into account relevant decisions by the Conference of the Parties on capacity-building and on the financial mechanism of the Convention;

35. *Reiterates* the request to the Parties, within the framework of decision 2/CP.7, to promote capacity-building with a specific view to obtaining more applications for accreditation as designated operational entities from entities located in Parties not included in Annex I to the Convention and invites intergovernmental and non-governmental organizations to contribute to this effort;

36. *Requests* the Executive Board to broaden participation in the clean development mechanism, including through meetings with a designated national authority forum on a regular basis, in conjunction with meetings of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol and its subsidiary bodies;

Resources for work on the clean development mechanism

37. *Decides,* with a view to accruing resources to cover administrative expenses for operational functions as of 2008, and with the understanding that the issuance of certified emissions reductions, in accordance with the distribution agreement, shall be effected only when the share of proceeds to cover administrative expenses has been received, that the share of proceeds to cover administrative expenses of the clean development mechanism as referred to in Article 12, paragraph 8, of the Kyoto Protocol shall be:

(a) USD 0.10 per certified emission reduction issued for the first 15,000 tonnes of CO_2 equivalent for which issuance is requested in a given calendar year;

(b) USD 0.20 per certified emission reduction issued for any amount in excess of 15,000 tonnes of CO_2 equivalent for which issuance is requested in a given calendar year;

38. *Further decides* to review these arrangements at its second session and, in the case of a surplus above the level of financial resources defined by the Executive Board in paragraph 13 (b) above being available from the share of proceeds to cover administrative expenses of the clean development mechanism, to consider lowering the rate mentioned in paragraph 37 (b), but that in no case shall the rate in paragraph 37 (b) be less than the rate in paragraph 37 (a);

39. *Requests* the Executive Board to report on revenue received from the share of proceeds for administrative expenses to assist in this review;

40. *Invites* Parties to urgently make contributions to the Trust Fund for Supplementary Activities for funding the work on the clean development mechanism in the biennium 2006–2007, at a level that would allow the full implementation of the management plan of the clean development mechanism as of early 2006, including through the strengthened capacity of the secretariat to support the Executive Board in its decision-making, and the secretariat to continue to report on the level of contributions;

41. *Further invites* Parties to make contributions for activities to broaden participation in the clean development mechanism in addition to the ones referred to in paragraph 40.

9th plenary meeting
9–10 December 2005

Decision 27/CMP.1

Procedures and mechanisms relating to compliance under the Kyoto Protocol

The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,

Recalling decision 24/CP.7 containing an annex on procedures and mechanisms relating to compliance under the Kyoto Protocol,

Recalling also Articles 18 and 20 of the Kyoto Protocol,

Noting the recommendation in decision 24/CP.7, paragraph 2, and the prerogative of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol to decide on the legal form of the procedures and mechanisms relating to compliance in terms of Article 18,

Noting also the proposal by Saudi Arabia to amend the Kyoto Protocol in this regard,

Emphasizing the need for Parties to do their utmost for an early resolution of this issue,

1. *Approves and adopts* the procedures and mechanisms relating to compliance under the Kyoto Protocol, as contained in the annex to this decision, without prejudice to the outcome of the process outlined in paragraph 2 of this decision;

2. *Decides* to commence consideration of the issue of an amendment to the Kyoto Protocol in respect of procedures and mechanisms relating to compliance in terms of Article 18, with a view to making a decision by the third session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol;

3. *Requests* the Subsidiary Body for Implementation to commence consideration of the issue noted in paragraph 2 above at its twenty-fourth session (May 2006) and report on the outcome to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its third session (December 2007);

4. *Also decides* that the first meeting of the Compliance Committee shall be held in Bonn, Germany, early in 2006, and requests the secretariat to organize the meeting.

ANNEX

Procedures and mechanisms relating to compliance under the Kyoto Protocol

In pursuit of the ultimate objective of the United Nations Framework Convention on Climate Change, hereinafter referred to as "the Convention", as stated in its Article 2,

Recalling the provisions of the United Nations Framework Convention on Climate Change, and the Kyoto Protocol to the Convention, herein after referred to as "the Protocol",

Being guided by Article 3 of the Convention,

Pursuant to the mandate adopted in decision 8/CP.4 by the Conference of the Parties at its fourth session,

The following procedures and mechanisms *have been adopted*:

I. Objective

The objective of these procedures and mechanisms is to facilitate, promote and enforce compliance with the commitments under the Protocol.

II. Compliance Committee

1. A compliance committee, hereinafter referred to as "the Committee", is hereby established.

2. The Committee shall function through a plenary, a bureau and two branches, namely, the facilitative branch and the enforcement branch.

3. The Committee shall consist of twenty members elected by the Conference of the Parties serving as the meeting of the Parties to the Protocol, ten of whom are to be elected to serve in the facilitative branch and ten to be elected to serve in the enforcement branch.

4. Each branch shall elect, from among its members and for a term of two years, a chairperson and a vice-chairperson, one of whom shall be from a Party included in Annex I and one from a Party not included in Annex I. These persons shall constitute the bureau of the Committee. The chairing of each branch shall rotate between Parties included in Annex I and Parties not included in Annex I in such a manner that at any time one chairperson shall be from among the Parties included in Annex I and the other chairperson shall be from among the Parties not included in Annex I.

5. For each member of the Committee, the Conference of the Parties serving as the meeting of the Parties to the Protocol shall elect an alternate member.

6. Members of the Committee and their alternates shall serve in their individual capacities. They shall have recognized competence relating to climate change and in relevant fields such as the scientific, technical, socio-economic or legal fields.

7. The facilitative branch and the enforcement branch shall interact and cooperate in their functioning and, as necessary, on a case-by-case basis, the bureau of the Committee may designate one or more members of one branch to contribute to the work of the other branch on a non-voting basis.

8. The adoption of decisions by the Committee shall require a quorum of at least three fourths of the members to be present.

9. The Committee shall make every effort to reach agreement on any decisions by consensus. If all efforts at reaching consensus have been exhausted, the decisions shall as a last resort be adopted by a majority of at least three fourths of the members present and voting. In addition, the adoption of decisions by the enforcement branch shall require a majority of members from Parties included in Annex I present and voting, as well as a majority of members from Parties not included in Annex I present and voting. "Members present and voting" means members present and casting an affirmative or a negative vote.

10. The Committee shall, unless it decides otherwise, meet at least twice each year, taking into account the desirability of holding such meetings in conjunction with the meetings of the subsidiary bodies under the Convention.

11. The Committee shall take into account any degree of flexibility allowed by the Conference of the Parties serving as the meeting of the Parties to the Protocol, pursuant to Article 3, paragraph 6, of the Protocol and taking into account Article 4, paragraph 6, of the Convention, to the Parties included in Annex I undergoing the process of transition to a market economy.

III. Plenary of the Committee

1. The plenary shall consist of the members of the facilitative branch and the enforcement branch. The chairpersons of the two branches shall be the co-chairpersons of the plenary.

2. The functions of the plenary shall be:

(a) To report on the activities of the Committee, including a list of decisions taken by the branches, to each ordinary session of the Conference of the Parties serving as the meeting of the Parties to the Protocol;

(b) To apply the general policy guidance referred to in section XII (c) below, received from the Conference of the Parties serving as the meeting of the Parties to the Protocol;

(c) To submit proposals on administrative and budgetary matters to the Conference of the Parties serving as the meeting of the Parties to the Protocol for the effective functioning of the Committee;

(d) To develop any further rules of procedure that may be needed, including rules on confidentiality, conflict of interest, submission of information by intergovernmental and non-governmental organizations, and translation, for adoption by the Conference of the Parties serving as the meeting of the Parties to the Protocol by consensus; and

(e) To perform such other functions as may be requested by the Conference of the Parties serving as the meeting of the Parties to the Protocol for the effective functioning of the Committee.

IV. Facilitative Branch

1. The facilitative branch shall be composed of:

(a) One member from each of the five regional groups of the United Nations and one member from the small island developing States, taking into account the interest groups as reflected by the current practice in the Bureau of the Conference of the Parties;

(b) Two members from Parties included in Annex I; and

(c) Two members from Parties not included in Annex I.

2. The Conference of the Parties serving as the meeting of the Parties to the Protocol shall elect five members for a term of two years and five members for a term of four years. Each time thereafter, the Conference of the Parties serving as the meeting of the Parties to the Protocol shall elect five new members for a term of four years. Members shall not serve for more than two consecutive terms.

3. In electing the members of the facilitative branch, the Conference of the Parties serving as the meeting of the Parties to the Protocol shall seek to reflect competences in a balanced manner in the fields referred to in section II, paragraph 6, above.

4. The facilitative branch shall be responsible for providing advice and facilitation to Parties in implementing the Protocol, and for promoting compliance by Parties with their commitments under the Protocol, taking into account the principle of common but differentiated responsibilities and respective capabilities as contained in Article 3, paragraph 1, of the Convention. It shall also take into account the circumstances pertaining to the questions before it.

5. Within its overall mandate, as specified in paragraph 4 above, and falling outside the mandate of the enforcement branch, as specified in section V, paragraph 4, below, the facilitative branch shall be responsible for addressing questions of implementation:

(a) Relating to Article 3, paragraph 14, of the Protocol, including questions of implementation arising from the consideration of information on how a Party included in Annex I is striving to implement Article 3, paragraph 14, of the Protocol; and

(b) With respect to the provision of information on the use by a Party included in Annex I of Articles 6, 12 and 17 of the Protocol as supplemental to its domestic action, taking into account any reporting under Article 3, paragraph 2, of the Protocol.

6. With the aim of promoting compliance and providing for early warning of potential non-compliance, the facilitative branch shall be further responsible for providing advice and facilitation for compliance with:

(a) Commitments under Article 3, paragraph 1, of the Protocol, prior to the beginning of the relevant commitment period and during that commitment period;

(b) Commitments under Article 5, paragraphs 1 and 2, of the Protocol, prior to the beginning of the first commitment period; and

(c) Commitments under Article 7, paragraphs 1 and 4, of the Protocol prior to the beginning of the first commitment period.

7. The facilitative branch shall be responsible for applying the consequences set out in section XIV below.

V. Enforcement Branch

1. The enforcement branch shall be composed of:

(a) One member from each of the five regional groups of the United Nations and one member from the small island developing States, taking into account the interest groups as reflected by the current practice in the Bureau of the Conference of the Parties;

(b) Two members from Parties included in Annex I; and

(c) Two members from Parties not included in Annex I.

2. The Conference of the Parties serving as the meeting of the Parties to the Protocol shall elect five members for a term of two years and five members for a term of four years. Each time thereafter, the Conference of the Parties serving as the meeting of the Parties to the Protocol shall elect five new members for a term of four years. Members shall not serve for more than two consecutive terms.

3. In electing the members of the facilitative branch, the Conference of the Parties serving as the meeting of the Parties to the Protocol shall seek to reflect competences in a balanced manner in the fields referred to in section II, paragraph 6, above.

4. The facilitative branch shall be responsible for providing advice and facilitation to Parties in implementing the Protocol, and for promoting compliance by Parties with their commitments under the Protocol, taking into account the principle of common but differentiated responsibilities and respective capabilities as contained in Article 3, paragraph 1, of the Convention. It shall also take into account the circumstances pertaining to the questions before it.

5. Within its overall mandate, as specified in paragraph 4 above, and falling outside the mandate of the enforcement branch, as specified in section V, paragraph 4, below, the facilitative branch shall be responsible for addressing questions of implementation:

(a) Relating to Article 3, paragraph 14, of the Protocol, including questions of implementation arising from the consideration of information on how a Party included in Annex I is striving to implement Article 3, paragraph 14, of the Protocol; and

(b) With respect to the provision of information on the use by a Party included in Annex I of Articles 6, 12 and 17 of the Protocol as supplemental to its domestic action, taking into account any reporting under Article 3, paragraph 2, of the Protocol.

6. With the aim of promoting compliance and providing for early warning of potential non-compliance, the facilitative branch shall be further responsible for providing advice and facilitation for compliance with:

(a) Commitments under Article 3, paragraph 1, of the Protocol, prior to the beginning of the relevant commitment period and during that commitment period;

(b) Commitments under Article 5, paragraphs 1 and 2, of the Protocol, prior to the beginning of the first commitment period; and

(c) Commitments under Article 7, paragraphs 1 and 4, of the Protocol prior to the beginning of the first commitment period.

7. The facilitative branch shall be responsible for applying the consequences set out in section XIV below.

V. Enforcement Branch

1. The enforcement branch shall be composed of:

(a) One member from each of the five regional groups of the United Nations and one member from the small island developing States, taking into account the interest groups as reflected by the current practice in the Bureau of the Conference of the Parties;

(b) Two members from Parties included in Annex I; and

(c) Two members from Parties not included in Annex I.

2. The Conference of the Parties serving as the meeting of the Parties to the Protocol shall elect five members for a term of two years and five members for a term of four years. Each time thereafter, the Conference of the Parties serving as the meeting of the Parties to the Protocol shall elect five new members for a term of four years. Members shall not serve for more than two consecutive terms.

3. In electing the members of the enforcement branch, the Conference of the Parties serving as the meeting of the Parties to the Protocol shall be satisfied that the members have legal experience.

4. The enforcement branch shall be responsible for determining whether a Party included in Annex I is not in compliance with:

(a) Its quantified emission limitation or reduction commitment under Article 3, paragraph 1, of the Protocol;

(b) The methodological and reporting requirements under Article 5, paragraphs 1 and 2, and Article 7, paragraphs 1 and 4, of the Protocol; and

(c) The eligibility requirements under Articles 6, 12 and 17 of the Protocol.

5. The enforcement branch shall also determine whether to apply:

(a) Adjustments to inventories under Article 5, paragraph 2, of the Protocol, in the event of a disagreement between an expert review team under Article 8 of the Protocol and the Party involved; and

(b) A correction to the compilation and accounting database for the accounting of assigned amounts under Article 7, paragraph 4, of the Protocol, in the event of a disagreement between an expert review team under Article 8 of the Protocol and the Party involved concerning the validity of a transaction or such Party's failure to take corrective action.

6. The enforcement branch shall be responsible for applying the consequences set out in section XV below for the cases of non-compliance mentioned in paragraph 4 above. The consequences of non-compliance with Article 3, paragraph 1, of the Protocol to be applied by the enforcement branch shall be aimed at the restoration of compliance to ensure environmental integrity, and shall provide for an incentive to comply.

VI. Submissions

1. The Committee shall receive, through the secretariat, questions of implementation indicated in reports of expert review teams under Article 8 of the Protocol, together with any written comments by the Party which is subject to the report, or questions of implementation submitted by:

(a) Any Party with respect to itself; or

(b) Any Party with respect to another Party, supported by corroborating information.

2. The secretariat shall forthwith make available to the Party in respect of which the question of implementation is raised, hereinafter referred to as "the Party concerned", any question of implementation submitted under paragraph 1 above.

3. In addition to the reports referred to in paragraph 1 above, the Committee shall also receive, through the secretariat, other final reports of expert review teams.

VII. Allocation and preliminary examination

1. The bureau of the Committee shall allocate questions of implementation to the appropriate branch in accordance with the mandates of each branch set out in section IV, paragraphs 4–7, and Section V, paragraphs 4–6.

2. The relevant branch shall undertake a preliminary examination of questions of implementation to ensure that, except in the case of a question raised by a Party with respect to itself, the question before it:

(a) Is supported by sufficient information;

(b) Is not *de minimis* or ill-founded; and

(c) Is based on the requirements of the Protocol.

3. The preliminary examination of questions of implementation shall be completed within three weeks from the date of receipt of these questions by the relevant branch.

4. After the preliminary examination of questions of implementation, the Party concerned shall, through the secretariat, be notified in writing of the decision and, in the event of a decision to proceed, be provided with a statement identifying the question of implementation, the information on which the question is based and the branch that will consider the question.

5. In the event of the review of eligibility requirements for a Party included in Annex I under Articles 6, 12 and 17 of the Protocol, the enforcement branch shall also, through the secretariat, notify forthwith the Party concerned, in writing, of the decision not to proceed with questions of implementation relating to eligibility requirements under those articles.

6. Any decision not to proceed shall be made available by the secretariat to other Parties and to the public.

7. The Party concerned shall be given an opportunity to comment in writing on all information relevant to the question of implementation and the decision to proceed.

VIII. General procedures

1. Following the preliminary examination of questions of implementation, the procedures set out in this section shall apply to the Committee, except where otherwise provided in these procedures and mechanisms.

2. The Party concerned shall be entitled to designate one or more persons to represent it during the consideration of the question of implementation by the relevant branch. This Party shall not be present during the elaboration and adoption of a decision of the branch.

3. Each branch shall base its deliberations on any relevant information provided by:

(a) Reports of the expert review teams under Article 8 of the Protocol;

(b) The Party concerned;

(c) The Party that has submitted a question of implementation with respect to another Party;

(d) Reports of the Conference of the Parties, the Conference of the Parties serving as the meeting of the Parties to the Protocol, and the subsidiary bodies under the Convention and the Protocol; and

(e) The other branch.

4. Competent intergovernmental and non-governmental organizations may submit relevant factual and technical information to the relevant branch.

5. Each branch may seek expert advice.

6. Any information considered by the relevant branch shall be made available to the Party concerned. The branch shall indicate to the Party concerned which parts of this information it has considered. The Party concerned shall be given an opportunity to comment in writing on such information. Subject to any rules relating to confidentiality, the information considered by the branch shall also be made available to the public, unless the branch decides, of its own accord or at the request of the Party concerned, that information provided by the Party concerned shall not be made available to the public until its decision has become final.

7. Decisions shall include conclusions and reasons. The relevant branch shall forthwith, through the secretariat, notify the Party concerned in writing of its decision, including conclusions and reasons therefor. The secretariat shall make final decisions available to other Parties and to the public.

8. The Party concerned shall be given an opportunity to comment in writing on any decision of the relevant branch.

9. If the Party concerned so requests, any question of implementation submitted under section VI, paragraph 1; any notification under section VII, paragraph 4; any information under paragraph 3 above; and any decision of the relevant branch, including conclusions and reasons therefor, shall be translated into one of the six official languages of the United Nations.

IX. Procedures for the Enforcement Branch

1. Within ten weeks from the date of receipt of the notification under section VII, paragraph 4, the Party concerned may make a written submission to the enforcement branch, including rebuttal of information submitted to the branch.

2. If so requested in writing by the Party concerned within ten weeks from the date of receipt of the notification under section VII, paragraph 4, the enforcement branch shall hold a hearing at which the Party concerned shall have the opportunity to present its views. The hearing shall take place within four weeks from the date of receipt of the request or of the written submission under paragraph 1 above, whichever is the later. The Party concerned may present expert testimony or opinion at the hearing. Such a hearing shall be held in public, unless the enforcement branch decides, of its own accord or at the request of the Party concerned, that part or all of the hearing shall take place in private.

3. The enforcement branch may put questions to and seek clarification from the Party concerned, either in the course of such a hearing or at any time in writing, and the Party concerned shall provide a response within six weeks thereafter.

4. Within four weeks from the date of receipt of the written submission of the Party concerned under paragraph 1 above, or within four weeks from the date of any hearing pursuant to paragraph 2 above, or within fourteen weeks from the notification under section VII, paragraph 4, if the Party has not provided a written submission, whichever is the latest, the enforcement branch shall:

(a) Adopt a preliminary finding that the Party concerned is not in compliance with commitments under one or more of the articles of the Protocol referred to in section V, paragraph 4; or

(b) Otherwise determine not to proceed further with the question.

5. The preliminary finding, or the decision not to proceed, shall include conclusions and reasons therefor.

6. The enforcement branch shall forthwith, through the secretariat, notify the Party concerned in writing of its preliminary finding or decision not to proceed. The secretariat shall make the decision not to proceed available to the other Parties and to the public.

7. Within ten weeks from the date of receipt of the notification of the preliminary finding, the Party concerned may provide a further written submission to the enforcement branch. If the Party concerned does not do so within that period of time, the enforcement branch shall forthwith adopt a final decision confirming its preliminary finding.

8. If the Party concerned provides a further written submission, the enforcement branch shall, within four weeks from the date it received the further submission, consider it and adopt a final decision, indicating whether the preliminary finding, as a whole or any part of it to be specified, is confirmed.

9. The final decision shall include conclusions and reasons therefor.

10. The enforcement branch shall forthwith, through the secretariat, notify the Party concerned in writing of its final decision. The secretariat shall make the final decision available to the other Parties and to the public.

11. The enforcement branch, when the circumstances of an individual case so warrant, may extend any time frames provided for in this section.

12. Where appropriate, the enforcement branch may, at any time, refer a question of implementation to the facilitative branch for consideration.

X. Expedited procedures for the Enforcement Branch

1. Where a question of implementation relates to eligibility requirements under Articles 6, 12 and 17 of the Protocol, sections VII to IX shall apply, except that:

(a) The preliminary examination referred to in section VII, paragraph 2, shall be completed within two weeks from the date of receipt of the question of implementation by the enforcement branch;

(b) The Party concerned may make a written submission within four weeks from the date of receipt of the notification under section VII, paragraph 4;

(c) If so requested in writing by the Party concerned within two weeks from the date of receipt of the notification under section VII, paragraph 4, the enforcement branch shall hold a hearing as referred to in section IX, paragraph 2, that shall take place within two weeks from the date of receipt of the request or of the written submission under subparagraph (b) above, whichever is the later;

(d) The enforcement branch shall adopt its preliminary finding or a decision not to proceed within six weeks of the notification under section VII, paragraph 4, or within two weeks of a hearing under section IX, paragraph 2, whichever is the shorter;

(e) The Party concerned may make a further written submission within four weeks from the date of receipt of the notification referred to in section IX, paragraph 6;

(f) The enforcement branch shall adopt its final decision within two weeks from the date of receipt of any further written submission referred to in section IX, paragraph 7; and

(g) The periods of time stipulated in section IX shall apply only if, in the opinion of the enforcement branch, they do not interfere with the adoption of decisions in accordance with subparagraphs (d) and (f) above.

2. Where the eligibility of a Party included in Annex I under Articles 6, 12 and 17 of the Protocol has been suspended under section XV, paragraph 4, the Party concerned may submit a request to reinstate its eligibility, either through an expert review team or directly to the enforcement branch. If the enforcement branch receives a report from the expert review team indicating that there is no longer a question of implementation with respect to the eligibility of the Party concerned, it shall reinstate that Party's eligibility, unless the enforcement branch considers that there continues to be such a question of implementation, in which case the procedure referred to in paragraph 1 above shall apply. In response to a request submitted to it directly by the Party concerned, the enforcement branch shall decide as soon as possible, either that there no longer continues to be a question of implementation with respect to that Party's eligibility in which case it shall reinstate that Party's eligibility, or that the procedure referred to in paragraph 1 above shall apply.

3. Where the eligibility of a Party to make transfers under Article 17 of the Protocol has been suspended under section XV, paragraph 5 (c), the Party may request the enforcement branch to reinstate that eligibility. On the basis of the compliance action plan submitted by the Party in accordance with section XV, paragraph 6, and any progress reports submitted by the Party including information on its emissions trends, the enforcement branch shall reinstate that eligibility, unless it determines that the Party has not demonstrated that it will meet its quantified emission limitation or reduction commitment in the commitment period subsequent to the one for which the Party was determined to be in non-compliance, hereinafter referred to as "the subsequent commitment period". The enforcement branch shall apply the procedure referred to in paragraph 1 above, adapted insofar as necessary for the purposes of the procedure in the present paragraph.

4. Where the eligibility of a Party to make transfers under Article 17 of the Protocol has been suspended under section XV, paragraph 5 (c), the enforcement branch shall reinstate that eligibility forthwith if the Party demonstrates that it has met its quantified emission limitation or reduction commitment in the subsequent commitment period, either through the report of the expert review team under Article 8 of the Protocol for the final year of the subsequent commitment period or through a decision of the enforcement branch.

5. In the event of a disagreement whether to apply adjustments to inventories under Article 5, paragraph 2, of the Protocol, or whether to apply a correction to the compilation and accounting database for the accounting of assigned amounts under Article 7, paragraph 4, of the Protocol, the enforcement branch shall decide on the matter within twelve weeks of being informed in writing of such disagreement. In doing so, the enforcement branch may seek expert advice.

XI. Appeals

1. The Party in respect of which a final decision has been taken may appeal to the Conference of the Parties serving as the meeting of the Parties to the Protocol against a decision of the enforcement branch relating to Article 3, paragraph 1, of the Protocol if that Party believes it has been denied due process.

2. The appeal shall be lodged with the secretariat within 45 days after the Party has been informed of the decision of the enforcement branch. The Conference of the Parties serving as the meeting of the Parties to the Protocol shall consider the appeal at its first session after the lodging of the appeal.

3. The Conference of the Parties serving as the meeting of the Parties to the Protocol may agree by a three-fourths majority vote of the Parties present and voting at the meeting to override the decision of the enforcement branch, in which event the Conference of the Parties serving as the meeting of the Parties to the Protocol shall refer the matter of the appeal back to the enforcement branch.

4. The decision of the enforcement branch shall stand pending the decision on appeal. It shall become definitive if, after 45 days, no appeal has been made against it.

XII. Relationship with the Conference of the Parties serving as the meeting of the Parties to the Protocol

The Conference of the Parties serving as the meeting of the Parties to the Protocol shall:

(a) In considering the reports of the expert review teams in accordance with Article 8, paragraphs 5 and 6 of the Protocol, identify any general problems that should be addressed in the general policy guidance referred to in subparagraph (c) below;

(b) Consider the reports of the plenary on the progress of its work;

(c) Provide general policy guidance, including on any issues regarding implementation that may have implications for the work of the subsidiary bodies under the Protocol;

(d) Adopt decisions on proposals on administrative and budgetary matters; and

(e) Consider and decide appeals in accordance with section XI.

XIII. Additional period for fulfilling commitments

For the purpose of fulfilling commitments under Article 3, paragraph 1, of the Protocol, a Party may, until the hundredth day after the date set by the Conference of the Parties serving as the meeting of the Parties to the Protocol for the completion of the expert review process under Article 8 of the Protocol for the last year of the commitment period, continue to acquire, and other Parties may transfer to such Party, emission reduction units, certified emission reductions, assigned amount units and removal units under Articles 6, 12 and 17 of the Protocol, from the preceding commitment period, provided the eligibility of any such Party has not been suspended in accordance with section XV, paragraph 4.

XIV. Consequences applied by the Facilitative Branch

The facilitative branch, taking into account the principle of common but differentiated responsibilities and respective capabilities, shall decide on the application of one or more of the following consequences:

(a) Provision of advice and facilitation of assistance to individual Parties regarding the implementation of the Protocol;

(b) Facilitation of financial and technical assistance to any Party concerned, including technology transfer and capacity building from sources other than those established under the Convention and the Protocol for the developing countries;

(c) Facilitation of financial and technical assistance, including technology transfer and capacity building, taking into account Article 4, paragraphs 3, 4 and 5, of the Convention; and

(d) Formulation of recommendations to the Party concerned, taking into account Article 4, paragraph 7, of the Convention.

XV. Consequences applied by the Enforcement Branch

1. Where the enforcement branch has determined that a Party is not in compliance with Article 5, paragraph 1 or paragraph 2, or Article 7, paragraph 1 or paragraph 4, of the Protocol, it shall apply the following consequences, taking into account the cause, type, degree and frequency of the non-compliance of that Party:

(a) Declaration of non-compliance; and

(b) Development of a plan in accordance with paragraphs 2 and 3 below.

2. The Party not in compliance under paragraph 1 above, shall, within three months after the determination of non-compliance, or such longer period that the enforcement branch considers appropriate, submit to the enforcement branch for review and assessment a plan that includes:

(a) An analysis of the causes of non-compliance of the Party;

(b) Measures that the Party intends to implement in order to remedy the non-compliance; and

(c) A timetable for implementing such measures within a time frame not exceeding twelve months which enables the assessment of progress in the implementation.

3. The Party not in compliance under paragraph 1 above shall submit to the enforcement branch progress reports on the implementation of the plan on a regular basis.

4. Where the enforcement branch has determined that a Party included in Annex I does not meet one or more of the eligibility requirements under Articles 6, 12 and 17 of the Protocol, it shall suspend the eligibility of that Party in accordance with relevant provisions under those articles. At the request of the Party concerned, eligibility may be reinstated in accordance with the procedure in section X, paragraph 2.

5. Where the enforcement branch has determined that the emissions of a Party have exceeded its assigned amount, calculated pursuant to its quantified emission limitation or reduction commitment inscribed in Annex B to the Protocol and in accordance with the provisions of Article 3 of the Protocol as well as the modalities for the accounting of assigned amounts under Article 7, paragraph 4, of the Protocol, taking into account emission reduction units, certified emission reductions, assigned amount units and removal units the Party has acquired in accordance with section XIII, it shall declare that that Party is not in compliance with its commitments under Article 3, paragraph 1, of the Protocol, and shall apply the following consequences:

(a) Deduction from the Party's assigned amount for the second commitment period of a number of tonnes equal to 1.3 times the amount in tonnes of excess emissions;

(b) Development of a compliance action plan in accordance with paragraphs 6 and 7 below; and

(c) Suspension of the eligibility to make transfers under Article 17 of the Protocol until the Party is reinstated in accordance with section X, paragraph 3 or paragraph 4.

6. The Party not in compliance under paragraph 5 above shall, within three months after the determination of non-compliance or, where the circumstances of an individual case so warrant, such

longer period that the enforcement branch considers appropriate, submit to the enforcement branch for review and assessment a compliance action plan that includes:

(a) An analysis of the causes of the non-compliance of the Party;

(b) Action that the Party intends to implement in order to meet its quantified emission limitation or reduction commitment in the subsequent commitment period, giving priority to domestic policies and measures; and

(c) A timetable for implementing such action, which enables the assessment of annual progress in the implementation, within a time frame that does not exceed three years or up to the end of the subsequent commitment period, whichever occurs sooner. At the request of the Party, the enforcement branch may, where the circumstances of an individual case so warrant, extend the time for implementing such action for a period which shall not exceed the maximum period of three years mentioned above.

7. The Party not in compliance under paragraph 5 above shall submit to the enforcement branch a progress report on the implementation of the compliance action plan on an annual basis.

8. For subsequent commitment periods, the rate referred to in paragraph 5 (a) above shall be determined by an amendment.

XVI. Relationship with Articles 16 and 19 of the Protocol

The procedures and mechanisms relating to compliance shall operate without prejudice to Articles 16 and 19 of the Protocol.

XVII. Secretariat

The secretariat referred to in Article 14 of the Protocol shall serve as the secretariat of the Committee.

9th plenary meeting
9 10 December 2005

Annex 5: Relevant Treaty Articles

Consolidated Version of the Treaty of the European Community

Article 2

The Community shall have as its task, by establishing a common market and an economic and monetary union and by implementing common policies or activities referred to in Articles 3 and 4, to promote throughout the Community a harmonious, balanced and sustainable development of economic activities, a high level of employment and of social protection, equality between men and women, sustainable and non-inflationary growth, a high degree of competitiveness and convergence of economic performance, a high level of protection and improvement of the quality of the environment, the raising of the standard of living and quality of life, and economic and social cohesion and solidarity among Member States.

Article 3

1. For the purposes set out in Article 2, the activities of the Community shall include, as provided in this Treaty and in accordance with the timetable set out therein:

   …

(1) a policy in the sphere of the environment;

Article 6

Environmental protection requirements must be integrated into the definition and implementation of the Community policies and activities referred to in Article 3, in particular with a view to promoting sustainable development.

Article 10

Member States shall take all appropriate measures, whether general or particular, to ensure fulfilment of the obligations arising out of this Treaty or resulting from action taken by the institutions of the Community. They shall facilitate the achievement of the Community's tasks.

They shall abstain from any measure which could jeopardise the attainment of the objectives of this Treaty.

TITLE XIX

Environment

Article 174

1. Community policy on the environment shall contribute to pursuit of the following objectives:

   – preserving, protecting and improving the quality of the environment,
   – protecting human health,
   – prudent and rational utilisation of natural resources,
   – promoting measures at international level to deal with regional or worldwide environmental problems.

2. Community policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Community. It shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay.

   In this context, harmonisation measures answering environmental protection requirements shall include, where appropriate, a safeguard clause allowing Member States to take provisional measures, for non-economic environmental reasons, subject to a Community inspection procedure.

3. In preparing its policy on the environment, the Community shall take account of:

   – available scientific and technical data,
   – environmental conditions in the various regions of the Community,
   – the potential benefits and costs of action or lack of action,
   – the economic and social development of the Community as a whole and the balanced development of its regions.

4. Within their respective spheres of competence, the Community and the Member States shall cooperate with third countries and with the competent international organisations. The arrangements for Community cooperation may be the subject of agreements between the Community and the third parties concerned, which shall be negotiated and concluded in accordance with Article 300.

The previous subparagraph shall be without prejudice to Member States' competence to negotiate in international bodies and to conclude international agreements.

Article 175

1. The Council, acting in accordance with the procedure referred to in Article 251 and after consulting the Economic and Social Committee and the Committee of the Regions, shall decide what action is to be taken by the Community in order to achieve the objectives referred to in Article 174.
2. By way of derogation from the decision-making procedure provided for in paragraph 1 and without prejudice to Article 95, the Council, acting unanimously on a proposal from the Commission and after consulting the European Parliament, the Economic and Social Committee and the Committee of the Regions, shall adopt:

(a) provisions primarily of a fiscal nature;
(b) measures affecting:

- town and country planning,
- quantitative management of water resources or affecting, directly or indirectly, the availability of those resources,
- land use, with the exception of waste management;

(c) measures significantly affecting a Member State's choice between different energy sources and the general structure of its energy supply.

The Council may, under the conditions laid down in the first subparagraph, define those matters referred to in this paragraph on which decisions are to be taken by a qualified majority.

3. In other areas, general action programmes setting out priority objectives to be attained shall be adopted by the Council, acting in accordance with the procedure referred to in Article 251 and after consulting the Economic and Social Committee and the Committee of the Regions.
   The Council, acting under the terms of paragraph 1 or paragraph 2 according to the case, shall adopt the measures necessary for the implementation of these programmes.
4. Without prejudice to certain measures of a Community nature, the Member States shall finance and implement the environment policy.

5. Without prejudice to the principle that the polluter should pay, if a measure based on the provisions of paragraph 1 involves costs deemed disproportionate for the public authorities of a Member State, the Council shall, in the act adopting that measure, lay down appropriate provisions in the form of:

   – temporary derogations, and/or
   – financial support from the Cohesion Fund set up pursuant to Article 161.

Article 176

The protective measures adopted pursuant to Article 175 shall not prevent any Member State from maintaining or introducing more stringent protective measures. Such measures must be compatible with this Treaty. They shall be notified to the Commission.

Article 226

If the Commission considers that a Member State has failed to fulfil an obligation under this Treaty, it shall deliver a reasoned opinion on the matter after giving the State concerned the opportunity to submit its observations.

If the State concerned does not comply with the opinion within the period laid down by the Commission, the latter may bring the matter before the Court of Justice.

Article 228

1. If the Court of Justice finds that a Member State has failed to fulfil an obligation under this Treaty, the State shall be required to take the necessary measures to comply with the judgment of the Court of Justice.
2. If the Commission considers that the Member State concerned has not taken such measures it shall, after giving that State the opportunity to submit its observations, issue a reasoned opinion specifying the points on which the Member State concerned has not complied with the judgment of the Court of Justice.

If the Member State concerned fails to take the necessary measures to comply with the Court's judgment within the time limit laid down by the Commission, the latter may bring the case before the Court of Justice. In so doing it shall specify the amount of the lump sum or penalty payment to be paid by the Member State concerned which it considers appropriate in the circumstances.

If the Court of Justice finds that the Member State concerned has not complied with its judgment it may impose a lump sum or penalty payment on it. This procedure shall be without prejudice to Article 227.

Consolidated Version of the Treaty on European Union

Article 4

…

3. Pursuant to the principle of sincere cooperation, the Union and the Member States shall, in full mutual respect, assist each other in carrying out tasks which flow from the Treaties.

The Member States shall take any appropriate measure, general or particular, to ensure fulfilment of the obligations arising out of the Treaties or resulting from the acts of the institutions of the Union.

The Member States shall facilitate the achievement of the Union's tasks and refrain from any measure which could jeopardise the attainment of the Union's objectives.

Consolidated Version of the Treaty on the Functioning of the European Union

Article 4

1. The Union shall share competence with the Member States where the Treaties confer on it a competence which does not relate to the areas referred to in Articles 3 and 6.
2. Shared competence between the Union and the Member States applies in the following principal areas:

…
(e) environment;

Article 11

(ex Article 6 TEC)

Environmental protection requirements must be integrated into the definition and implementation of the Union policies and activities, in particular with a view to promoting sustainable development.

TITLE XX Environment

Article 191

(ex Article 174 TEC)

1. Union policy on the environment shall contribute to pursuit of the following objectives:

   – preserving, protecting and improving the quality of the environment,
   – protecting human health,
   – prudent and rational utilisation of natural resources,
   – promoting measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change.

2. Union policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Union. It shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay.

   In this context, harmonisation measures answering environmental protection requirements shall include, where appropriate, a safeguard clause allowing Member States to take provisional measures, for non-economic environmental reasons, subject to a procedure of inspection by the Union.

3. In preparing its policy on the environment, the Union shall take account of:

   – available scientific and technical data,
   – environmental conditions in the various regions of the Union,
   – the potential benefits and costs of action or lack of action,
   – the economic and social development of the Union as a whole and the balanced development of its regions.

4. Within their respective spheres of competence, the Union and the Member States shall cooperate with third countries and with the competent international organisations. The arrangements for Union cooperation may be the subject of agreements between the Union and the third parties concerned.

   The previous subparagraph shall be without prejudice to Member States' competence to negotiate in international bodies and to conclude international agreements.

Article 192

(ex Article 175 TEC)

1. The European Parliament and the Council, acting in accordance with the ordinary legislative procedure and after consulting the Economic and Social Committee and the Committee of the Regions, shall decide what action is to be taken by the Union in order to achieve the objectives referred to in Article 191.
2. By way of derogation from the decision-making procedure provided for in paragraph 1 and without prejudice to Article 114, the Council acting unanimously in accordance with a special legislative procedure and after consulting the European Parliament, the Economic and Social Committee and the Committee of the Regions, shall adopt:
   (a) provisions primarily of a fiscal nature;
   (b) measures affecting:

   – town and country planning,
   – quantitative management of water resources or affecting, directly or indirectly, the availability of those resources,
   – land use, with the exception of waste management;

   (c) measures significantly affecting a Member State's choice between different energy sources and the general structure of its energy supply.

   The Council, acting unanimously on a proposal from the Commission and after consulting the European Parliament, the Economic and Social Committee and the Committee of the Regions, may make the ordinary legislative procedure applicable to the matters referred to in the first subparagraph.

3. General action programmes setting out priority objectives to be attained shall be adopted by the European Parliament and the Council, acting in accordance with the ordinary legislative procedure and after consulting the Economic and Social Committee and the Committee of the Regions.

   The measures necessary for the implementation of these programmes shall be adopted under the terms of paragraph 1 or 2, as the case may be.

4. Without prejudice to certain measures adopted by the Union, the Member States shall finance and implement the environment policy.
5. Without prejudice to the principle that the polluter should pay, if a measure based on the provisions of paragraph 1 involves costs deemed disproportionate for the public authorities of a Member State, such measure shall lay down appropriate provisions in the form of:

   – temporary derogations, and/or
   – financial support from the Cohesion Fund set up pursuant to Article 177.

Article 193

(ex Article 176 TEC)

The protective measures adopted pursuant to Article 192 shall not prevent any Member State from maintaining or introducing more stringent protective measures. Such measures must be compatible with the Treaties. They shall be notified to the Commission.

TITLE XXI Energy

Article 194

1. In the context of the establishment and functioning of the internal market and with regard for the need to preserve and improve the environment, Union policy on energy shall aim, in a spirit of solidarity between Member States, to:
(a) ensure the functioning of the energy market;
(b) ensure security of energy supply in the Union;
(c) promote energy efficiency and energy saving and the development of new and renewable forms of energy; and
(d) promote the interconnection of energy networks.
2. Without prejudice to the application of other provisions of the Treaties, the European Parliament and the Council, acting in accordance with the ordinary legislative procedure, shall establish the measures necessary to achieve the objectives in paragraph 1. Such measures shall be adopted after consultation of the Economic and Social Committee and the Committee of the Regions.

Such measures shall not affect a Member State's right to determine the conditions for exploiting its energy resources, its choice between different energy sources and the general structure of its energy supply, without prejudice to Article 192(2)(c).

3. By way of derogation from paragraph 2, the Council, acting in accordance with a special legislative procedure, shall unanimously and after consulting the European Parliament, establish the measures referred to therein when they are primarily of a fiscal nature.

Article 258

(ex Article 226 TEC)

If the Commission considers that a Member State has failed to fulfil an obligation under the Treaties, it shall deliver a reasoned opinion on the matter after giving the State concerned the opportunity to submit its observations.

If the State concerned does not comply with the opinion within the period laid down by the Commission, the latter may bring the matter before the Court of Justice of the European Union.

Article 260

(ex Article 228 TEC)

1. If the Court of Justice of the European Union finds that a Member State has failed to fulfil an obligation under the Treaties, the State shall be required to take the necessary measures to comply with the judgment of the Court.
2. If the Commission considers that the Member State concerned has not taken the necessary measures to comply with the judgment of the Court, it may bring the case before the Court after giving that State the opportunity to submit its observations. It shall specify the amount of the lump sum or penalty payment to be paid by the Member State concerned which it considers appropriate in the circumstances.

If the Court finds that the Member State concerned has not complied with its judgment it may impose a lump sum or penalty payment on it.This procedure shall be without prejudice to Article 259.

3. When the Commission brings a case before the Court pursuant to Article 258 on the grounds that the Member State concerned has failed to fulfil its obligation to notify measures transposing a directive adopted under a legislative procedure, it may, when it deems appropriate, specify the amount of the lump sum or penalty payment to be paid by the Member State concerned which it considers appropriate in the circumstances.

If the Court finds that there is an infringement it may impose a lump sum or penalty payment on the Member State concerned not exceeding the amount specified by the Commission. The payment obligation shall take effect on the date set by the Court in its judgment.

II

(Acts whose publication is not obligatory)

COUNCIL

COUNCIL DECISION

of 25 April 2002

concerning the approval, on behalf of the European Community, of the Kyoto Protocol to the United Nations Framework Convention on Climate Change and the joint fulfilment of commitments thereunder

(2002/358/CE)

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 175(1) in conjunction with Article 300(2), first sentence of the first subparagraph, and Article 300(3), first subparagraph, thereof,

Having regard to the proposal from the Commission [1],

Having regard to the Opinion of the European Parliament [2],

Whereas:

(1) The ultimate objective of the United Nations Framework Convention on Climate Change ('the Convention'), which was approved on behalf of the Community by Council Decision 94/69/EC of 15 December 1993 concerning the conclusion of the United Nations Framework Convention on Climate Change [3], is to achieve stabilisation of greenhouse-gas concentrations in the atmosphere at a level which prevents dangerous anthropogenic interference with the climate system.

(2) The Conference of the Parties to the Convention, at its first session, concluded that the commitment by developed countries to aim at returning, individually or jointly, their emissions of carbon dioxide and other greenhouse gases not controlled by the Montreal Protocol to the Convention for the Protection of the Ozone Layer to 1990 levels by the year 2000 was inadequate for achieving the Convention's long-term objective of preventing dangerous anthropogenic interference with the climate system. The Conference further agreed to begin a process to enable appropriate action to be taken for the period beyond 2000, through the adoption of a protocol or another legal instrument [4].

(3) This process resulted in the adoption on 11 December 1997 of the Kyoto Protocol to the United Nations Framework Convention on Climate Change ('the Protocol') [5].

(4) The Conference of the Parties to the Convention, at its fourth session, decided to adopt the Buenos Aires Plan of Action, to reach agreement on the implementation of key elements of the Protocol at the sixth session of the Conference of the Parties [6].

(5) The core elements for the implementation of the Buenos Aires Plan of Action were agreed upon by consensus by the Conference of the Parties at its resumed sixth session in Bonn from 19 to 27 July 2001 [7].

(6) A range of decisions giving effect to the Bonn Agreements were adopted by consensus by the Conference of the Parties at its seventh session in Marrakech from 29 October to 10 November 2001 [8].

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[1] OJ C 75 E, 26.3.2002, p. 17.

[2] Opinion delivered on 6 February 2002 (not yet published in the Official Journal).

[3] OJ L 33, 7.2.1994, p. 11.

[4] Decision 1/CP.1: 'The Berlin Mandate: Review of the adequacy of Article 4, paragraph 2(a) and (b), of the Convention, including proposals related to a protocol and decisions on follow-up'.

[5] Decision 1/CP.3: 'Adoption of the Kyoto Protocol to the United Nations Framework Convention on Climate Change'.

[6] Decision 1/CP.4: 'The Buenos Aires Plan of Action'.

[7] Decision 5/CP.6: 'Implementation of the Buenos Aires Plan of Action'.

[8] Decisions 2-24/CP.7: 'The Marrakech Accords'.

(7) The Protocol, under Article 24, is open for ratification, acceptance or approval by States and by regional economic integration organisations that have signed it.

(8) The Protocol, under Article 4, provides for Parties to fulfil their commitments under Article 3 jointly, acting in the framework of and together with a regional economic integration organisation.

(9) When the Protocol was signed in New York on 29 April 1998, the Community declared that it and its Member States would fulfil their respective commitments under Article 3(1) of the Protocol jointly in accordance with Article 4 thereof.

(10) In deciding to fulfil their commitments jointly in accordance with article 4 of the Kyoto Protocol, the Community and the Member States are jointly responsible, under paragraph 6 of that article and in accordance with article 24(2) of the Protocol, for the fulfilment by the Community of its quantified emission reduction commitment under Article 3(1) of the Protocol. Consequently, and in accordance with Article 10 of the Treaty establishing the European Community, Member States individually and collectively have the obligation to take all appropriate measures, whether general or particular, to ensure fulfilment of the obligations resulting from action taken by the institutions of the Community, including the Community's quantified emission reduction commitment under the Protocol, to facilitate the achievement of this commitment and to abstain from any measure that could jeopardise the attainment of this commitment.

(11) The legal base of any further Decision in relation to the approval by the Community of future commitments in respect of emission reductions will be determined by the content and effect of that Decision.

(12) The Council agreed upon the contributions of each Member State to the overall Community reduction commitment in the Council conclusions of 16 June 1998 ([1]). Certain Member States expressed assumptions concerning base year emissions and common and coordinated policies and measures. The contributions are differentiated to take account i.a. of expectations for economic growth, the energy mix and the industrial structure of the respective Member State. The Council further agreed that the terms of the agreement would be included in the Council Decision on the approval of the Protocol by the Community. Article 4(2) of the Protocol requires the Community and its Member States to notify the Secretariat, established by Article 8 of the Convention, of the terms of this agreement on the date of deposit of their instruments of ratification or approval. The Community and its Member States have an obligation to take measures in order to enable the Community to fulfil its obligations under the Protocol without prejudice to the responsibility of each Member State towards the Community and other Member States to fulfilling its own commitments.

(13) The base-year emissions of the Community and its Member States will not be established definitively before the entry into force of the Protocol. Once these base-year emissions are definitively established and at the latest before the start of the commitment period, the Community and its Member States shall determine these emission levels in terms of tonnes of carbon dioxide equivalent in accordance with the procedure referred to in Article 8 of Council Decision 93/389/EEC of 24 June 1993 for a monitoring mechanism of Community CO_2 and other greenhouse gas emissions ([2]).

(14) The Gothenburg European Council on 15 and 16 June 2001 reaffirmed the determination of the Community and the Member States to meet their commitments under the Protocol, and stated that the Commission will prepare a proposal for ratification before the end of 2001 making it possible for the Community and its Member States to fulfil their commitment rapidly to ratify the Protocol.

(15) The Laeken European Council on 14 and 15 December 2001 confirmed the Union's determination to honour its commitment under the Kyoto Protocol and its desire that the Protocol should come into force before the Johannesburg World Summit on Sustainable Development, 26 August to 4 September 2002.

(16) The measures necessary for the implementation of this Decision should be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission ([3]).

HAS ADOPTED THIS DECISION:

Article 1

The Kyoto Protocol to the United Nations Framework Convention on Climate Change (the Protocol') signed on 29 April 1998 in New York is hereby approved on behalf of the European Community.

The text of the Protocol is set out in Annex I.

([1]) Doc. 9702/98 of 19 June 1998 of the Council of the European Union reflecting the outcome of proceedings of the Environment Council of 16-17 June 1998, Annex I.

([2]) OJ L 167, 9.7.1993, p. 31. Decision as last amended by Decision 1999/296/EC (OJ L 117, 5.5.1999, p. 35).

([3]) OJ L 184, 17.7.1999, p. 23.

Article 2

The European Community and its Member States shall fulfil their commitments under Article 3(1) of the Protocol jointly, in accordance with the provisions of Article 4 thereof, and with full regard to the provisions of Article 10 of the Treaty establishing the European Community.

The quantified emission limitation and reduction commitments agreed by the European Community and its Member States for the purpose of determining the respective emission levels allocated to each of them for the first quantified emission limitation and reduction commitment period, from 2008 to 2012, are set out in Annex II.

The European Community and its Member States shall take the necessary measures to comply with the emission levels set out in Annex II, as determined in accordance with Article 3 of this Decision.

Article 3

The Commission shall, at the latest by 31 December 2006 and in accordance with the procedure referred to in Article 4(2) of this Decision, determine the respective emission levels allocated to the European Community and to each Member State in terms of tonnes of carbon dioxide equivalent following the establishment of definitive base-year emission figures and on the basis of the quantified emission limitation or reduction commitments set out in Annex II, taking into account the methodologies for estimating anthropogenic emissions by sources and removals by sinks referred to in Article 5(2) of the Protocol and the modalities for the calculation of assigned amount pursuant to Article 3(7) and (8) of the Protocol.

The assigned amount of the European Community and of each Member State shall be equal to its respective emission level determined in accordance with this Article.

Article 4

1. The Commission shall be assisted by the committee instituted by Article 8 of Decision 93/389/EEC.

2. Where reference is made to this paragraph, Articles 5 and 7 of Decision 1999/468/EC shall apply.

The period laid down in Article 5(6) of Decision 1999/468/EC shall be set at three months.

3. The Committee shall adopt its rules of procedure.

Article 5

1. The President of the Council is hereby authorised to designate the person or persons empowered to notify, on behalf of the European Community, this Decision to the Secretariat of the United Nations Framework Convention on Climate Change in accordance with Article 4(2) of the Protocol.

2. The President of the Council is hereby authorised to designate the person or persons empowered to deposit, on the same date as the notification referred to in paragraph 1, the instrument of approval with the Secretary-General of the United Nations in accordance with Article 24(1) of the Protocol, in order to express the consent of the Community to be bound.

3. The President of the Council is hereby authorised to designate the person or persons empowered to deposit, on the same date as the notification referred to in paragraph 1, the declaration of competence set out in Annex III, according to the provisions of Article 24(3) of the Protocol.

Article 6

1. When depositing their instruments of ratification or approval of the Protocol, Member States shall notify, at the same time and on their own behalf, this Decision to the Secretariat of the United Nations Framework Convention on Climate Change in accordance with Article 4(2) of the Protocol.

2. Member States shall endeavour to take the necessary steps with a view to depositing their instruments of ratification or approval simultaneously with those of the European Community and the other Member States and as far as possible not later than 1 June 2002.

3. Member States shall inform the Commission not later than 1 April 2002 of their decisions to ratify or to approve the Protocol or, according to the circumstances, of the probable date of completion of the requisite procedures. The Commission shall, in cooperation with the Member States, arrange a date for depositing the instruments of ratification or approval simultaneously.

Article 7

This Decision is addressed to the Member States.

Done at Luxembourg, 25 April 2002.

For the Council

The President

M. RAJOY BREY

ANNEX II

Table of quantified emission limitation or reduction commitments for the purpose of determining the respective emission levels allocated to the European Community and its Member States in accordance with article 4 of the Kyoto Protocol

	Quantified emission reduction commitment as laid down in Annex B of the Kyoto Protocol (percentage of base year or period)
European Community	92 %
	Quantified emission limitation or reduction commitment as agreed in accordance with article 4(1) of the Kyoto Protocol (percentage of base year or period)
Belgium	92,5 %
Denmark	79 %
Germany	79 %
Greece	125 %
Spain	115 %
France	100 %
Ireland	113 %
Italy	93,5 %
Luxembourg	72 %
Netherlands	94 %
Austria	87 %
Portugal	127 %
Finland	100 %
Sweden	104 %
United Kingdom	87,5 %

ANNEX III

Declaration by the European Community made in accordance with article 24(3) of the Kyoto Protocol

The following States are at present members of the European Community: the Kingdom of Belgium, the Kingdom of Denmark, the Federal Republic of Germany, the Hellenic Republic, the Kingdom of Spain, the French Republic, Ireland, the Italian Republic, the Grand Duchy of Luxembourg, the Kingdom of the Netherlands, the Republic of Austria, the Portuguese Republic, the Republic of Finland, the Kingdom of Sweden, the United Kingdom of Great Britain and Northern Ireland.

The European Community declares that, in accordance with the Treaty establishing the European Community, and in particular Article 175(1) thereof, it is competent to enter into international agreements, and to implement the obligations resulting therefrom, which contribute to the pursuit of the following objectives:

— preserving, protecting and improving the quality of the environment;

— protecting human health;

— prudent and rational utilisation of natural resources;

— promoting measures at international level to deal with regional or world wide environmental problems.

The European Community declares that its quantified emission reduction commitment under the Protocol will be fulfilled through action by the Community and its Member States within the respective competence of each and that it has already adopted legal instruments, binding on its Member States, covering matters governed by the Protocol.

The European Community will on a regular basis provide information on relevant Community legal instruments within the framework of the supplementary information incorporated in its national communication submitted under Article 12 of the Convention for the purpose of demonstrating compliance with its commitments under the Protocol in accordance with Article 7(2) thereof and the guidelines thereunder.