

International Aviation and the EU ETS

Inclusion of aviation from the point of view of non-EU countries and
the principle of common but differentiated responsibilities



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Table of contents

Acknowledgement	III
Abbreviations	IV
<u>1 INTRODUCTION</u>	<u>1</u>
1.1 Introduction to the topic	1
1.2 Research questions and limitation	3
1.3 Structure	4
1.4 Method and sources	5
<u>2 BACKGROUND: CLIMATE CHANGE AND EMISSION TRADING</u>	<u>7</u>
2.1 Definition of climate change	7
2.2 The International and EU legal framework for climate change	9
2.2.1 United Nations Framework Convention on Climate Change	9
2.2.2 Kyoto Protocol	10
2.2.3 The EU Law	12
2.3 Emission trading as a climate change mitigation mechanism	13
2.3.1 Definition of emission trading	13
2.3.2 International Emission Trading	14
2.3.3 European Union Emission Trading Scheme	15
<u>3 CLIMATE CHANGE AND INTERNATIONAL AVIATION</u>	<u>18</u>
3.1 Environmental impact of international aviation	18
3.2 The International framework for international aviation	18
3.2.1 Convention on International Civil Aviation	18
3.2.2 Open Skies Agreement	21

3.3	Inclusion of aviation in the EU ETS	22
3.3.1	Aviation Emission Directive	22
3.3.2	Scope of the emission trading scheme	22
3.3.3	Allocation of allowances	23
4	<u>INCLUSION OF AVIATION FROM THE POINT OF VIEW OF NON-EU COUNTRIES AND THE PRINCIPLE OF COMMON BUT DIFFERENTIATED RESPONSIBILITIES</u>	25
4.1	Background: Judicial review of the legal basis for the inclusion: Case C- 366/10	25
4.1.1	The role of the USA	26
4.2	Discussion of the EU's unilateral action from the international treaty point of view	28
4.2.1	The Treaty on European Union	28
4.2.2	UNFCCC and Kyoto Protocol	28
4.2.3	Chicago Convention	30
4.2.4	Open Skies Agreement	31
4.3	The principle of common but differentiated responsibilities	32
4.3.1	From sovereign equality of states to common but differentiated responsibility	32
4.3.2	Legal framework for the CBDR principle	34
4.3.3	Of the legal status of the CBDR principle	35
4.3.4	The two elements of the CBDR principle	36
4.4	Developing countries and the challenge of participation	37
4.4.1	Differentiated treatment in the climate change regime	37
4.4.2	Analysis pro and contra inclusion	40
5	<u>CONCLUSIONS</u>	43
	Bibliography	44

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Abbreviations

6th EAP	the Sixth Community Environment Action Programme
CATA	China Air Transport Association
CBDR	Common but differentiated responsibilities
CER	Certified Emission Reduction
CO ₂	Carbon dioxide
COP	Conference of the Parties
ECJ	European Court of Justice
EEA	European Economic Area
EFTA	European Free Trade Association
ERU	Emission Reduction Unit
EU	European Union
EU15	The number of member countries in the EU prior to the accession of ten candidate countries on 1 May 2004
EU ETS	European Union Emission Trading Scheme
GHG	Greenhouse gas
Ibid.	Ibidem
ICAO	International Civil Aviation Organization
IEA	International Energy Agency
IET	International Emission Trading
ILA	International Law Association
IPCC	Intergovernmental Panel on Climate Change
OECD	Organisation for Economic Co-operation and Development
RMU	Removal Unit
TFEU	Treaty on the Functioning of the European Union
UN	United Nations
UNCTAD	UN Conference on Trade and Development
UNFCCC	UN Framework Conventions for on Climate Change
UNGA	General Assembly of the United Nations

1 Introduction

1.1 Introduction to the topic

Climate change is happening, the EU Commission stated in 2005. It cannot be totally halted at the moment but it is possible to reduce its adverse effects and prevent final, irreversible damage to the globe.¹ Emissions from aviation play a crucial role in this mitigation. The emissions from international aviation contribute to climate change and inter alia between 1990 and 2009 carbon dioxide (CO₂) emissions from aviation accounted for 44.2 % in the EU15.² Although emissions formed only 3.4 % of the greenhouse gas emissions (GHG) at EU level in 2009³ and emissions from aviation have also decreased for the second time in a row⁴, the emissions have generally grown rapidly and significantly during the last 20 years. So far any remarkable contribution has not been required from the international aviation sector but because it is very likely that the growth of the aviation sector will continue in the future, some international policy actions are needed.⁵

The United Nations Framework Convention on Climate Change (UNFCCC)⁶ and its Protocol (Kyoto Protocol)⁷, the most important international instruments to tackle climate

¹ Commission of the European Communities. 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 Global Climate Change*. Brussels, 9.2.2005. COM(2005) 35 final. (hereinafter COM(2005) 35 final), p. 3.

² EU15 refers to the group of those 15 countries that were EU Member states prior to the enlargement of the EU with ten new member states in 2004. These 15 countries were: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom. Distinguish from EU19 and EU27.

See: <http://stats.oecd.org/glossary/detail.asp?ID=6805>.

³ European Environment Agency. *Annual European Union greenhouse gas inventory 1990–2009 and inventory report 2011*. Submission to the UNFCCC Secretariat. Technical report No.2/2011. 27 May 2011, p. vi. (hereinafter European Environment Agency 2011)

⁴ Ibid. p. xi. The decrease can be explained by the economic recession. Ibid. p. 338.

⁵ Commission of the European Communities. Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions. *Reducing the Climate Change Impact of Aviation*. Brussels, 27.9.2005. COM(2005), 459 final. (hereinafter COM(2005) 459 final), p. 10.

⁶ United Nations Framework Convention on Climate Change, 31 ILM 849 (entered into force 21. March, 1994 (hereinafter UNFCCC))

⁷ Kyoto Protocol to the United Nations Framework Convention on Climate Change, U.N. Doc. FCC/CP/1997/L.7/Add.1 (entered into force 16. February 2005) (hereinafter Kyoto Protocol)

change, do not regulate GHG emissions from international aviation. The effect of aviation emissions was known when the documents were negotiated but due to the lack of consensus on how the responsibility of emissions should be divided between the states, only domestic CO₂ emissions were included in the national emission totals regulated by the Kyoto Protocol⁸, and parties to the protocol agreed to continue working with aviation emissions reductions through the International Civil Aviation Organization (ICAO).⁹

The European Union (EU), one of the leaders in addressing climate change, has signed and ratified both the UNFCCC and its Kyoto Protocol and is in its entirety subject to emission reductions. In 2005, in order to reach the reduction targets and to fulfill its own environmental policy, the EU established the regional emission trading scheme (EU ETS) for the exchange of greenhouse gas emission allowances.¹⁰ The EU has also been willing to regulate the emissions from international aviation because it has been concerned about the severe effects if not enough measures are taken to mitigate the aviation emissions or if these measures are taken too late. Already in 2001 the Commission announced that the EU might take some action to include aviation in the EU ETS if there would not be any progress from the ICAO.¹¹

In 2005, the Commission published its Communication “Winning the Battle Against Global Climate Change” according to which international actions had to be taken to ensure that the emissions from aviation would not prevent the achievement of the EU’s overall environmental objective. These international actions to be taken were referred as implementing a new market-based instrument at EU level and the Commission stated that the scope of international action had to be widened to cover international aviation.¹² Later in the same year, the Commission published Communication called “Reducing the Climate Change Impact of Aviation” where it was concluded that the best solution, both from the economic and environmental point of view, was to include the international aviation in the

⁸ Barton, Jane. *Including aviation in the EU Emissions Trading Scheme: prepare for take-off*. In: *Journal For European Environmental & Planning Law*, Vol. 5 (2008), p. 184.

⁹ Kyoto Protocol, *supra* note 7, art. 2.2

¹⁰ Directive 2003/87/EC of the European Parliament and of the Council 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 275/32, 25.10.2003. (hereinafter EU ETS Directive)

¹¹ Decision NO 1600/2002/EC of the European Parliament and of the Council of 22 July 2002 laying down the Sixth Community Environment Action Programme, art. 5 (2) (iii) (a) (hereinafter 6th EAP)

¹² COM(2005) 35 final, *supra* note 1 at 8.

EU ETS.¹³ This Communication was supported by a study concluded for the Commission regarding the design and impacts of the possible inclusion of aviation in the EU ETS.¹⁴ Following that, the Directive 2003/87/EC (EU ETS Directive)¹⁵ was amended with the Directive 2008/101/EC (Aviation Emission Directive)¹⁶ in January 2009 and from 2012 onwards, all flights departing from and arriving to the EU are to be included in the EU ETS.

Inclusion of aviation has been endorsed by the EU member states but has received a lot of opposition in international fora. A number of non-EU states and airlines have claimed the inclusion to be against international treaties and principles and there is a case pending before the European Court of Justice from the legal point of view.¹⁷ In addition, China Air Transport Association (CATA) has claimed the inclusion to be against the principle of common but differentiated responsibilities. According to CATA, the unilateral EU action “gravely violates the universally accepted principle of common but differentiated responsibility in the area of combating climate change and the provision of the Convention on International Civil Aviation.”¹⁸

1.2 Research questions and limitation

The purpose of this thesis is first of all to provide the framework for regulation of climate change and emissions from international aviation. Secondly, the purpose is to discuss the role of developing countries in climate change mitigation and also the role and status of the principle of common but differentiated responsibilities (CBDR). Some specific questions are: How can the principle be defined and how should it be interpreted, especially when linked to international environmental treaties? What is the legislative history, the original

¹³ COM(2005) 459 final, supra note 5 at 10.

¹⁴ Giving Wings to Emission Trading. Inclusion of Aviation under the European Union Emission Trading System (EU ETS): design and impacts. Report for the European Commission, DG Environment. No. ENV.C.2/ETU/2004/0074r. Delft, July 2005. (hereinafter CE Delft 2005)

¹⁵ EU ETS Directive, supra note 10.

¹⁶ Directive 2008/101/EC of the European Parliament and of the Council of 19 November 2008a amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community, OJ L 8/3, 13.1.2009. (hereinafter Aviation Emission Directive)

¹⁷ Reference for a preliminary ruling from High Court of Justice Queen's Bench Division (Administrative Court) (United Kingdom) made on 22 July 2010 — The Air Transport Association of America, American Airlines, Inc., Continental Airlines, Inc., United Airlines, Inc. v The Secretary of State for Energy and Climate Change. OJ C 260/9, 25.9.2010. (hereinafter case C-366/10)

¹⁸ China Air Transport Association. *Statement by CATA on inclusion of International Aviation into the EU ETS*. 3.10.2011. Available at: <http://www.wcarn.com/list/13/13140.html>.

intent of the principle and whether the meaning of the principle has changed during the decades or should it still be interpreted based on the words of the instruments? Thirdly, the purpose is to analyse whether the inclusion of aviation in the EU ETS or more precisely the inclusion of developing countries under the trading scheme violates the CBDR principle. The Kyoto Protocol obliges only Annex I parties, developed states, to reduce their emissions and due to the application of the CBDR principle, these emission reduction targets do not apply to developing countries.¹⁹ Developing countries are therefore under no international legal obligation to reduce GHG emissions and they do not have to meet any emission targets but by adding them under the trading scheme, developing countries will become part of the emission limitations at EU level. All the aircrafts, also from developing countries and non-EU countries, are forced to be included in the trading scheme which places a cap on total quantity of emissions for flights. Discussion of the legal status, definition and role of CBDR principle is highly affected by the controversial and never-ending political problem: the North-South divide. The question is therefore not only legal but also or merely a political one. The international organizations, states or scholars have not managed to find a clear legal definition for the principle or define the legal status of the principle, so it will of course not be provided by this thesis either. However, the thesis offers general discussion of the status and the possible legal obstacles the principle may give rise to in light of the inclusion of developing countries in the EU ETS.

Inclusion of aviation in the EU ETS concerns climate change on a large-scale and the topic would deserve a longer research and could be discussed from many perspectives but as the number of words is limited the subject had to be limited strictly to the main questions. The main focus is on the EU ETS, Aviation Emission Directive and on the analysis of the CBDR principle. Unfortunately following interesting topics such as possible violation of the WTO rules and the future of the climate regime in general are not covered in this thesis.

1.3 Structure

This study is divided into five chapters. Chapter 1 is the introduction chapter that leads the reader to the subject. Chapter 2 begins with a definition of climate change and presents the two most important international treaties in the field of environmental law, that is, the

¹⁹ Kyoto Protocol, *supra* note 7, art. 3.1

UNFCCC and the Kyoto Protocol. The chapter gives also a brief overview of the EU's important role in climate change mitigation and at the end, presents the emission trading system in general and the International Emission Trading system and the European Union Emission Trading Scheme in more detail. Chapter 3 covers climate change and international aviation. It gives an overview of the environmental impact of international aviation on climate change and the international legal frameworks for the regulation of international civil aviation: the Convention on International Civil Aviation (the Chicago Convention)²⁰ and the Open Skies Agreement. At the end the historical background of the inclusion of aviation in the EU ETS and the scope of the trading scheme is discussed. Chapter 4 gives an overview of the case pending before the European Court of Justice and discusses also the role and effect of the USA in climate change mitigation. Furthermore, the legal basis for the inclusion according to the relevant treaties is discussed: the treaty of the European Union²¹, the UNFCCC, the Kyoto Protocol, the Chicago Convention and the Open Skies Agreement.²² The third part of the chapter concentrates on the CBDR principle and it covers the historical development of the responsibility in international environmental law, the justification for differential treatment of developing countries and the regulative framework of the CBDR principle. Topics of further discussion are the legal status, role and two elements of the CBDR principle. At the end the chapter identifies and analyses the EU ETS' possible violations of the CBDR principle. Conclusions from this thesis are presented in chapter 5.

1.4 Method and sources

Legal research means a scientific research where the existing, positive law is being interpreted and systematized. In other words, the purpose is to interpret the meaning of the existing law. Legal research is based on existing legal materials such as provisions of national law, international law, law principles and other materials, like preparatory materials of law. With the help of existing law, the researcher interprets and analyzes legal problems and tries to solve them. The purpose of legal research is neither to create new law nor simply to describe the

²⁰ Convention on International Civil Aviation done at Chicago on the 7th day of December 1944, Doc 7300 (hereinafter Chicago Convention)

²¹ Consolidated version of the Treaty on European Union (2010/C 83/01). OJ L 83/13, 30.3.2010. (hereinafter EU Treaty)

²² Air transport agreement between the United States of America, of the one part and the European Community, of the other part. OJ L 134/4, 25.5.2007. (hereinafter Open Skies Agreement)

regulations. Instead, a successful legal research examines specific legal problems and through argumentation tries to find the best interpretation and content of the law.²³ In this study the used method is legal research as the purpose is to interpret and systematize the existing EU legislation on the inclusion of aviation in the EU ETS as well as the regulation on the CBDR principle. On the other hand, the international law perspective is heavily concerned.

Climate change is a very current topic and it has been the top issue in the international forum for many decades. It has been obvious for decades that the emissions from international aviation have to be regulated at international level but that the EU took the leading role and made it happen through its trading scheme, is a relatively new issue. Ever since the EU announced the inclusion, there has been a lot of discussion on the topic and many articles especially on the legal basis for the inclusion in international law but there are not that many articles or studies directly on the question if the inclusion violates the CBDR principle. However, there is one case under procedure at the European Court of Justice (ECJ) regarding the legality of the Aviation Emission Directive.²⁴ Related to this case, the Advocate General has recently delivered her opinion stating that that the inclusion is compatible with international law: “*All in all, therefore, Directive 2008/101 (or Directive 2003/87 as amended by Directive 2008/101) is compatible with all of the provisions and principles of public international law referred to in the request for a preliminary ruling.*”²⁵ The opinion is really relevant to the thesis on many parts and can be used to help to analyze the research questions. What is making this thesis a challenge is that although there are probably hundreds of articles of the actual CBDR principle, it has not been discussed that much related to the EU ETS. The inclusion of aviation in the EU ETS is something really relevant and current but it concerns a field of law that develops all the time. These two issues make it a challenge but on the other hand, give a lot of academic freedom. And also because the field is developing, there exists no clear answer to these questions and therefore it is legal research at its best.

²³ Chynowth, Paul. *Legal Research*. In: *Advanced Research Methods in the Built Environment*. West Sussex, 2008, p. 28 – 37 ; Niemi, Matti Ilmari. *Lainoppi – analyysiä vai oikeuttamista?* In: *Lakimies*. Vol. 5 (2002), p. 775, 778; Aarmio, Aulis. *Lain ja kohtuuden tähden*. Juva 1986, p. 108 - 111.

²⁴ Case C-366/10, supra note 17.

²⁵ Opinion of Advocate General Kokott. Delivered on 6 October 2011. Case C-366/10. The Air Transport Association of America and Others, recital 237. (hereinafter Kokott)

2 Background: Climate change and emission trading

2.1 Definition of climate change

According to the United Nations Framework Convention on Climate Change (UNFCCC) “*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.*”²⁶ In other words, climate change refers to change in the state of climate, change in its properties and the easiest way to explain this phenomenon is through external influences such as global warming.²⁷ Global warming means a rising of average Earth’s temperature which is caused by the increase of atmospheric greenhouse gases²⁸ like CO₂. The increase has been caused by human activities such as burning of fossil fuels to produce energy for transportation. It was unsure for years whether and how human activities have contributed to the dramatic increase of GHGs but in 2007 the fourth Assessment Report by the Intergovernmental Panel on Climate Change (IPCC) stated that it is *extremely unlikely* that global warming could be explained without external forcing, that is, human activities and that it is *very likely* that it could not be caused only by natural causes.²⁹ In the first report from 1990, the IPCC stated that it was certain that emissions from human activities are substantially growing and that these activities *may* inadvertently change the climate. It was further stated that nitrous oxide had increased by about 8 % since pre-industrial times *presumable* due to human activities. At that time the IPCC was unable to specify the sources of those emissions but hold it likely that agriculture played a part in that.³⁰

²⁶ UNFCCC, supra note 6, art. 1.2.

²⁷ Stern, Nicholas. *The Economics of Climate Change. The Stern Review*. Cambridge 2007, chapter I. See also Summary for Policy Makers. In: *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (hereinafter IPCC (2007))

²⁸ UNFCCC, supra note 6, art. 1.5: “Greenhouse gases mean those gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and re-emit infrared radiation.”

²⁹ IPCC (2007), supra note 27 at 10.

³⁰ Intergovernmental Panel on Climate Change. *Climate Change. The IPCC Scientific Assessment. The final Report of Working Group I*, Cambridge 1990, p. 22. (hereinafter IPCC 1990)

When looking back to the evolution of the international climate change regime, it has been challenging to establish an international treaty on climate change. In the beginning the slowness was caused by the skepticism toward the scientific results of the global effects but also because the dimension of the catastrophe and its effects to everything was not fully understood.³¹ The first international approaches to form a treaty related to environmental damages were as early as in the 1970`s³² but for example the real concerns of the state of climate and international legal work in that field started in the 1980`s when the global climate was declared to be a common concern of mankind³³ and international organizations, especially the United Nations (UN) took the first important steps to recognizing and addressing the issue. But due to the political³⁴, scientific³⁵ and economic³⁶ complexity, it took until the 1990`s when the first international convention on climate change was adopted.³⁷

The only way to combat climate change is to reduce the amount of GHGs, especially CO₂ that is known as the most common of the gases.³⁸ In this future combat one of most important industrial sectors is international aviation but the process to address the emissions from international aviation has not been any different compared to a general climate change regime. There have been considerable improvements in the average fuel efficiency³⁹ and reducing emissions from aviation has been one of the environmental goals of many international organizations such as of the ICAO whose work is to regulate for the

³¹ See for example from the IPCC`s first, second and third Assessment reports about the uncertainties regarding climate change, supra note 27 and 30.

³² Such as Convention on Long-range Transboundary Air Pollution in 1979 and Convention for the Protection of Ozone Layer in 1985. Later in 1990: International Convention on Oil Pollution Preparedness, Response and Co-operation; in 1991 Convention on Environmental Impact Assessment in a Transboundary Context; in 1991 Protocol on Environmental Protection on the Antarctic Treaty.

³³ UN General Assembly Resolution of 6 December 1988. Protection of global climate for present and future generations of mankind (A/Res/43/53), recital 1.

³⁴ Political complexity can refer inter alia to the question how the responsibility can be measured between the states and whether and how developing countries should participate.

³⁵ According to the first assessment report by the IPCC in 1990 there were many uncertainties especially regarding the incomplete understanding of GHG sources. IPCC (1990), supra note 30 at vii.

³⁶ Climate change mitigation is an economical challenge as the mitigation should be done in the most cost-effective way. Climate change should be stopped but as little money as possible should be used. At the same time there remains the question whether developed countries should pay all the costs.

³⁷ UNFCCC in 1994.

³⁸ UNFCCC homepage. *Emission trading*.

http://unfccc.int/kyoto_protocol/mechanisms/emissions_trading/items/2731.php

³⁹ Barton, Jane. *Tackling Aviation Emissions: The Challenges Ahead*. In: Journal for European Environmental & Planning Law. Vol. 3, number 4 (2006), p. 316. (hereinafter Barton 2006)

promotion of safe and secure development of international aviation. However, due to the growing industry, the measures that have been taken by the ICAO so far have not been enough. The ICAO was established already in 1944⁴⁰ and it still has not managed to find a mutual agreement for the regulation of international aviation emissions. It is therefore not surprising that the EU decided to go its own way and include aviation in its trading scheme. Before taking a closer look at the EU's role in climate change mitigation, an overview of the two most important instruments, the UNFCCC and its Kyoto Protocol is provided.

2.2 The International and EU legal framework for climate change

2.2.1 United Nations Framework Convention on Climate Change

The UNFCCC was the first international convention to emerge against climate change. The convention was opened for signatures at the 1992 United Nations Conference on Environment and Development and it entered into force in 1994.⁴¹ The convention is globally wide expanded and has to date 194 parties⁴², including the EU and the USA. The ultimate objective of the convention is to stabilize GHG concentrations at a level that would prevent dangerous human caused interference with the climate system.⁴³ The UNFCCC does not set any legally binding quantified emission reduction limits but by the signatures the countries committed themselves to the conventions aim to voluntarily reduce GHGs.⁴⁴ All parties, developed and developing, alone or jointly⁴⁵, shall respond to climate change by means of preparing and updating their national climate change mitigation and adaptation programs.⁴⁶

The role of developed countries in the lead of combating climate change is highly underlined in the UNFCCC and the text of the convention does not give room for any other interpretation of developed countries' role in the mitigation process. According to art. 3 the

⁴⁰ Chicago Convention, supra note 20.

⁴¹ UNFCCC, supra note 6.

⁴² The latest ratifying countries are Somalia where the convention entered into force in December 2009 and in Iraq in October 2009. See for more details: www.unfccc.int.

⁴³ UNFCCC, supra note 6, art. 2.

⁴⁴ Ibid. art. 4.2.

⁴⁵ Ibid. art. 4.1

⁴⁶ UN Climate Change Secretariat (2002) *A guide to the climate change convention and its Kyoto Protocol*. Bonn 2002, p. 11 – 12. (hereinafter Climate Change Secretariat 2002)

parties have the right and they also should promote sustainable development and developed country parties should take the lead in combating climate change. The special need of developing countries should be given full consideration, especially for those countries that are particularly vulnerable. It is further stated that the parties should take precautionary measures which take into account different socio-economic contexts, cover all relevant sources, comprise all economic sectors and that the parties may cooperate in these measures.⁴⁷ To achieve the objective and implement Convention provisions the convention relies on the principle of equity, the precautionary principle and especially the principle of common but differentiated responsibilities is being referred to several times.⁴⁸

Though only a framework convention, the role of it should not be diminished because in addition that it was the first ever convention to combat climate change, it was also the break up for the more binding legal measures in the field. Since the early beginning of the negotiation process of the convention, it became obvious that climate change could not be mitigated only by stabilizing of GHG concentrations and the process of strengthening the commitments by setting quantified limitations and reductions within certain timeframe was stated in 1995.⁴⁹ This priority aim was fulfilled in 1997 when one of the most important achievements so far in the field of environmental law came into being, namely the UNFCCC's Kyoto Protocol. The Kyoto Protocol was the first international legal agreement to establish legally binding quantitative restrictions on emissions for the developed countries party to the Protocol.

2.2.2 Kyoto Protocol

Kyoto Protocol is an international protocol to the UNFCCC and the purpose of it is to supplement and strengthen the framework convention and set legally binding quantified emission reduction targets. Already the negotiation process of the Kyoto Protocol crystallized the complexity that was to be met in the future in the field of international environmental law: The Protocol was adopted in 1997⁵⁰ but it came into force only after many meetings and really complex and long negotiations in 2005. The delay was mainly

⁴⁷ Ibid. art. 3.

⁴⁸ Ibid. Preamble, art. 3 - 4.

⁴⁹ Report of the Conference of the Parties on its First Session, held at Berlin from 28 March to 7 April FCCC/CP/1995/7/Add.1/ Decision 1/CP.1, p. part II, recital 2(a) (Hereinafter Berlin Mandate)

⁵⁰ Conference of the Parties, Third Session, Kyoto 1-10 December 1997
<http://unfccc.int/cop4/resource/docs/cop3/107a01.pdf>

caused because according to art. 25.1 of the Protocol it was required a ratification of 55 parties whose emissions accounted in total at least 55 % of the total CO₂ emissions.⁵¹ After the USA, at that time the largest GHG emitter in the world, withdrew from the Protocol in 2000, the 55 % emission limit became difficult to achieve.⁵² The entry into force was finally managed by the receipt of Russian ratification in November 2004.⁵³

The Protocol shares the same ultimate objective, principles and division to Annex I⁵⁴ and non-Annex” parties with the UNFCCC. Annex I parties includes all the industrialized parties to the protocol such as Norway and Finland and non-Annex parties on the contrary all the developing countries who have signed and ratified the Protocol. The qualifying difference which distinguishes the UNFCCC from the Protocol is that the Protocol sets quantitative restrictions on emissions from industrialized economies⁵⁵ and establishes a set of mechanism such as emission trading to help the parties to achieve their commitments in a cost-effective manner. Those industrialized economies bound by the targets, Annex I parties to the convention, are obliged to reduce individually or jointly GHG emissions against the level for 1990 during the first commitment period, the five years period from 2008 to 2012.⁵⁶ Quantified reduction targets are referred as levels of allowed emissions which are divided into assigned amount units. Many countries have to reduce their emissions but some countries just need to stabilize the emissions and some countries can even increase their emissions like Norway that can increase emissions with 1 %.⁵⁷ The EU⁵⁸ negotiated a general emission reduction of 8 % to concern the Union as a whole.⁵⁹

⁵¹ Kyoto Protocol, supra note 7, art. 25.1

⁵² Freestone, David. *The UN Framework Convention on Climate Change, the Kyoto Protocol, and the Kyoto Mechanisms*. In: Legal aspects of implementing the Kyoto Protocol mechanisms: making Kyoto work. Oxford 2005, p. 9.

⁵³ UN Climate Change Secretariat (2004) *Kyoto Protocol to enter into force 16 February 2005*. Press release. Bonn 18.11.2004, [p. 1]

⁵⁴ Annex I country means a country included in Annex I to the Convention. Kyoto Protocol, supra note 7, art. 1.6.

⁵⁵ Climate Change secretariat 2002, supra note 46 at 22.

⁵⁶ Kyoto Protocol, supra note 7, art. 3.1.

⁵⁷ Ibid. Annex B.

⁵⁸ Note: The European Community that negotiated the EU Burden Shared Agreement was replaced and succeeded by the European Union by the establishment of the Treaty of Lisbon, 13. December 2007. This thesis talks however about the EU. Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community, signed at Lisbon, 13 December 2007, OJ L 2007 C 306, 17.12.2007.

⁵⁹ 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 fulfillment of commitments thereunder (2002/358/CE), Annex II. (hereinafter Burden Sharing Agreement)

Like the framework convention, the Kyoto Protocol pays special attention to developing countries. In art. 10 of the Protocol it is stated that parties' common but differentiated responsibilities and specific national and regional development circumstances shall be taken into account.⁶⁰ The CBDR principle is further applied with the quantified emission reductions as these reductions concern only developed countries listed in Annex I.⁶¹

2.2.3 The EU Law

Combating climate change is one of the most important priorities in the EU's policy and the EU has also been the driving force in the international climate change negotiations. Climate change mitigation is the first of the four priority areas set in the Sixth Environmental Programme⁶² and the EU Sustainable Development Strategy⁶³ mentions climate change mitigation as the first long-term specific objective of the strategy.⁶⁴ The EU has made considerable efforts to mitigate climate change at EU level also through the European Climate Change Program and all the action at EU-level is completed with member states domestic mitigation actions.⁶⁵

The EU is a full party to the UNFCCC and the EU and its member states ratified the Kyoto Protocol in May 2002.⁶⁶ Art. 4 of the Kyoto Protocol, often referred as the EU Bubble⁶⁷, justifies the EU and its member states to fulfill their quantified emission reduction targets jointly. Authorized by this article, the EU agreed a general 8 % reduction and because of the Burden Sharing Agreement⁶⁸, the commitments are further shared between EU15. The individual caps vary from an increase of 27 % for Portugal and a reduction of 21 % for

⁶⁰ Kyoto Protocol, supra note 7, art. 10.

⁶¹ Ibid. art 2- 3, Annex B.

⁶² 6th EAP, supra note 11.

⁶³ Communication from the Commission. A Sustainable Europe for a Better World: A European Union Strategy for Sustainable Development (Commission's proposal to the Gothenburg European Council), COM(2001)264 final, Brussels, 15.5.2001.

⁶⁴ Europa, Climate Change and the EU's Response, MEMO/07/58, February 15, 2007, p. 6.

⁶⁵ Communication from the Commission. Report on Demonstrable Progress under the Kyoto Protocol (required under art. 5(3) of Decision 280/2004/EC concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol), COM (2005) 615 final, p. 3.

⁶⁶ Europa, *European Union ratifies the Kyoto Protocol*, IP/02/794. Brussels, 31. May 2002, [p. 1]

⁶⁷ Art. 4 is written in general terms and it does not refer directly to the EU. The original meaning of the article was to allow the EU to establish its internal burden-sharing of the emission reduction commitments among its member states. *International rules for Greenhouse Gas Emission Trading. Defining the principles, modalities, rules and guidelines for verification, reporting and accountability*. Tietenberg, Tom [et al.] UNCTAD/GDS/GFSB/Misc.6. United Nations Conference on Trade and Development 1999, p. 24

⁶⁸ Burden Sharing Agreement, supra note 59.

Germany and Denmark. Finland and France were the only countries whose commitment is at least to stabilize the emissions to 1990 level.⁶⁹

It was obvious already on the date of the Kyoto Protocol ratification that in addition to the 8 % GHG reductions, further medium and long-term strategies in climate change combat were needed. In 2005 the European Parliament and the European Council re-affirmed the EU objective not to let the temperature to rise more than 2°C⁷⁰ and it was stated that the more mitigation actions are postponed, the greater the risk of irreversible climate change is.⁷¹ The EU had already for years tried to push through a global solution to mitigating the emissions of international aviation and already in its Sixth Environment Action Programme⁷² from 2002 the EU stated that to fulfill its commitments of 8 % reductions in emissions, the EU would pursue to identify and undertake specific actions to reduce emissions from aviation if such actions would not be agreed with the ICAO by 2002.⁷³ The Commission has also stated in February 2005 that the scope of international action must be widened to cover all sectors and that especially international aviation should be included.⁷⁴ The Commission concluded further in its Communication that to mitigate the emissions from international aviation in a most cost-efficient and environmentally effective way, it would be done through including the aviation into the EU-ETS.⁷⁵ These statements led for the amendment of the EU ETS Directive in 2009.

2.3 Emission trading as a climate change mitigation mechanism

2.3.1 Definition of emission trading

Emission trading means trading not with emissions itself, but with emissions rights. In this context an emission right means a right to emit a certain quantity of GHGs during a certain

⁶⁹ Kyoto Burden-sharing targets for EU-15 countries. See for more information on the webpage to the European Environment Agency at <http://www.eea.europa.eu/data-and-maps/figures/kyoto-burden-sharing-targets-for-eu-15-countries>

⁷⁰ COM(2005) 35 final supra note 1 at 3.

⁷¹ Ibid. p. 8.

⁷² 6th EAP, supra note 11.

⁷³ Ibid. art. 5 (iii) (a)

⁷⁴ COM(2005) 35 final, supra note 1 at 8.

⁷⁵ Europa. *Questions & Answers on aviation & climate change*, MEMO/06/506. Brussels, 20. Desember 2006, p. 3.(hereinafter Memo/06/506)

time period.⁷⁶ Emission trading has become one of most important tools in climate change mitigation⁷⁷ and can be defined as a market-based mechanism⁷⁸ which states or companies are using in order to meet their set emission targets. To date there are several emission trading systems in the world that vary in many ways but the basic idea of all of them is that the trading scheme sets an individual target or cap on the total quantity of emissions for each party. If the party is emitting less than it is allowed and receives surplus, it has the possibility to sell the allowances to another party that has exceeded its emission limit.⁷⁹

Even though we have become more aware of emission trading through the Kyoto Protocol, it has not been established by it and neither is it an EU invention. Namely the first national emission trading system was launched in the USA as early as in 1979. However, the International Emission Trading (IET) established by the Kyoto Protocol and the EU ETS are the most important existing trading systems at the time of writing this thesis.⁸⁰ This thesis focuses mostly on the EU ETS but because it is designed accordingly to the IET, an overview of that system is necessary.

2.3.2 International Emission Trading

International Emission Trading, also referred to as carbon market, means the emission trading system established by the Kyoto Protocol. Emission trading regulated in art. 17⁸¹ is one of the three flexibility mechanisms⁸² under the Protocol and it is established to maximize the cost-effectiveness of climate change mitigation. The key elements of the trading scheme are that emission trading is voluntarily (“*parties* may participate”) and even though it is hypothetically possible for a party to reach the emission target only by trading the carbon units, emission trading cannot be the only action for this purpose (“Any such trading shall be supplemental to domestic actions”). The third element is that the system is

⁷⁶ De Witt Wijnen, Rutger. *Emission Trading under Article 17 of the Kyoto Protocol*. In: *Legal aspects of implementing the Kyoto Protocol mechanisms: making Kyoto work*. Oxford 2005, p. 403.

⁷⁷ Hood, Christina. *Reviewing Existing and Proposed Emission Trading Systems*. Information paper. International Energy Agency. OECD 2010, p. 6.

⁷⁸ Market-based mechanism aim at reducing of GHG emissions at a lower cost in flexible way. See inter alia http://unfccc.int/kyoto_protocol/mechanisms/items/1673.php

⁷⁹ Hood, supra note 77 at 11.

⁸⁰ Massai, Leonardo. *The Kyoto Protocol in the EU : European Community and Member States under International and European Law*. The Hague 2011, p. 109

⁸¹ Kyoto Protocol, supra note 7, art. 17.

⁸² Other mechanisms are Joint Implementation regulated in art. 6 and the Clean Development Mechanism regulated in art. 12 of the Kyoto Protocol.

available only to developed countries that can use it to fulfill the quantified emission targets.⁸³

The trading system works so that the Annex I parties will be assigned a certain amount of GHGs⁸⁴ and their emissions may not exceed this amount unless the party acquires additional emission rights through flexibility mechanisms.⁸⁵ If the emissions are not exceeding the limit, a party has the possibility to trade with emission units and by way of trading the Annex I parties benefit directly of the emission reductions they have managed to achieve.

2.3.3 European Union Emission Trading Scheme

The EU Emission Trading scheme was established by the EU ETS directive in October 2003⁸⁶ and it has been in force since 2005.⁸⁷ It is to date the first and largest international emission trading scheme and it has been defined as a cornerstone of the EU's climate change mitigation.⁸⁸ The scheme was established not only to fulfill the obligations under the Kyoto Protocol but also to help the EU achieve its own environmental targets. According to the preamble of the EU ETS Directive: *“This Directive aims to contribute to fulfilling the commitments of the European Community and its Member States more effectively, through an efficient European market in greenhouse gas emission allowances, with the least possible diminution of economic development and employment.”*⁸⁹

The EU ETS is the largest cap and trade-scheme and the basic idea of the scheme is that the EU has set up an absolute cap⁹⁰ for emissions that are allowed to be released by each of

⁸³ Kyoto Protocol, supra note 7, art. 17.

⁸⁴ The Assigned Amount = AAU refers to a special quantity of GHGs that a party is allowed to release according to the Protocol. Other possible trading units are: RMU (a removal unit), ERU (an emission reduction unit generated from a joint implementation project) and CER (a certified emission reduction generated from a clean development mechanism). Kyoto Protocol supra note 7, art. 3 and Decision 11/CMP.1. *Modalities, rules and guidelines for emissions trading under Article 17 of the Kyoto Protocol* 11/CMP.11

⁸⁵ Kyoto Protocol supra note 7, art. 3

⁸⁶ EU ETS Directive, supra note 10.

⁸⁷ MEMO/06/506, supra note 75 at 3.

⁸⁸ European Commission. Climate Action. Emission Trading System.

http://ec.europa.eu/clima/policies/ets/index_en.htm

⁸⁹ EU ETS Directive, supra note 10, preamble.

⁹⁰ Also referred as quotas or permits. The Commission of the European Communities. Green paper on greenhouse gas emission trading within the European Union. Brussels, 8.3.2000. COM(2000) 87 final, p. 7. (hereinafter COM(2000) 87 final)

the businesses covered. Within this cap, businesses get a certain number of allowances each of them giving them a right to emit one tonne of CO₂ per year and if the business has managed to reduce its emissions more effectively it may engage in trading of their excess.⁹¹

The EU ETS is being implemented in three distinct phases: Phase 1 ran from 2005 to 2007 and was a pilot-phase called “learning by doing”. During the phase a price for carbon and free trade in emissions and the necessary infrastructure for the scheme to work in the next phases were established. Phase 2 is still running and it runs parallel with the Kyoto commitment period from 2008 to 2012. During this phase the EU ETS will be substantially strengthened and extended, the inclusion of aviation being a good example of this. Phase 3 will run for eight years between 2013 and 2020.⁹²

Although the EU ETS is built on the innovative mechanisms set up under the Kyoto Protocol and the second trading period from 2008 to 2012 runs parallel with the first commitment period of the Kyoto Protocol, the EU ETS and IET are two independent trading systems.⁹³ They have however a lot in common inter alia similarities in terminology, in the concept of monitoring and reporting. In addition both of them enable the participants to comply with the emission reduction targets by exchanging trading units.⁹⁴ There are many differences as well. The EU ETS is a *mandatory, domestic and entity based system*. Compared to the IEA which is a voluntarily system, participation to the EU ETS is *mandatory* for businesses in the sectors covered. What is meant by *domestic* is that although the scheme is multinational, it is domestic in a way that trading is happening at EU level as a measure for the EU.⁹⁵ And instead of states, this trading system gives the possibility to trade to *entities*, individual companies but the actions by these companies’ are under the responsibility of the state where the emission source is located.⁹⁶

⁹¹ EU ETS Directive, supra note 10, art. 3

⁹² European Commission. EU action against climate change. The EU Emission Trading Scheme. 2009 Edition. Luxembourg 2009, p. 8. Available at: http://ec.europa.eu/clima/publications/docs/ets_en.pdf

⁹³ Massai, supra note 80 at 114 and 117.

⁹⁴ Ibid p. 110

⁹⁵ COM(2000) 87 final, supra note 90 at 9 (footnote 13).

⁹⁶ Ibid, p. 9.

The EU ETS covers over 12.000 power stations and industrial plants in 29 countries⁹⁷ and these installations are accounting for more than 50 % of the EU's CO₂ emissions.⁹⁸ The geographical scope of the scheme is wide as it operates in all 27 EU member states and since the beginning of 2008 EEA EFTA states have participated in the system.⁹⁹ The EU ETS Directive was incorporated into the EEA Agreement which made it possible to companies in Norway, Iceland¹⁰⁰ and Liechtenstein to participate in the trading scheme.¹⁰¹ Also the scope of the EU ETS is wide. During the first phase, the scheme covered CO₂ emissions from the most high-emitting installations such as oil refineries and steel plants. At least 95 % of the allowances were allocated free of charge. In the second phase, the scope of the emissions has been extended to cover also emissions of nitrous oxide and in addition the geographical scope was extended in 2008 when the EEA EFTA states joined the scheme.¹⁰² The most important benchmark at this point is nevertheless the year 2012 when the emission from international aviation will be added under the scheme.

⁹⁷ Europa. Emissions trading: EU ETS emissions increased in 2010 but remain well below pre-crisis level, IP/11/581. Brussels, 17. May 2011, [p. 1]

⁹⁸ European Commission, supra note 95 at 13.

⁹⁹ Ibid. p. 6

¹⁰⁰ At the moment none of Icelandic installations participate. European Commission, supra note 95 at 14.

¹⁰¹ Decision of the EEA Joint Committee No 146/2007 of 26 October 2007 amending Annex XX (Environment) to the EEA Agreement OJ L 100/92, 10.4.2008.

¹⁰² As an example, during the second phase, the yearly allocated allowances were for Germany 451.2 million tonnes and for Norway 15.0 tonnes. European Commission, supra note 95 at 14.

3 Climate change and international aviation

3.1 Environmental impact of international aviation

In the future climate change combat, international aviation plays a crucial role because aviation contributes to climate change as the aircrafts release gases and particulates which alter the atmospheric composition.¹⁰³ To date international aviation forms one of the most important parts of modern society but at the same time it is the largest growing source of GHG emission. Although emissions from international aviation formed only 3.4 % of overall greenhouse gas emissions at EU level in 2009¹⁰⁴, the emissions from international aviation have increased by 73 % between 1990 and 2003. The worst scenarios are estimating that if the growth continues, by 2012 the emissions from international aviation only from EU airports will have increased by 150 % since 1990. Estimations show that international aviation will be the biggest emitter in the future and if they are left unregulated internationally, the emissions may threaten all the work done in greenhouse gas reductions by other sectors.¹⁰⁵

3.2 The International framework for international aviation

3.2.1 Convention on International Civil Aviation

The Chicago Convention was signed in 1944 and entered into force in 1947 and the purpose of the convention is to set up rules regarding international aviation, safety and rights of the signatories in relation to international air travel.¹⁰⁶ By the ratification of the convention, a specialized UN agency, the ICAO, was also established. The strategic objective of the ICAO is to promote the safe and secure development of international aviation by setting standards and regulations that are necessary in that field.¹⁰⁷ The ICAO

¹⁰³ Commercial aircrafts release not only CO₂ but also nitrogen oxides, water vapour, sulphate and soot particles. COM (2005) 459 final, supra note 5 at 3.

¹⁰⁴ European Environment Agency, supra note 3 at vi and 338.

¹⁰⁵ Ibid. p. 2.

¹⁰⁶ Chicago Convention, supra note 20.

¹⁰⁷ Ibid. art. 44.

can set legally binding standards or issue non-binding legal policy recommendations.¹⁰⁸ One of the three ICAO's environmental goals is to limit or reduce the impact of aviation greenhouse gas emissions on the global climate¹⁰⁹ and it has also developed an ICAO Programme of Action on International Aviation and Climate Change according to which a process will be established for the development of a framework for market based measures in international aviation.¹¹⁰ Unlike all its member states individually, the EU is not party to the Convention and is therefore not bound by the Convention.¹¹¹

The actions taken by the ICAO have for the most part contributed to improving the understanding of how the international aviation impacts climate change and the ICAO has not managed to develop a global solution for the regulation of aviation emissions.¹¹² Inter alia after the ICAO Assembly supported the development of an open emission trading system in 2001, three possible systems were discussed. One of these suggestions was an aviation specific system based on a new legal instrument under the ICAO auspices. Even though it was argued that the system could get greater participation than a Kyoto-based system, it was stated that the negotiation process of a new legal instrument would be a complex, time consuming, resource intensive and in addition the outcome would be uncertain.¹¹³ The ICAO worked therefore further with the establishment of a mutual agreement approach and it urged the states not to implement a system on other states aircraft operators except on the basis of mutual agreement between those states.¹¹⁴ The adoption of a resolution supporting mutual agreement approach led to a reservation made by the 27 EU member states and 15 other member states. Those states reserved the right under the Chicago Convention to enact and apply market-based measures, such as emission trading, on a non-discriminatory basis to all aircraft operators.¹¹⁵ The resolution has been superseded in October 2010 by a resolution A37-19 which recognizes the

¹⁰⁸ Ibid. art. 37 and Kokott, supra note 25, recital 11.

¹⁰⁹ Resolution A36-22: Consolidated Statement of Continuing ICAO Policies and Practices Related to Environmental Protection adopted by 36th Session of the ICAO Assembly in 2007, Appendix A. (hereinafter Resolution A36-22)

¹¹⁰ Ibid. appendix K

¹¹¹ Chicago Convention, status of the ratification.

Available at: <http://legacy.icao.int/icao/en/leb/chicago.pdf>

¹¹² COM(2005) 459, supra note 5 at 4.

¹¹³ Committee on Aviation Environmental Protection, Sixth Meeting. Montreal, 2 to 12 February 2004. Emission Trading- Status Report and Next Steps. CAEP/6-WP/8, p. 4.

¹¹⁴ Resolution A36-22, supra note 109, appendix L

¹¹⁵ ICAO. Extracts of A36-min. P/9 (Minutes of the ninth plenary meeting) Reservations made to Assembly Resolutions A36-22, A36-24 and A36-28, p. 1 – 3.

important role of emission trading and recommends guiding principles for the introduction of such schemes by Chicago Convention member states. In its chapter 14 of the market-based measures, the resolution states as follows: “*Urges States to respect the guiding principles listed in the Annex, when designing new and implementing existing MBMs for international aviation, and to engage in constructive bilateral and/or multilateral consultations and negotiations with other States to reach an agreement*”.¹¹⁶ The EU made a reservation into this chapter as well by stating again that the chapter 14 cannot be interpreted as “*requiring that market-based measures may only be implemented on the basis of mutual agreement between States* and that claiming further that the Chicago Convention expressly recognizes the right of each party to apply “*on a non-discriminatory basis its own laws and regulations to aircraft of all States*”.¹¹⁷ Like Kokott has stated, the resolution cannot be seen more than as a non-binding political declaration and not as a legally binding standard on aviation.¹¹⁸

It has been argued that ICAO's inability to regulate is due to the different policies followed by the Chicago convention and the Kyoto Protocol. The Kyoto Protocol makes a clear difference between Annex I and non-Annex parties, whereas ICAO's basic policy is based on the non-discriminatory principle. According to art. 11 of the convention, all the policies that the ICAO establishes are equally applicable to all member states and all aircrafts and no differentiation is allowed.¹¹⁹ Therefore to mitigate the emissions from international aviation, the ICAO should find an internationally applicable solution that would apply in a similar way to everybody. As non-Annex parties are holding tight of the CBDR principle and because the EU member states and many other states do not support mutual agreement system, this kind of instrument has not yet been established.

¹¹⁶ Resolution A37-19: Consolidated statement of continuing ICAO policies and practices related to environmental protection – Climate change. Adopted by 37th Session of the ICAO Assembly in 2010, chapter 14.

¹¹⁷ Reservations to Resolution A37-19 (17/2), [p.11]
available at: http://legacy.icao.int/icao/en/assembl/A37/Docs/10_reservations_en.pdf

¹¹⁸ Kokott, supra note 25, recital 193.

¹¹⁹ Chicago Convention, supra note 20, art. 11: “Subject to the provisions of this Convention, the laws and regulations of a contracting State relating to the admission to or departure from its territory or aircraft engaged in international air navigation, or to the operation and navigation of such aircraft while within its territory, shall be applied to the aircraft of all contracting states without distinction as to nationality, and shall be complied with by such aircraft upon entering or departing from or while with the territory of that state.”

Even though the EU supports ICAO activities, the Commission stated that it is not realistic to expect the ICAO to take measures that would be accepted by all its member states.¹²⁰ Lack of progress and inability to find a global solution was therefore the reasons that the EU decided to go its own way and include international aviation in its emission trading scheme. Even though Kokott has stated in her opinion that the recent resolution of the ICAO indicates a more positive fundamental attitude to the incorporation of aviation activities in national and regional trading schemes¹²¹, however the latest working paper of the ICAO called the inclusion “a violation of the cardinal principle of state sovereignty” and asked non-EU carriers not be included in the trading scheme.¹²²

3.2.2 Open Skies Agreement

The objective of this study is to discuss mainly the possible violation of the CBDR principle and therefore the problem is discussed mostly from the developing countries point of view. The role of the USA is however, so significant and interesting, that its relation to the issue have to be discussed as well. In this chapter an overview of the bilateral agreement between the USA and the EU will be given and the role of the USA is discussed later in the chapter 4.

The EU-US Open Skies Agreement is a bilateral agreement between the EU and its member states and the USA in the transport field and was concluded in 2007 and amended in 2010¹²³. The Open Skies Agreement was agreed for the liberalization of aviation relationship between the two parties and it calls for an expansion of international air transport but at the same time, it affirms the importance of protecting the environment in developing and implementing international aviation policy.¹²⁴ Agreement allows each party to determine the frequency and capacity of the international air transportation it offers and therefore the parties cannot unilaterally restrict the flights through their airports inter alia by means of requiring operational plans unless it is required by environmental

¹²⁰ COM(2005) 459, supra note 5 at 5.

¹²¹ Kokott, supra note 25, recital 193.

¹²² International Centre for Trade and Sustainable Development (2011b). EU Emissions Trading Scheme Faces Pushback from UN Civil Aviation Body. Bridges Trade BioRes. Volume 15. Number 38, 9. November 2011, p. 9.

¹²³ Open Skies Agreement, amended. Protocol to amend the Air Transport Agreement signed on 25 and 30 April 2007 between the United States of America and the European Community and its Member States, signed in Luxembourg on 24 June 2010. OJ L 233/3, 25.8.2010.

¹²⁴ Open Skies Agreement, supra note 22, preamble.

reasons¹²⁵. According to art. 15 a state party can take environmental measures as long as the measures are weighted against the impact it might have on aviation and that the measures follow the environmental standards adopted by the ICAO.¹²⁶

3.3 Inclusion of aviation in the EU ETS

3.3.1 Aviation Emission Directive

According to the Commission opinion the international aviation had to be addressed as part of EU's effective long-term climate policy because it was not covered by the Kyoto protocol.¹²⁷ In July 2008 the European Parliament voted in favor of the legislation and finally in January 2009 the EU ETS Directive¹²⁸ was amended with the Aviation Emission Directive¹²⁹ in order to include aviation activities in the EU ETS. It was not only the cost-effectiveness which made the EU to decide the inclusion but also because by this way some environmental outcome was guaranteed at the same time that the system allows the growth of the aviation sector. It was also seen as a flexible way for businesses.¹³⁰

The new Aviation Emission Directive came into force in February 2009 and it states that all flights from 2012 onwards between, into and out of EU airports are included in the EU's existing Emission Trading Scheme. The EU ETS has no differentiation between airlines and it means that it applies to all airlines regardless of nationality and business model.¹³¹

3.3.2 Scope of the emission trading scheme

Aviation Emission Directive added a new "Aviation"-chapter in the EU ETS Directive. The scope of the scheme is defined in art. 3a which states as follows: "*The provisions of this Chapter shall apply to the allocation and issue of allowances in respect of aviation*"

¹²⁵ Ibid. art. 3.

¹²⁶ Ibid. art. 15

¹²⁷ Proposal for a Directive of the European Parliament and of the Council amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community COM(2006) 818, p. 2 (hereinafter COM(2006) 818 final)

¹²⁸ EU ETS Directive, supra note 10.

¹²⁹ Aviation Emission Directive, supra note 16.

¹³⁰ Commission presentation on aviation in the EU ETS at the ICAO Council Briefing. European Commission- DG Clima. International and Climate Strategy. Arthur Runge-Metzger. Aviation and Emission Trading. ICAO Council Briefing. 29. September 2011, slide 17.

¹³¹ COM(2006) 818 final, supra note 127 at 6.

activities listed in Annex I.” According to Annex I to the Aviation Emission Directive, the emission trading scheme shall apply in principle to all flights *between, into and out of* EU airports. The directive applies irrespective of the nationality of the aircraft operator¹³² and of the membership in the EU or any other international treaty. This means all the aircrafts, also from developing countries and non-EU countries, are forced to be included in the trading scheme which places a cap on total quantity of emissions for flights unless one of the following restrictions shall apply: the trading scheme shall not apply *inter alia* to flights by State aircraft, circular flights, rescue flights and flights by aircraft with a maximum take-off weight of less than 5 700 kg.¹³³ In addition a so called *de minimis-rule* applies to the EU ETS. This principle means that the scheme is not applied to flights performed by commercial air transport operator if they operate less than 243 flights per period in three successive periods of four months or if the total emissions of the flights are less than 10,000 tonnes per year.¹³⁴ This could be the case regarding some developing countries. However, another exemption which will be more interesting is the art. 25a according to which the scheme shall not apply if a third country has equivalent measures as the trading scheme to reduce climate change impacts from aviation. *Where a third country adopts measures for reducing the climate change impact of flights departing from that country which land in the Community which are at least equivalent to the requirements of this Directive, the Commission shall amend this Directive to provide for flights arriving from that country to be excluded from the aviation activities listed in Annex I with effect from the next period referred to in Article 3b... ”*

3.3.3 Allocation of allowances

Allocation of allowances is important because the number of allowances determines also the limit on emissions. During phase 1 and 2, the member states decided the amount of

¹³² Art. 3 o) “aircraft operator” means the person who operates an aircraft at the time it performs an aviation activity listed in Annex I or, where that person is not known or is not identified by the owner of the aircraft, the owner of the aircraft. Aviation Emission Directive, supra note 16.

¹³³ Also military flights, firefighting flights, humanitarian flights, emergency medical service flights, customs and police flights, training flights, flights performed exclusively for the purpose of scientific research, flights performed in the framework of public service obligations, flights performed exclusively for the purpose of checking, testing or certifying aircraft or equipment whether airborne or ground-based and public service obligation flights will be excluded from the scheme. Commission Decision of 8 June 2009 on the detailed interpretation of the aviation activities listed in Annex I to Directive 2003/87/EC of the European Parliament and of the Council (2009/450/EC), OJ L 149/69, 12.6.2009, Annex 2.2

¹³⁴ Ibid. Annex 2.7

allowances to be allocated but during phase 3, starting from 2013, the number of allowances is determined at EU level.¹³⁵ The European Commission published in September 2011 the benchmark values for allocation of free emissions allowances to airlines. In 2012 an airline will receive 0.6797 allowances per 1,000 tonne-kilometres and 0.6422 allowances in 2013 to 2020.¹³⁶ Allocations will be based on historical production data where the baseline for data collection is either from 1 January 2005 to 31 December 2008, or 1 January 2009 to 31 December 2010.¹³⁷ Based on the benchmark values published by the Commission, 85% of the aviation allowances will be allocated free of charge to aircraft operators in 2012 and the remaining 15 % will be auctioned. During 2013 and 2020 number of allowances allocated for free will be 82%. In addition a special reserve of 3 % will be set aside for new entrants and fast growing airlines.¹³⁸

¹³⁵ European Commission. Climate Action. Allocation 2005 – 2012.

http://ec.europa.eu/clima/policies/ets/allocation/index_en.htm

¹³⁶ Commission Decision of 26 September 2011 on benchmarks to allocate greenhouse gas emission allowances free of charge to aircraft operators pursuant to Article 3e of Directive 2003/87/EC of the European Parliament and of the Council (2011/638/EU), OJ L 252/20, 28.9.2011.

¹³⁷ Commission Decision of 27 April 2011 determining transitional Union-wide rules for harmonised free allocation of emission allowances pursuant to Article 10a of Directive 2003/87/EC of the European Parliament and of the Council (*notified under document C(2011)2772*) (2011/278/EU), OJ L130/1, 17.5.2011

¹³⁸ Europa. European Commission sets the rules for allocation of free allowances to airlines, IP/11/1077. Brussels 26. September 2011, [p. 1]. Questions & Answers on the benchmark for free allocation to airlines and on the inclusion of aviation in the EU's Emission Trading System (EU ETS), MEMO/11/631, Brussels, 26 September 2011.

4 Inclusion of aviation from the point of view of non-EU countries and the principle of common but differentiated responsibilities

4.1 Background: Judicial review of the legal basis for the inclusion: Case C-366/10

The question of the legality of the inclusion of aviation can be discussed through the case C-366/10 against the UK's implementation of Aviation Emission Directive and Kokott's opinion on it and therefore an overview of the case as well as a discussion of the USA's role in this matter is given before the overview of the relevant treaties and the evaluation of the CBDR principle. In 2009 related to the UK's implementation of the amended Aviation Emission Directive, the US Air Transport Association together with three US Airlines¹³⁹ (hereinafter claimants) filed a complaint to the UK Supreme Court to challenge the measures taken by the UK. The Supreme Court referred the case to the ECJ to get its preliminary ruling¹⁴⁰ on the validity of the Directive. The preliminary ruling was requested because the claimants contend that the EU is exceeding its power under international law when including international aviation in the EU ETS, especially because the non-EU aircrafts are to be included. The claimants are of the opinion that the inclusion is in breach of a number of principles of customary international law such as the principle of the sovereignty of States over their own air space and also various international agreements inter alia the Chicago Convention and the Kyoto Protocol. Related to the role of aircrafts registered in third countries the claimants also wanted to know whether the inclusion is invalid because of the contravention of the principles of customary international law or the above mentioned agreements when applying to flights taking place outside the airspace of

¹³⁹ Interveners: The International Air Transport Association and National Airlines Council of Canada. Also the defendant has got interveners by the Aviation Environment Federation, WWF-UK, The European Federation for Transport and Environment, The Environmental Defense Fund and Earth Justice. Case C-366/10, supra note 17.

¹⁴⁰ The national courts in each EU country have the right to ask for advice/a preliminary ruling when the court is in doubt about the interpretation or validity of an EU law. The ECJ is to give an interpretation of the EU law or to rule on its validity. The ECJ is not applying that law because that is the task of the national court. See for more information: Notices from European Union Institutions, Bodies, Offices and Agencies. Court of Justice of the European Union. Information note on references from national courts for a preliminary ruling, 2011/C 160/01. OJ C 160/1, 28.5.2011.

EU member states. The actual case is still pending before the ECJ but as already mentioned, the Advocate General Kokott has delivered its opinion on the 6th of October and according to her opinion: “*Directive 2008/101 (or Directive 2003/87 as amended by Directive 2008/101) is compatible with all of the provisions and principles of public international law referred to in the request for a preliminary ruling. Accordingly, the questions raised in the present proceedings do not give rise to a restrictive interpretation or application of that directive with regard to any of the aforementioned provisions or principles.*”¹⁴¹ Although the Advocate General opinions represent independent and impartial opinions of the cases which do not bind the court, the opinions are really influential and are followed by the ECJ in the majority of the cases.¹⁴² Kokott`s opinions will be covered in more detail in the relevant parts in the discussion of the international treaties.

4.1.1 The role of the USA

The USA is really trying to do everything to avoid the inclusion of aviation in the EU ETS. First of all it was American airlines and transport association who opposed the inclusion of aviation in the first place and challenged the measures taken by the UK by referring the case to the UK Court. Secondly the USA took a further step after the Kokott`s opinion was published. The US House of Representatives passed a bill making it illegal for US airlines to comply with the EU scheme and therefore have set its airlines in a really difficult position because if the American airlines continue its flights to Europe they will be either in breach of national or European law.¹⁴³ Furthermore, on 30th of September 2011, a joint declaration by 26 non-European countries was adopted in India for the opposition of the inclusion of aviation in the EU-ETS. The Declaration is signed inter alia by the USA, China and Russia and even though it recognizes that it is necessary to address the emissions from international aviation, it urges the EU and its member states to refrain from including non-EU-aircrafts in the trading scheme. According to the Joint Declaration the signatories “*Oppose the EU`s plan to include all flights by non-EU carriers to/from an*

¹⁴¹ Kokott, supra note 25, recital 237 - 238.

¹⁴² Court of Justice of the European Union . Press Release No 104/11. According to Advocate General Kokott the inclusion of international aviation in the EU emissions trading scheme is compatible with international law. Luxembourg, 6 October 2011.

¹⁴³ International Centre for Trade and Sustainable Development (2011a). US Bill Complicates EU Aviation Emissions Initiative. Bridges Trade BioRes. Volume 11. Number 19, 31. October 2011, p. 2.

airport in the territory of an EU Member State in its emissions trading system (EU Directive 2008/10/101EC), which is inconsistent with applicable international law and urge the EU and its Member States to refrain from including flights by non-EU carriers to/from an airport in the territory of an EU Member State in its emissions trading system”.¹⁴⁴

The role of the USA is not only important and but also interesting. First of all the USA is the second biggest CO₂- emitter in the world.¹⁴⁵ The USA has a lot of political power that can be demonstrated in the following way: due to its withdrawal in the 1990`s it almost managed to prevent the Kyoto Protocol to come into force and due to this withdrawal China did not want to be committed by the quantified emission reduction limits either. It is important to point out once again that the USA is party to the UNFCCC but is not obliged to any emission reduction because it withdrew from the Kyoto Protocol. Another interesting point is that the USA has been against the strict adaption of the CBDR principle and has requested that especially China be committed to some binding targets. It has stressed that although developed countries have mainly caused the pollution during the last decades, it does not justify the emerging economies, such as China, to be without any legal obligations to reduce the emissions in the future.¹⁴⁶ What is interesting in this settlement, however, is that now that the aviation is to be included in the EU ETS and hence also the developing countries, such as China, are forced to pay for their emissions caused by the aviation sector, the USA is opposing the inclusion as a violation of international law and treaties such as Open Skies Agreement and have even allied together with China against the inclusion.¹⁴⁷

¹⁴⁴ International Civil Aviation Organization. Joint declaration. appendix to the ICAO working paper. Council 194th Session. Inclusion of International Civil Aviation in the European Union Emission Trading Scheme (EU ETS) and its impact. C-WP/13790. 17.10.2011, recital 5 and 6. (hereinafter Joint Declaration)

¹⁴⁵ International Energy Agency. *IEA Statistics: CO₂ Emissions from fuel combustion. Highlights*. 2011 Edition. OCED/IEA 2011, p. 9. (Hereinafter IEA 2011)

¹⁴⁶ Baumert Kevin A. *Participation of developing countries in the international climate change regime: Lessons for the future*. Washington University International Law Review 365 (2006), p. 1.

¹⁴⁷ Joint Declaration, supra note 144.

4.2 Discussion of the EU's unilateral action from the international treaty point of view

4.2.1 The Treaty on European Union

The legal basis for the inclusion at EU level is provided by the Treaty of the European Union¹⁴⁸. According to art. 3 the task of the EU is to ensure “*a high level of protection and improvement of the quality of the environment*”.¹⁴⁹ The Union policy on environmental issues is provided by the Treaty on the Functioning of the European Union (TFEU) under the title XX Environment.¹⁵⁰ According to art. 191 the objectives of the EU are to preserve, protect and improve the quality of the environment, to protect human health, to utilize natural resources prudently and rationally and *to promote measures at international level to deal with regional or worldwide environmental problems*. For the achievement and fulfillment of the above mentioned objectives, the EU has the special competence to harmonise based on art. 192 which sets out the procedures to be followed in order to achieve the objectives of art. 191.¹⁵¹

4.2.2 UNFCCC and Kyoto Protocol

According to art. 2.2 of the Kyoto Protocol, *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*.¹⁵² One of the questions referred to the ECJ was whether it is lawful for the EU to act alone outside the framework of the ICAO and therefore, whether the Aviation Emission Directive contravenes Article 2(2) of the Kyoto Protocol?¹⁵³ If one starts with the legal basis for the inclusion according the UNFCCC, it can be found in the art. 4(1) (b). According to that all parties shall “*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*

¹⁴⁸ “*Legal basis for the proposal is Article 175 (which was also the legal basis for Directive 2003/87/EC)*”. COM(2006) 818 final. Note: Ex art. 175, now art. 192. Consolidated version of the Treaty on the Functioning of the European Union. (2010/C 83/01). OJ L 83/47, 30.3.2010. (hereinafter TFEU)

¹⁴⁹ EU Treaty, supra note 21.

¹⁵⁰ TFEU, supra note 148.

¹⁵¹ Ibid. art. 191 and 192.

¹⁵² Kyoto Protocol, supra note 7, art. 2.2

¹⁵³ Case C-366-10, supra note 17, question 4a.

gases not controlled by the Montreal Protocol, and measures to facilitate adequate adaptation to climate change. Further in art. 4(1)(c) it is stated that all parties have to “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.” As part of transport sector, aviation can be included in this category. These articles clearly state that the convention has not set any restrictions to any parties to refrain from further measures in the international aviation field. On the contrary it encourages parties for the implementation of programmes to mitigate climate change. Also when you look at the ultimate objective of the UNFCCC, it is obvious that the purpose is to reduce the adverse effects and tackle against climate change. Not to forget that the UNFCCC calls for the cooperation between the states but also reaffirms the principle of sovereignty of states in this international cooperation.¹⁵⁴

Further, when it comes to the Kyoto Protocol, the Protocol includes precise articles on transport sectors impact on climate change. According to art. 2(1) (a) (vii) developed countries listed in Annex I shall *implement and/or further elaborate policies and measures in accordance with its national circumstances, such as: Measures to limit and/or reduce emissions of greenhouse gases not controlled by the Montreal Protocol in the transport sector.* The Protocol further calls for cooperation between member states for the achievement of its quantified emission reduction targets and generally for the climate change mitigation.¹⁵⁵ Both of the articles refer to the possibility to regulate aviation emission but however, the regulation should be done through the ICAO. Namely according to art. 2.2 of the Kyoto Protocol the mandate to address the climate impact of aviation is given to the ICAO (*Annex I parties shall... working through the ICAO...*) but the article does not specify in details about the level of authority nor the interplay between the states and the ICAO. It does not state anything whether state parties are allowed to regulate international aviation individually, how and at what level member states should cooperate

¹⁵⁴ UNFCCC, supra note 6, preamble.

¹⁵⁵ Kyoto Protocol, supra note 7, art. 2.1.b.

or what rules come into play in case of a conflict.¹⁵⁶ Also Advocate General Kokott reaffirmed that although the mandate is given to the ICAO, it is not stated in the art. 2.2 that the mandate is *exclusive* or that mitigation could *only* happen through the ICAO. Kokott stated further that in case the parties wanted to give an exclusive authority to the ICAO, the authorization would have been expressed in a precise way.¹⁵⁷ Art. 2.2 is not untroubled and is therefore open for interpretation but it is easy to agree Kokott because if you once again read through the UNFCCC and Kyoto Protocols preambles, the ultimate objective and the environmental policies of the UN and the EU, the exclusive authority of the ICAO would be contrary to the very existence of these treaties and the policies and would make all these regulations empty. There is also no room for the discussion that the Kyoto Protocol would list an exhaustive catalogue of the measures to be taken in climate change mitigation.¹⁵⁸ All in all, it can be stated that the UNFCCC and its Kyoto Protocol are giving the framework for the work and encourages and supports parties to take further measures and that it was not meant to given an exclusive authority to the ICAO.

4.2.3 Chicago Convention

When it then comes to the Chicago Convention, the question referred to the ECJ was whether the Amended Directive is invalid, *if and insofar as it applies the Emissions Trading Scheme to those parts of flights (either generally or by aircraft registered in third countries) which take place outside the airspace of EU Member States* is contravening Articles 1, 11 and/or 12 of the Chicago Convention.¹⁵⁹ Before the analysis, the first thing to point out again is that the EU is not party to the Convention. However, as it has been claimed that the inclusion is against the Convention, some articles have to be mentioned. The convention calls for non-discrimination through its articles and the art. 1 starts by referring to the member states *complete and exclusive sovereignty over the airspace over its territory*.¹⁶⁰ But what is even more important in this context is the art. 11 of the applicability of air regulations. According to it “*the laws and regulations of a contracting State relating to the admission to or departure from its territory of aircraft engaged in*

¹⁵⁶ Petersen, Malte. *The legality of the EU's Stand-Alone Approach to the Climate Impact of Aviation: The Express Role Given to the ICAO by the Kyoto Protocol*. In: Review of European Community & International Law Vol.17 (2008), p. 202.

¹⁵⁷ Kokott, supra note 25, recital 177.

¹⁵⁸ Ibid. recital 81.

¹⁵⁹ Case C-366/10, supra note 17, question 3 a.

¹⁶⁰ Chicago Convention, supra note 20, art. 1

international air navigation, or to the operation and navigation of such aircraft while within its territory, shall be applied to the of all contracting States without distinction as to nationality, and shall be complied with by such aircraft upon entering or departing from or while within the territory of that state."¹⁶¹ Furthermore, the art. 12 regarding the rules of the air states that "*Each contracting State undertakes to adopt measures to insure that every aircraft flying over or manoeuvring within its territory and that every aircraft carrying its nationality mark, wherever such aircraft may be, shall comply with the rules and regulations relating to the flight and manoeuvre of aircraft there in force. Each contracting State undertakes to keep its own regulations in these respects uniform, to the greatest possible extent, with those established from time to time under this Convention. Over the high seas, the rules in force shall be those established under this Convention. Each contracting State undertakes to insure the prosecution of all persons violating the regulations applicable.* Like Kokott has stated, art. 11 concern the prohibition of discrimination of aircrafts on the basis of their nationality and therefore no distinction is to be done based on the nationality.¹⁶² If different rules based on the origin and nationality of the aircrafts were applied, it would be against the Chicago Conventions non-discrimination principles. Also the preparatory documents of the Aviation Emission Directive in 2006 was stating that the developing countries had to covered by the scheme in order to avoid discrimination as to nationality in line with the Chicago Convention.¹⁶³

4.2.4 Open Skies Agreement

Regarding the Open Skies Agreement, question referred to the ECJ was whether the *Amended Directive invalid, insofar as it applies the Emissions Trading Scheme to aviation activities is contravening article 15(3) of the Open Skies Agreement.*¹⁶⁴ Like it has been written earlier, art. 15 concerns the environmental measures which the party is allowed to be taken as long as they are weighted against the impacts on aviation and that the ICAO

¹⁶¹ Ibid. art. 11

¹⁶² Kokott, supra note 25, recital 166 -168.

¹⁶³ Commission Staff Working Document. Accompanying document to the Proposal for a Directive of the European Parliament and of the Council Amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading with the Community. Impact Assessment of the Inclusion of aviation in the scheme for greenhouse gas emission allowance trading with the Community. SEC(2006) 1684, Brussels, 20.12.2006, chapter: Economic impacts on developing countries. (hereinafter Commission Staff Working Document)

¹⁶⁴ Case C-366/10, supra note 17, question 4 a.

standards are followed.¹⁶⁵ The environmental measures allowed to be taken have to be in accordance with articles 2 and 3.4 of the Agreement: the states have to have fair and equal opportunity¹⁶⁶ and the applied conditions have to be uniform.¹⁶⁷ According to Kokott all the articles refer to the non-discrimination principle and all the environmental measures taken by the parties have to be applied to the airlines in a non-discriminatory manner.¹⁶⁸ As the EU ETS concern environmental measures, the parties may proceed by taking measures affecting air services as long as they are not discriminatory. Inclusion of aviation have to concern all airlines because otherwise it would be against the non-discrimination principle of the Agreement. And what comes to the environmental standard of the ICAO that should be followed, like it has been earlier written, the ICAO can set legally binding standards but because such standards do not exist, they cannot be taken into account. It can just be agreed with Kokott that the inclusion is not violating the Open Skies Agreement.¹⁶⁹

4.3 The principle of common but differentiated responsibilities

4.3.1 From sovereign equality of states to common but differentiated responsibility

The very fundamental principle of international law is the sovereign equality of states according to which states are *judicially equal, have equal rights and duties and are equal members of the international community, notwithstanding differences of an economic, social, political or other nature.*¹⁷⁰ However, followed by the new international challenges, such as climate change, the international politics have been slightly forced to move toward a differential treatment of states because the traditional system did not conform to the international environmental politics. It was necessary also because it led to more effective ratification of international treaties which was needed especially in the field of climate change. The environmental crisis, or the more certainty of its dramatic consequences, developed fast and there was an urgency to find a solution.¹⁷¹

¹⁶⁵ Open Skies Agreement, supra note 22, art. 15.

¹⁶⁶ Ibid. art. 2

¹⁶⁷ Ibid. art. 3.4

¹⁶⁸ Kokott, supra note 25, recital 106.

¹⁶⁹ Ibid. recital 194.

¹⁷⁰ Declaration on Principles of International Law Concerning Friendly Relations and Co-operation Among States in Accordance with the Charter of the United Nations, UNGA Resolution 2625 (XXV) (1970)

¹⁷¹ Cullet, Philippe. *Differential Treatment in International Environmental Law*. Aldershot, 2003, p. 17.

One of the core examples of the differential treatment is expressed in the CBDR principle, defined also as one of the leading principles of sustainable development law.¹⁷² The principle has a historical responsibility dimension which means that the obligations in the field of climate change mitigation differ according to countries past contribution to global warming and also states capabilities at the moment have to be taken into account. Every country has a certain responsibility to combat climate change but the level of responsibility will depend on the circumstances of the country. The CBDR principle evolves from the general principles of equity in international law¹⁷³ and reflects to the special needs of developing countries that have to be taken into account in the field of international environmental law.¹⁷⁴ When discussing the development of the CBDR principle, there seem to be a common opinion that the principle was most conspicuously defined for the first time in 1992 by the art. 7 of the Rio Declaration: “...in view of the different contributions to global environmental degradation, States have common but differentiated responsibilities...”¹⁷⁵ and by the art. 6 “The Special Situation and needs of developing countries particularly the least developed and those most environmentally vulnerable, shall be given special priority..” Agenda 21¹⁷⁶ which is agreed also at the Earth Summit in 1992¹⁷⁷ at the same with the Rio Declaration, states that the different situations and capabilities of countries have to be taken into account¹⁷⁸ The above mentioned documents can be defined as non-binding political declarations or soft-law documents and even though not legally binding, they have contributed to the development of international

¹⁷² Cordonier Segger, Marie-Claire [et al.]: *Prospects for Principles of International Sustainable Development Law after the WSSD: Common but Differentiated Responsibilities, Precaution and Participation*. In: *Reciel*. Vol 12. Issue 1. (2003), p. 55 – 56. See also: ILA New Delhi Declaration of Principles of International Law Relating to Sustainable Development, 2 April 2002. The 70th Conference of the International Law Association, held in New Delhi, India, 2-6 April 2002.

¹⁷³ Centre for International Sustainable Development Law . *The Principle of Common but Differentiated Responsibilities: Origins and Scope*. A CISDL Legal Brief for the World Summit on Sustainable Development 2002. Johannesburg 26. August 2002, [p. 1]

¹⁷⁴ Sands, Philippe. *Principles of International Environmental Law*. Cambridge 2003, p.285.

¹⁷⁵ United Nations Declarations on Environment and Development, Rio De Janeiro, 14 June 1992, A/CONF.151/26/Rev.1, 31 ILM, art. 7.

¹⁷⁶ United Nations Conference on Environment and Development, Rio De Janeiro, 13 June 1992, A/CONF.151/26/Rev.1 (hereinafter Agenda 21)

¹⁷⁷ Earth Summit, *UN Conference on Environment and Development*.

<http://www.un.org/geninfo/bp/enviro.html>

¹⁷⁸ Agenda 21, supra note 176, recital 39.3 (d)

environment law and especially the role of CBDR principle.¹⁷⁹ At treaty level and exactly in wording “ the principle of common but differentiated responsibilities”, the principle is regulated for the first time in the UNFCCC even though it can be said that the principle is expressed in some way or another practically in every modern environmental treaties.¹⁸⁰

4.3.2 Legal framework for the CBDR principle

The UNFCCC recalls and acknowledges the leading role of developed countries in climate change mitigation. It is stated in the preamble that climate change mitigation needs widest possible cooperation by all states but acknowledges the common but differentiated responsibilities, respective capabilities and social and economic conditions of all states.¹⁸¹ According to article 3.1 the states should protect the climate system *on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities*.¹⁸² It is further stated that parties’ common but differentiated responsibilities have to be taken into account when they are fulfilling their commitments under the art. 4.1 of the convention.¹⁸³ When applied to the UNFCCC, principle basically underlines that industrialized states shall take the lead to modifying their long-term emission trends and providing financial help and technological resources to developing countries even though climate change is a global problem.

The Kyoto Protocol refers to CBDR principle in its art. 10 according to which no new commitments other than those listed in the art. 4.1 of the UNFCCC, shall be introduced to non-Annex parties. In order to advance the implementation of those commitments, parties common but differentiated responsibilities, specific national and regional development priorities, objectives and circumstances shall be taken into account.¹⁸⁴ However, one of the very characteristics of the Kyoto Protocol compared to the UNFCCC is that the protocol

¹⁷⁹ Soft-law means non-legally binding instruments used in contemporary international relations by states and international organizations. It includes inter alia inter-state conference declarations such as the Rio Declaration. Boyle, Alan. *Soft law in International Law-Making*. In: International Law. Oxford, 2010, p. 124. See also Sands, supra note 174, p. 140.

¹⁸⁰ Honkonen, Tuula (2009b). *The Principle of Common but Differentiated Responsibility in Post-2012 Climate Negotiations*. In: Reciel. Vol 18. Issue 3. (2009), p. 258.

¹⁸¹ UNFCCC, supra note 6, preamble.

¹⁸² Ibid. art. 3.1

¹⁸³ Ibid. art. 4.1

¹⁸⁴ Kyoto Protocol, supra note 7, art. 10.

applies the concept of common but differentiated responsibilities to the emission reductions. When applied to emission reduction, the principle means that the binding quantified emission targets concern only industrialized countries and developing countries, non-Annex parties, are under no legal obligation to reduce the emissions.¹⁸⁵

4.3.3 Of the legal status of the CBDR principle

The very first challenge generally related to principles of international environmental law is the general character and open-texture nature of the principles. On the one hand, the open-texture nature makes it easier to environmental regulation to be accepted by the states.¹⁸⁶ From the other hand however, as long the status is open, there is a lot of room for interpretation and different views. Before the application of the CBDR principle in the 1980`s, developing countries did not participate in international environmental treaties because the treaties did not differentiate between states and the same rules applied to all countries.¹⁸⁷ The application of the CBDR principle made it possible that developing countries signed and ratified both the UNFCCC and its Kyoto Protocol.

There is no room for the question whether the CBDR principle is relevant in the climate change field but on the contrary there exists different views of its the role and status.¹⁸⁸ Like it was written earlier, the principle has emerged from soft-law documents but has moved toward a legally binding principle of environmental law. In 1999 Lang described the principle as still a potential principle of international environmental law¹⁸⁹, whereas many scholars see it nowadays as an emerging principle of the international law of sustainable development or international environmental law.¹⁹⁰ However, the China Air Transport Association was claiming the inclusion of aviation in the EU ETS to be a grave violation of the *universally accepted principle of common but differentiated*

¹⁸⁵ Ibid. Annex B.

¹⁸⁶ Paradell-Trius, Lluís. *Principles of Environmental Law: An overview*. In: *Reciel*. Vol 9. Issue 2. (2000), p. 94.

¹⁸⁷ Atapattu, Sumudu A. *Emerging Principles of International Law*. Ardsley, 2006, p. 384.

¹⁸⁸ Scott, Joanne and Rajamani, Lavanya. *EU Climate Change Unilateralism. International Aviation in the European Emission Trading Scheme*. Social Science Research Network, 1. November, 2011, p. 13.

¹⁸⁹ Lang, Wingfried. *UN-Principles and International Environmental Law*. In: *Max Planck Yearbook of United Nations Law*, Vol. 3, (1999), p. 171.

¹⁹⁰ See inter alia Atapattu, supra note 187.

responsibilities.¹⁹¹ In this context it can be interpreted that "universally accepted" means the same as that the principle is part of customary international law. In order for a principle to reach the status of customary international law it has to fulfill the two elements required in art. 38 of the Statute of the International Court of Justice (ICJ), that is: state practice and opinion juris.¹⁹² Scott and Rajamani have recently discussed whether the principle can be regarded as a customary international law and concluded, like many others¹⁹³, that it is improbable that the principle is customary international law but at the same time strongly emphasize that it "had to be taken into consideration and given proper weight."¹⁹⁴ Based on the above mentioned, it is clear that the CBDR principle is not customary international law and at the moment still pretty far from being it as well because the views differ so much regarding the status of the principle.

But how should the principle be taken into account? There is no clear and globally accepted definition of the CBDR principle and therefore it can be interpreted in many ways and because the principle has two different elements, the common responsibilities and differentiated responsibilities, the interpretation gets even more complicated. Therefore, it can still be asked whether the CATA can claim that the inclusion of aviation violates the CBDR principle.

4.3.4 The two elements of the CBDR principle

When discussing the two elements, the common responsibilities mean first of all that all states have the responsibility to protect the environment based on the common concern of

¹⁹¹ Statement by CATA on inclusion of International Aviation into the EU ETS. Available at: <http://www.wcarn.com/list/13/13140.html>

¹⁹² The statute of the International Court of Justice, art. 38. "1. *The Court, whose function is to decide in accordance with international law such disputes as are submitted to it, shall apply:*
a. international conventions, whether general or particular, establishing rules expressly recognized by the contesting states;
b. international custom, as evidence of a general practice accepted as law;
c. the general principles of law recognized by civilized nations;
d. subject to the provisions of Article 59, judicial decisions and the teachings of the most highly qualified publicists of the various nations, as subsidiary means for the determination of rules of law.
2. *This provision shall not prejudice the power of the Court to decide a case ex aequo et bono, if the parties agree thereto.*

¹⁹³ See inter alia Stone, Christopher: *Common but Differentiated Responsibilities in International Law*. The American Journal of International Law, Vol. 98, no. 2 (April 2004): "The practice of differentiating responsibilities has not, despite occasional claims by its proponents, been elevated to the status of a customary principle of international law", p. 299.

¹⁹⁴ Scott and Rajamani, supra note 188 at 13.

human kind. The environment belongs to everybody and in the same way it is everybody's responsibility to take care of it. The definition of differentiated responsibilities on the other hand is more complicated. It is based on the historical responsibility dimension and means that states have differing contributions and differing capabilities to take any climate change mitigation measures.¹⁹⁵ Inter alia French has analyzed the differentiated obligations that the principle contains. According to him, the principle can first of all be used as to set up differential standards. In the UNFCCC, the principle is inter alia used to set differential standards to ensure that the commitments imposed by the convention are more all-embracing for developed states than developing states. Further, art. 3 guides not only the future implementation but also includes a written constitution the Conference of the Parties is obliged to apply when they are fulfilling the obligations set by the convention. When it comes to the Kyoto Protocol, the differential standard is different to that in the UNFCCC because the purpose of the Kyoto Protocol is to set up legally binding emission limitations and the differential treatment was an essential component for the achievement of a successful treaty.¹⁹⁶

4.4 Developing countries and the challenge of participation

4.4.1 Differentiated treatment in the climate change regime

During the Kyoto Protocol negotiation process in the 90's, developing countries were not willing to commit themselves to any quantified reduction targets.¹⁹⁷ Developing countries claimed that they had not generated GHG emissions that were then in the atmosphere and also that developed countries would remain predominant GHG emitters in the future.¹⁹⁸ Developed countries accepted their role and took the main responsibility to reduce the emissions and the role of the developing countries in the participation in the climate regime was based on the application of the CBDR principle. What is the idea behind the

¹⁹⁵ Rajamani, Lavanya. *The Principle of Common but Differentiated Responsibility and the Balance of Commitments under the Climate Regime*. In: *Reciel*. Vol 9, Issue 2. (2000), p. 121 - 122.

¹⁹⁶ French, Duncan. *Developing States and International Environmental Law: The Importance of Differentiated Responsibilities*. In: *International and Comparative Law Quarterly*. Vol. 49, number 1 (2000), p. 40 – 41. See also UNFCCC, supra note 6, art.7 of the COP obligations.

¹⁹⁷ In this context when it is referred to developing countries it is meant the division to Annex I and non-Annex parties in the UNFCCC and the Kyoto Protocol. Developing countries include all states parties to the Kyoto Protocol without any legal obligation to reduce GHG emissions during the first commitment period under the Kyoto Protocol.

¹⁹⁸ Lo, Shih-Fang. *The differing capabilities to respond to the challenge of climate change across Annex parties under Kyoto Protocol*. In: *Environmental Science & Policy* 1 (2010), p. 43.

differentiated treatment between countries and how can it be justified? When it comes to the legally binding emission limits the only solution found during the Kyoto negotiations was the concept of “common but differentiated responsibilities” which is included both in the UNFCCC and in the Kyoto Protocol.¹⁹⁹ At that time the most important thing was to achieve a mutual agreement and get the needed signatories for the first international and binding agreement and without the principle developing countries would not have signed and ratified the Protocol in the first place. From one side, the principle is fair and legally justifiable because it is clear that developed countries have more capacity to address climate change. But from the other side the principle has become the corner-stone and as well as the stumbling-stone of the climate change. What is meant by this is that due to the political problems between the North and South it took first 8 years before the Kyoto Protocol was in force and now that the first commitment period is soon over, there are still the same political obstacles and inability as there was in the 90’s to find mutual understanding for the emission reductions. And when it comes to the inclusion of international aviation in the EU ETS, the same principle has been resurfaced.

Tackling climate change is a long-term process and it does not end after one or two Kyoto commitment periods and these days it is not only developed countries that are emitting. It is therefore important that the international participation will be broadened in the future and the role of the emerging economies as emitters have to be taken into account. As an example, in China CO₂ emissions increased by 5 % in 2008 – 2009²⁰⁰ and China was declared to be the biggest CO₂ emitter in the world already in 2007²⁰¹ and was that still in 2009.²⁰² It has also been written that at the same time as the share of the emissions from the EU-25 is expected to decrease less than 10 % in the coming decades, the alarming estimation is that the share from developing countries will increase more than half of the total. Also even if the EU could manage to cut its emissions by 50 % by 2050, there would not be that much effect on the atmospheric concentrations if other major emitters such as China made substantial reductions as well.²⁰³ What also needs to be taken into account is

¹⁹⁹ UNFCCC, supra note 6, art. 3.1, Kyoto Protocol, supra note 7, art. 10

²⁰⁰ IEA 2011, supra note 145 at 9.

²⁰¹ Vidal, Johan; Adam, David. *China overtakes US as world’s biggest CO₂ emitter*. In: The Guardian. 19.6.2007.

²⁰² IEA 2011, supra note 145 at 9.

²⁰³ COM(2005) 35 final, supra note 1 at 4.

that all developing countries are not equally poor and that there are also differences between Annex I and non-Annex parties. For example according to the World Bank, China (a non-Annex party) is an upper middle-income country and the second largest economy in the world in 2010.²⁰⁴ China's ranking according to its gross national income per capita is 121, compared to Ukraine (Annex I party) whose ranking is 135.²⁰⁵ Therefore one has to think what the relevance of historic emissions is today and think what the countries are doing today and not twenty years ago. One has to think also how capable countries are at the moment to mitigate climate change. Inter alia Rajamani has stated that although the application of the historical contribution is justifiable, it cannot be relied forever and therefore developing countries need to participate at some point.²⁰⁶ Therefore, developing countries cannot be left outside in climate change mitigation only relying to common but differentiated responsibilities because this concept does not hold any longer. Developing countries have been under emerging industrial and economic development during the last decades and have been and are still sending out significant amounts of GHG emissions. They have to be responsible in those emissions in the same way the developed countries are responsible now. If the same old rules apply, it leads to advance to developing countries, in the cost of developed countries. Rajamani has inter alia stated that developed countries that benefitted the most were made to pay the most. They have to reduce their emissions, transfer technology and make it possible for developing countries to promote sustainable development that do not have to obligate themselves to any legally binding limitation.²⁰⁷ This same should apply now especially to the emerging economies such as China as well. But where to draw the line between developed and developing countries and how long the division to I and non-Annex-parties can remain? At this point it can also be asked when developing countries are benefitting at the cost of developed countries and benefitting the most out of this situation? Before there is any generally accepted definition of developing countries, the question seems almost impossible to be answered.

²⁰⁴ The World Bank. See: <http://www.worldbank.org/en/country/china/overview>

²⁰⁵ The World Bank. Gross national income per capita 2010, Atlas method and PPP. Available at: <http://siteresources.worldbank.org/DATASTATISTICS/Resources/GNIPC.pdf>

²⁰⁶ Rajamani, supra note 195 at 122.

²⁰⁷ Ibid.

4.4.2 Analysis pro and contra inclusion

As has been written earlier the CATA has stated that the inclusion of aviation is a unilateral action of the EU which gravely violates the universally accepted principle of common but differentiated responsibilities. As the earlier discussion of the unilateral action and also the universality of the CBDR principle shows, there remains the analysis on a general level whether the inclusion of aviation violates the CBDR principle.

If one starts from the literal interpretation, one could say that the inclusion could violate the principle. Under the Kyoto Protocol or any other international treaties, developing countries, or in this case China, have not obliged themselves to any international reductions. On the opposite, due to their weaker position and the application of the CBDR principle, they have been excluded from these reductions. Even though the CBDR principle is not customary international law, one can ask whether it could be applied to the EU ETS because of the inclusion in the UNFCCC and its Kyoto Protocol. According to the preparatory documents of the Aviation Emission Directive in 2006 it was stated that the inclusion would be fully in line with the CBDR principle under the UNFCCC. It was stated that *“Incorporation of aviation emissions from routes to/from EU airports into the EU ETS would first of all be a measure taken by the Community as an Annex I Party to the UNFCCC. In terms of the economic impacts, a larger proportion of compliance costs would naturally be borne by Annex I carriers as they generally have a higher market share on the routes covered. However, carriers from developing countries that are able to operate in competition with Annex I carriers on such routes would of course need to be covered in order to avoid a) distortions of competition and b) discrimination as to nationality in line with the Chicago Convention.”*²⁰⁸ It looks like that the EU has changed its view regarding the relationship between the CBDR principle and the ETS. According to the Commission presentation on aviation in September 2011, the EU ETS is consistent with the CBDR principle because the principle does not apply to the scheme: the CBDR principle applies to states and the climate measures states take and on the opposite, the EU ETS applies to businesses and therefore it could not be claimed to be against the principle. It is further stated that the EU ETS is first of all part of the EU’s environmental policy.

²⁰⁸ Commission Staff Working Document, supra note 163, chapter: Economic impacts on developing countries.

Secondly it is an economic instrument that helps the states fulfill the emission limits. The EU ETS does not set any individual emission limitations and therefore it is up to each aircraft how much they emit. In addition the scheme does not regulate the operation or navigation of the aircrafts or set any requirements for the airplanes and therefore it can only be seen as an administrative measure that relates purely to departure and landing of the flights and the amount of allowances the aircraft has to surrender is based on the flight.²⁰⁹ All in all, if the operators were treated differently on the basis of nationality, it would be incompatible with the Chicago Convention.²¹⁰

Even though one could still argue that the CBDR principle applies to the EU ETS and that it violates the CBDR principle, the interpretation can and should be taken further. Namely, how should the principle be interpreted in the 21st century? It can even be asked whether the CBDR principle is still suitable in the 21st century in its original meaning and whether the principle and the role of the developing countries as developing countries have become too decisive. As has been written earlier, the principle has changed its legal status toward a legally binding principle but one can ask whether the meaning of the principle has changed during the decades and whether it still should be interpreted in the same way. Related to this French has pointed out a really interesting fact about the use of the CBDR principle or especially the differentiated responsibilities. He has stated that the environmental treaties and declarations are just repeating almost the same sentences without explaining the meaning in more details. He refers inter alia to such sentences as “special needs and circumstances of developing countries”. He says that by repeating these sentences states may approach environmental issues in a more integrated and holistic way.²¹¹ This may be underlined but at the same time it prevents the development of the principle further. This concerns the terms “developing countries” and “emerging economies” and it can be argued that it is not interpreted as it nowadays should be. Because the historical responsibility dimension of the CBDR principle has got such a strong role, it seems possible for developing countries to refer to the principle all over again and make it possible for them to avoid commitments related to GHG emission reductions at an international level. All in all, the role of the CBDR principle is strong but at the same time unclear. The concept has

²⁰⁹ CE Delft 2005, supra note 14 at 173 – 174.

²¹⁰ European Commission- DG Clima, supra note 130, slide 40.

²¹¹ French, supra note 196 at 41.

been applied by many international treaties but the role it has now in the 21st century can be said to be due to the application in the Kyoto Protocols quantified emission reduction targets. It also seems that before a legally binding judgment or opinion juris, the role it has seems difficult to be changed. However, it seems somewhat safe to claim that there are not any legal obstacles for the inclusion of the developing countries under the aviation scheme because the principle does not apply to it. And although it would apply, the possible obstacles could be justified by claiming a better interpretation of the CBDR principle.

Anyway, why should developing countries have any different rights in this area? The EU ETS is not established only for the EU its emissions but the general idea behind the scheme is that the aviation attributes to climate change and as it will be the greatest source of GHGs in the future, a global solution is needed. Climate change is an issue of a common concern of human kind and it cannot be solved solely by excluding the developing countries of any responsibility and letting them pollute only based on this principle. The interpretation of the principle can be said to be outdated and it does not take into account the economic growth of some countries such as China and what effects the growth will have for the climate change. Neither does it take into account the fact that especially China has capability to implement climate change mitigation measures. Such a historical distinction between developed and developing countries cannot be done anymore and instead we should combat the climate change together and having it in our minds as a global problem to all the nations. The principle does not correspond the common concern we have, combating the climate change. Then however, the EU is attributing the allocation allowances for free of charge which means that there will not be any real exceed in the cost. This offers the possibility also to developing countries to participate and take a chance of the system.

5 Conclusions

The emissions from international aviation seem to play a crucial role in the future and since the ICAO has not managed to create an internationally accepted measure to regulate those emissions, someone had to take the leading role in this process. The inclusion of aviation in the EU ETS has not proceeded without any obstacles but it only characterizes the complexity that has been met in international climate change regulation since the 90`s. It also characterizes what kind of problems will occur when there is no clear answer regarding the role, status or definition of the CBDR principle. These questions were also discussed in this thesis and it was concluded that before the role is clear, it gives the possibility for the developing countries to refer to it. This happened now when the inclusion of aviation in the EU ETS as well and therefore it was also discussed whether the inclusion aviation in the EU ETS violates the CBDR principle. With the help of Kokott`s opinion it could be stated pretty clearly that the Aviation Emission Directive is not violating the CBDR principle but there is always room for the discussion of the CBDR principle. Therefore, it was also discussed how the CBDR principle should be interpreted and it was concluded that the principle is not suitable in its original form to today`s climate change regulation because it is so strictly connected to the historical dimension. Therefore the principle does not take into account countries capabilities at the moment. Neither does it take into account how the developing countries are emitting nowadays, and in the long run the interpretation of this principle has to be changed. It is really interesting to see how the interpretation of the CBDR will be the future and how the ECJ judgment will affect to it. It will also be really interesting to see how the EU ETS will start to work and whether the opposition of the trading scheme will affect to it. Probably the non-EU countries are just winning some time and they may probably manage to postpone a procedure. Probably the EU will work further with its rules and state them more clearly. Maybe a longer adaptation period will be grant to non-EU states. Whatever the decision will be, it can be stated that whether it concerns an international or regional climate change mitigation measure, there remains always the link to the principle of common but differentiated responsibilities.

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