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THE EC DECISION TO INCLUDE THE AVIATION ACTIVITIES IN THE EUROPEAN EMISSIONS TRADING SYSTEM (EU ETS): A BREACH OF INTERNATIONAL LAW?*

LA DECISIÓN DE LA COMUNIDAD EUROPEA DE INCLUIR LAS ACTIVIDADES DE AVIACIÓN EN EL SISTEMA DE INTERCAMBIO DE EMISIONES DE LA UNIÓN EUROPEA (EU ETS): ¿UN VIOLACIÓN AL DERECHO INTERNACIONAL?

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Abstract

On the 2nd of February 2009 the European Union enacted the Directive 2008/101/EC, which amended Directive 2003/87/EC, to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community. The purpose of this paper is to define whether this unilateral measure constitutes a breach of international law.

Key words author: European Emissions Trading System (EUETS), aviation, international law.

Keywords plus: International law, aircraft axhaust emmissions, environmental protection, environmental impact analysis, European Union.

Resumen

El 2 de febrero de 2009 la Unión Europea expidió la Directiva 2008/101/ EC, modificando la Directiva 2003/87/EC, para incluir las actividades de aviación en el esquema de comercialización de gases de efecto invernadero dentro de la Comunidad Europea. El propósito de este artículo es determinar si esa medida unilateral constituye una violación al derecho internacional.

Palabras clave autor: Sistema de Intercambio de Emisiones de la Unión Europea (EU ETS), Aviación, Derecho Internacional.

Palabras clave descriptor: *Derecho internacional, gases de escape en aviones, protección del medio ambiente, evaluación del impacto ambiental.*

Recently, UN Secretary-General Ban Ki-moon stated that climate change was the defining challenge of our generation and the defining challenge for multilateralism¹.

Probably the most difficult challenge lies in the fact that climate change is a global problem that requires a joint solution of all states, since the "greenhouse gases (GHGs) released anywhere in the world disperse rapidly in the global atmosphere"².

In fact, the climate is defined as "the average weather in terms of mean and its variability over a certain time-span and a certain area"³ and it varies, mostly, because of the so-called greenhouse effect.

This greenhouse effect, which consists in the absorption of infra-red radiation by the greenhouse gases such as water vapor, carbon dioxide, methane, and nitrous oxide, "has helped to ensure that much life has prospered in this planet"⁴.

In fact, "without these gases- and without the surface of the planet also absorbing some of the incoming solar radiationaverage global surface temperature would be minus 18 degrees Celsius instead of what it actually is, plus 15 degrees Celsius"⁵.

However, "since the beginning of the Industrial Revolution, mid-18th century, the impact of human activities began to extend to a much larger scale, continental or even global. Human activities, in particular those involving the combustion of fossil fuels for industrial or domestic usage, and biomass burning, produce greenhouse gases and aerosols which affect the composition of the atmosphere"⁶ and which have contributed to a "mean global

¹ Trust and Renewed Multilateralism. Speech to the European Forum Alpbach Political Symposium, Alpbach, 30 August 2009.

Dunoff, Ratner and Wippman. International Law. Norms, Actors, Process. A Problem – Oriented Approach. Pg, 811.

³ IPCC. Third Assessment Report. Pg, 87.

⁴ Atmosphere and outer space. Ian H. Rowlands. The Oxford Handbook of International Environmental Law. Pg, 327.

⁵ Id. Pg, 327.

⁶ IPCC. Third Assessment Report. Pg, 92.

warming of 0.4 to 0.8 C of the atmosphere at the surface since the late 19th century"⁷.

The statistics on global emissions by sector shows that

the largest contributor to human-induced CO_2 is power generation (24%), mostly produced in coal and gas fired stations. Next is land use change at 18%, then agriculture, industry and transport at 14% each (aviation is part of transport). Buildings (8%), other energy related activities (5%) and waste (3%) make up the rest⁸:



Source: October 2006 report by Sir Nicholas Stern

As mentioned before, one of the human activities that produce greenhouse gases is Aviation. In fact, under statistics of the International Air Transport Association (IATA), "Aviation is responsible for the 2% of global carbon dioxide (CO_2) emissions and for the 3% of the total man-made contribution to climate change".

⁷ IPCC. Third Assessment Report.Pg, 96.

⁸ Enviro.aero. Available at: http://enviro.aero/splash.html.

⁹ IATA. Available at: http://www.iata.org/whatwedo/environment.

Even though "the Airlines have improved fuel efficiency and CO₂ emissions almost 20% over the past 10 years"¹⁰ and even though "aviation has managed to decouple its emissions growth to around 3%, or some 20 million tonnes annually"¹¹, Governments, International Organizations and NGO's still consider Airline's emissions a serious risk and a relevant source of climate change impact.

However, as the "fuel constitutes 35% of the operating costs of passenger airlines and 39% for freight carriers"¹², the airline industry is one of the most interested in reducing its emissions (and therefore its operational costs). This is the reason why "since the start of the jet age, aviation has reduced fuel burn, CO₂ and water vapor emissions by some 70 % per passenger km"¹³:



Source: IATA WATS 2007.

Therefore, the same industry, lead by the IATA, has launched what was named the four pillar strategy which aims to "build and operate a commercial airliner that produces no net carbon emissions within 50 years from 2007"¹⁴.

¹⁰ IATA. Available at: http://www.iata.org/whatwedo/environment.

¹¹ Enviro. Available at: http://enviro.aero/splash.html.

¹² Air Transport Association in Colombia (ATAC). Available at: http://www.atac.aero/ contenidos/economico/panoramas/2009/noviembre.pdf.

¹³ IATA. Available at: http://www.iata.org/whatwedo/environment.

¹⁴ Id.

This four pillar strategy seeks: (a) to improve the technology to accelerate the renewal of fleet, "the development of cleaner, alternative fuels and more advanced technology for air traffic management and airframe and engine design"¹⁵, (b) to increase the efficiency of aircraft operations, (c) to improve the airspace and airport infrastructure ("by addressing airspace and airport inefficiencies, governments and infrastructure providers could eliminate up to 12% of CO₂ emissions from aviation, according to the IPCC"¹⁶) and (d) to impose global and voluntary incentives "to boost the research, development and deployment of new technologies rather than as a tool to suppress demand"¹⁷.

As stated by Giovanni Bisignani, Director General & CEO,

[i]n the short term, we must cut up to 18% of aviation fuel that is wasted as a result of inefficient infrastructure and operations. This represents more than 120 million tones of CO_2 per year. Implementing an effective Single European Sky alone would save 16 million tonnes annually.

In the longer term, technology must lead our efforts to build a zero carbon emission aircraft in the next 50 years. The world's leading aerospace nations must coordinate basic research, and then compete to apply it effectively. Governments and fuel suppliers must focus on alternative fuels. We aim to have 10% of airline fuel needs from alternative fuel sources by 2017¹⁸.

Although the high ambitions of this strategy and the industry's purpose to reduce emissions and costs are evident, some regulators think it is necessary to issue more measures to control the airlines emissions, particularly the EU.

In fact, on the 2nd of February 2009 the European Union enacted the Directive 2008/101/EC of the European Parliament and of the Council, which amended Directive 2003/87/EC, "so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community"¹⁹.

¹⁵ IATA. Building a greener future. 3rd Edition. October 2008. Pg, 3. Available at: http:// www.iata.org/NR/rdonlyres/C5840ACD-71AC-4FAA-8FEE-00B21E9961B3/0/building_greener_future_oct08.pdf.

¹⁶ Id. Pg, 4.

¹⁷ Id. Pg, 4.

¹⁸ Id. Pg, 1.

¹⁹ Directive 2008/101/EC of the European Parliament and of the Council. Available at:

The mentioned Directive states that "[f]rom 1 January 2012 all flights which arrive at or depart from an aerodrome situated in the territory of a Member State to which the Treaty applies shall be included"²⁰.

This means, as stated by the IATA, that "[v]irtually all airlines with operations to, from and within the EU fall under the scope of the directive, including non-EU airlines"²¹.

This means that under the EU legislation

all air carriers, including non-EU, international carriers, would be required to have permits to cover the entirely of their emissions from all flights to and from EU airports. For example, [...] on a flight from Los Angeles to Paris, United Airlines would have to obtain permits to cover not only the emissions of that flight in French airspace but in U.S. and international airspace over the Atlantic in order to operate to Paris²².

Both the industry and the other states reacted to the mentioned directive:

On behalf of the airline industry, IATA's Director General and CEO, Giovanni Bisignani stated that

Europe must show international leadership. The drafters of Kyoto envisaged a global ETS solution brokered through the International Civil Aviation Organization (ICAO) – a UN body. Europe's unilateral regional scheme misses the mark. An ETS that is fair, global and compliant with international law could be effective, but only if it is part of a comprehensive program to reduce emissions. Europe's regional scheme is none of these. To survive the oil crisis, airlines are already doing everything possible to save fuel and reduce emissions. So there is no additional incentive. Already, over 130 countries have vowed to oppose it. And it puts 7.6 million aviation-related European jobs at risk with higher $costs^{23}$.

On the other hand, the Air Transport Association (ATA) stated that

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32008L0101:EN:NOT. 20 Id. Annex 1.

²¹ Op. Cit. Available at: http://www.iata.org/whatwedo/environment/emissions-europe.htm.

²² Carl Burleson, E.U. Emissions Trading System Proposal, 21 Air & Space Law. (2006-2008), At 23.

²³ IATA. Available at: http://www.iata.org/whatwedo/environment.

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[t]his scheme, which would require US and other non-EU airlines to pay EU entities for the airlines' emissions for the entire length of a flight to and from Europe, becomes a revenue raiser for Europe, on the backs of the rest of the world. This is bad policy, particularly in light of the devastating effects high fuel prices already are having on the industry. As numerous countries have pointed out, it is a clear violation of international law. We hope the European legislature will think twice about this in the final vote that is expected soon. Otherwise, we would expect this matter will be heading for the courts²⁴.

As the EU finally approved the Directive and as the United Kingdom was the first European state to implement it by its UK's Aviation Greenhouse Gas Emissions Trading Scheme Regulations, on December 16, 2009, the Air Transport Association of America (ATA) and three of its individual airline members – American, Continental and United – filed a legal action in the United Kingdom (UK) challenging the first stage.

According to ATA's position

the United States asserts that the unilateral implementation of the EUETS requirements on the international aviation industry violates the Chicago Convention of 1944, which requires all signatory countries (including the EU Member States and the United States) to acquire ICAO's approval before placing any charges on airlines flying into their airports. The "charge" under the EUETS comes in the form of purchasing allowances in excess of permitted emissions or paying a fine for non-compliance with the EU ETS. Thus, according to the United States, the EU's implementation of its Proposal with respect to international aviation without first securing ICAO's permission to do so is unlawful²⁵.

The Commission of the EU

believes that the proposal conforms to international law and that the inclusion of non-EU carriers in the EU-ETS is preventing competitive distortions in the international air transport market. The EC's position is supported by a number of legal experts, who have concluded that the EU's unilateral

²⁴ Greenair. Independent reporter on Aviation and the Environment. Available at: http:// www.greenaironline.com/news.php?viewStory=212.

²⁵ Stephen R. Stegich and Laura A. McGinn, *The EU Emissions Trading Scheme and Aviation*, Pg 12. Available at: http://www.condonlaw.com/attachments/ets_aviation.pdf.

inclusion of all aircraft operators into the ETS irrespective of their origin and without the consent of the respective governments is legally feasible²⁶.

Taking into account the various differences and contradictory positions the EU ETS has caused for the aviation sector, the purpose of this paper is to define if this measure constitutes a breach of international law.

In order to address this issue, this paper is going to start describing the EU ETS, followed by the study of the applicable international instruments in order to determine whether the measure encompasses a breach of international law.

I. THE EC DECISION TO INCLUDE THE AVIATION ACTIVITIES IN THE EU ETS

A. Background

Under article 2 of the United Framework Convention on Climate Change (UNFCCC) the

ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner²⁷.

²⁶ Janina Scheelhaase, Wolfgang Grimme, Martin Schaefer, *The inclusion of aviation into the EU emission trading scheme – Impacts on competition between European and non-European network airlines*, Transportation Research Part D: Transport and Environment, Volume 15, Issue 1, January 2010, Pages 14-25 Air Transport, Global Warming and the Environment - SELECTED PAPERS FROM THE AIR TRANSPORT RESEARCH SOCIETY MEETING, BERKELEY. Available at: http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B-6VH8-4X30C8X-1&_user=142623&_origUdi=B6VGP-4TW5378-1&_fmt=high&_cov-erDate=01%2F31%2F2010&_rdoc=1&_orig=article&_acct=C000000333&_version=1&_urlVersion=0& userid=142623&md5=icd96806efbff1d9a1bcdaea661a708d.

²⁷ UNFCCC. Article 2.

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The EU, in its purpose to achieve the objective of stabilizing the greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system, is

committed to transforming Europe into a highly energy-efficient and low greenhouse gas-emitting economy and, until a global and comprehensive post-2012 agreement is concluded, made a firm independent commitment for the EU to reduce its greenhouse gas emissions to at least 20 % below 1990 levels by 2020²⁸.

In order to achieve this commitment, the EU has argued that it is essential to include the aviation emissions in the greenhouse gas emissions limitations. For that reason, in the negotiations of international agreements, the EU has reiteratively taken the position to include aviation in the international commitments of reducing greenhouse gases.

Following that rationale, the Kyoto Protocol to the UN-FCCC required "developed countries to pursue the limitation or reduction of emissions of greenhouse gases not controlled by the Montreal Protocol from aviation, working through the International Civil Aviation Organisation (ICAO)"²⁹.

Notwithstanding, after long negotiation regarding this issue

[a]t the sixth meeting of the ICAO Committee on Aviation Environmental Protection in 2004, it was agreed that an aviation-specific emissions trading system based on a new legal instrument under ICAO auspices seemed sufficiently unattractive that it should not then be pursued further. Consequently, Resolution A35-5 of the ICAO's 35th Assembly held in September 2004 did not propose a new legal instrument³⁰.

Moreover said Resolution A35-5 urged the "Contracting States to refrain from unilateral implementation of greenhouse gas emissions charges prior to the next regular session of the Assembly in 2007"³¹.

²⁸ Directive 2008/101/EC. Motivation.

²⁹ Ibid.

³⁰ Ibid.

³¹ Resolution A35-5 of the ICAO's 35th Assembly. Par. 29(b)4.

The EU, seeing that the ICAO did not make progress in seeking a legal tool to limit emissions in the aviation sector and

recalling that the Chicago Convention recognizes expressly the right of each Contracting Party to apply on a non-discriminatory basis its own air laws and regulations to the aircraft of all States, [...] placed a reservation on this resolution and reserved the right under the Chicago Convention to enact and apply market-based measures on a non-discriminatory basis to all aircraft operators of all States providing services to, from or within their territory³².

The slowness of the ICAO in reaching a global solution and the EU's purpose to lead the movement towards limiting the global temperature increase to 2 °C gave rise to the enactment of the mentioned Directive 2008/101/EC amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emissions allowance trading, including, as stated before, "all flights which arrive or depart from an aerodrome situated in the territory of a Member State"³³.

As we are going to see below, under the EU ETS

airlines will have their emissions "capped" at 97% of their 2004-05 levels; the cap will be lowered to 95% in 2013; and the airlines will be forced to purchase 15% of their allowances (carbon credits) under the cap at auction. Carriers which have experienced growth since 2004-05 will have to purchase additional allowances, either from another airline or industry which is also covered by the EU's ETS³⁴.

B. Total quantity of allowances for aviation

Under article 3c of Directive 2008/101/EC, "for the period from 1 January 2012 to 31 December 2012, the total quantity of allowances to be allocated to aircraft operators shall be equivalent to 97 % of the historical aviation emissions"³⁵ and for the period

³² Op. Cit. Directive 2008/101/EC.

³³ Annex 1(b).Directive 2008/101/EC.

³⁴ Challenging the EU ETS, Aviation Law Professor Blog, available at: http://lawprofessors. typepad.com/aviation/2010/03/challenging-the-eu-ets.html.

³⁵ Article 3c(1). Directive 2008/101/EC

beginning on 1 January 2013, and [...] for each subsequent period, the total quantity of allowances to be allocated to aircraft operators shall be equivalent to 95 % of the historical aviation emissions multiplied by the number of years in the period³⁶.

The term historical aviation emission is defined by the mentioned Directive as "the mean average of the annual emissions in the calendar years 2004, 2005 and 2006 from aircraft performing an aviation activity"³⁷.

Therefore it is correct to affirm that the cap or the limit of allowances³⁸ for the period from 1 January 2012 to 31 December 2012 is the 97% of the average of the annual emissions in the calendar years 2004, 2005 and 2006, and the limit of allowances for the period beginning on 1 January 2013 is the 95% of the average of the annual emissions in the calendar years 2004, 2005 and 2006.

C. Method of allocation of allowances for aviation through auctioning

Under article 3d of Directive 2008/101/EC, for the periods mentioned before, the 15% of allowances shall be auctioned and the 85% remaining allowances are going to be allocated free of charge after a process of application submitted by the aircraft operator to the competent authority in the administering Member State³⁹.

In that sense, if an airline emits more than the 85% of the cap it will have to buy the rest of the allowances and if it emits less than the 85% it will have the possibility to trade with those allowances in the market.

³⁶ Article 3c(2). Directive 2008/101/EC

³⁷ Article 3(s). Directive 2008/101/EC

³⁸ Allowance means an allowance to emit one tone of carbon dioxide equivalent. See Directive 2003/87/EC

³⁹ See, article 3e. Directive 2008/101/EC. The free allowances are calculated on a benchmarking.

D. Impact in the aviation business

In accordance to IATA, the EU ETS for aviation will carry a cost for the industry of EUR \$3.5 billion⁴⁰. Additionally, the aviation industry stated that "compliance will cost \$60-90 billion between 2008-2022, will reduce profits by \$55 billion between 2008-2022, and will prevent "green" investments by wiping out profits"⁴¹. On the other hand, the industry argues that "costs cannot automatically be passed onto price-sensitive customers"⁴².

Notwithstanding, under the World Wide Fund for Nature (WWF),

[e]ven assuming the full pass through of costs (which would occur regardless of whether allowances are received for free or not) - the actual rise in ticket prices as a result of including aviation in the ETS is likely to be minimal and will have little impact on reducing the rapid growth in emissions from this sector. According to media reports covering the leaked draft of the proposal the scheme would only, by 2020, and depending on the distance covered, raise ticket prices for a return trip by €4.6 (short haul) to €39 (long haul)⁴³.

II. DOES DIRECTIVE 2008/101/EC CONSTITUTE A BREACH OF INTERNATIONAL LAW?

a) The principle of sovereignty: The Directive 2008/101/EC under the Chicago Convention:

As stated before under Directive 2008/101/EC

all air carriers, including non- EU, international carriers, would be required to have permits to cover the entirely of their emissions from all flights to and from EU airports. For example, [...] on a flight from Los Angeles to Paris, United Airlines would have to obtain permits to cover not only the emissions of that flight in French airspace but in U.S. and international airspace over the Atlantic in order to operate to Paris⁴⁴.

⁴⁰ See, http://www.iata.org/pressroom/speeches/Pages/2008-10-13-01.aspx.

⁴¹ See, The EU Emissions Trading Scheme and Aviation, Stephen R. Stegich, Condon & Forsyth LLP, available at: www.condonlaw.com/attachments/ets_aviation.ppt.

⁴² Ibid, available at www.condonlaw.com/attachments/ets_aviation.ppt.

⁴³ WWF, Including aviation in the EU Emissions Trading Scheme – an estimate of the potential windfall profit, at 3.

⁴⁴ Op. Cit. Burleson, at 23.

This means, in short words that the airlines will have to have permits for the emissions done in the airspace of countries distinct from Europe if the arrival or departure of the flight is made on an airport situated in the territory of a member state of the EU.

The question that arises is whether the Directive, by charging the aircraft operators for its emissions made in the airspace of countries different from Europe, constitutes a violation of the principle of sovereignty established by the Chicago Convention on International Civil Aviation.

In fact, article 1 of the Chicago Convention on International Civil Aviation states that "[t]he contracting States recognize that every State has complete and exclusive sovereignty over the airspace above its territory".

Under a first view one could say that Directive 2008/101/EC, by regulating the aircraft emissions in other States, is in clear violation of this principle.

Regarding this point the Air Transport Association (ATA), which filed the first suit against the EU ETS, argues:

We believe application of the EU ETS to non-EU airlines violates several treaty provisions in the Convention on International Civil Aviation (commonly referred to as the "Chicago Convention"). Perhaps most significantly, that treaty (in Article 1) states that countries have sovereignty over the airlines in their own airspace. And yet, by its terms, the EU ETS provisions regulate U.S. airlines in U.S. airspace. For example, for a flight of a U.S. carrier from Dallas to London, the proposed legislation would regulate the emissions from that flight on the ground and as it takes off in Dallas, as it flies over Texas, Oklahoma, Missouri, Illinois, Indiana and Michigan, within U.S. offshore territory, over Canada and the Atlantic Ocean. Thus, the EU ETS provisions would regulate the entire flight, even though the flight would be in EU airspace for only a tiny fraction of the journey⁴⁵.

However, if we take into account that the greenhouse gas emissions have transboundary impacts, a deeper analysis is needed:

⁴⁵ Air Transport Association. Available at: https://www.airlines.org/government/Court+-Filings/Application+of+the+EU+ETS+to+US+Airlines.htm.

In fact the EU argues that since the pollution is a transboundary harm which affects the whole globe and, therefore, Europe, the EU ETS is not in violation of the sovereign principle by regulating the international flight.

As stated by Günther Handi,

[v]arious viewed as grounded in the maxim of sic utere tuo ut alienum non laedas tuo, the concept of "abuse of rights", or the principle of "good neighbourliness" (bon voisinage), these rules give expression to the fact that territorial sovereign rights in general are correlative and independent and consequently subject to reciprocally operating limitations. While absolute territorial sovereignty was once briefly invoked in defense of transboundary injurious uses of international watercourses, today it is universally accepted that a state's freedom to engage in, or permit, natural resource-related activities within its territorial boundaries or subject to its control is necessarily subject to the understanding that such activities should not produce transboundary effects "contrary to the rights of others"⁴⁶.

This limitation of the sovereignty principle was first address by the *Trail Smelter Case*⁴⁷ (United States v. Canada) were the Tribunal lined that

under principles of international law [...] no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes on or in the territory of another or the properties therein, if the case is of serious consequence and the injury is established by clear and convincing evidence⁴⁸.

Furthermore,

the specific intersection of transboundary environmental impact and prohibited state conduct has further come to be defined as the situation in which effects amount to a significantly injurious impact or, in the words of the Trail Smelter tribunal, are of "serious consequence"⁴⁹.

⁴⁶ Günther Handl, *Transboundary Impacts*, The Oxford Handbook of International Environmental Law, at 533.

⁴⁷ Trail Smelter Case (United States v. Canada), Award, 1941, 3 U.N.R.I.A.A. 1905.

⁴⁸ Trail Smetler Case, at 1965.

⁴⁹ Op. Cit., *Handl*, at 533

Additionally, the ICJ in the case concerning the Gabcikovo – Nagymaros Project (Hungary v. Slovakia) "expressly endorsed the prohibition of the transboundary injurious use of natural resources as a rule of international law"⁵⁰.

Accordingly, it is clear under the international law that it is prohibited to states to exercise their sovereignty in a manner that can cause a transboundary and serious harm, and, furthermore, it is also clear, under the ILC's draft Articles on Prevention of Transboundary Harm from Hazardous Activities, that States have the obligation "to take adequate measures to control and regulate sources of potential significant transboundary harm"⁵¹.

However, even if the international law oblige the State of origin to take adequate measures to prevent the transboundary harm, it does not allow third States to take measures instead of the State of origin⁵². Such an interpretation would undermine the most intrinsic fundaments of international law and the Chicago Convention.

In this sense, it is possible that the State of origin could be held liable for causing significant transboundary harm in a third State, but, what cannot be construed is that the regulatory authority and regulatory autonomy of the State of origin can be shifted to a third State, as is the case by Directive 2008/101/EC which intends a clear extraterritorial application of the EU ETS.

Under that perspective, I consider that any emissions trading schemes applicable to international flights would require the international consent of the States and therefore, any construction to apply, unilaterally, a trading scheme for international flights would constitute a breach of international law, as is the case under the EU ETS.

This is the reason why the member states of the Kyoto Protocol stated, in article 2.2, that

⁵⁰ Ibid, Handl, at 533.

⁵¹ Ibid, Handl, at 533.

^{52 &}quot;State of origin" means the State in the territory or otherwise under the jurisdiction or control of which the activities referred to in article 1 are planned or are carried out". Article 2(d). ILC articles on transboundary harm.

[t]he 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, respectively⁵³.

Another argument held by Gisbert Schwarze is that article 1 of the Chicago Convention is not breached since article 11 "provides the EU with the authority to impose obligations relating to arrival and departures"⁵⁴.

The mentioned article 11 of the Chicago Convention states:

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 of 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 within the territory of that State⁵⁵.

As you can see from the reading of the article, the authority of a member State to enact laws or regulations relating to the admission or departure from its territory is "subject to the provisions of this convention". In this sense, the mentioned authority of the member states under article 11 is limited by the compliance of the provisions of the Convention. Thus, the authority of the EU to enact laws or regulations was limited by the compliance of article 1, which, as we stated before, was breached by the Directive.

On the other hand, in my opinion the ATA is correct when it states that "any rules may only apply upon entering or depar-

⁵³ Kyoto Protocol to the United Nations Framework Convention on Climate Change, article 2.2.

^{54 &#}x27;Aviation And Climate Change: Aircraft Emissions Expected to Grow, but Technological and Operational Improvements and Government Policies Can Help Control Emissions', U.S. Government Accountability Office (GAO), GAO-09-554, available at: http://www. gao.gov/htext/d09554.html.

⁵⁵ Chicago Convention, Article 11.

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ting from or while within the territory of that State, whereas the European scheme reaches outside European territory"⁵⁶.

In conclusion, I consider that Directive 2008/101/EC is in violation of the principle of sovereignty recognized under article 1 of the Chicago Convention.

b) The principle of common but differentiated responsibilities between develop and developing countries: The Directive 2008/101/EC under the Kyoto Protocol:

The principle of common but differentiated responsibilities "whereby industrialized developed countries would take the lead in addressing the climate problem, specifically excluding developing countries from binding GHG emissions reductions"⁵⁷, is recognized and adopted by the Kyoto Protocol.

As stated by Harris,

this principle is grounded in shared notions of fairness: the developed countries are disproportionately responsible for historical GHG emissions and have the greatest capacity to act. Thus, the Convention makes few demands on the much less responsible and usually much less capable developing countries⁵⁸.

In the case under study the EU ETS applies to all flights which arrive or depart in a European airport regardless of the nationality of the aircraft operator. The EU ETS applies, thus, both to airlines constituted in develop and developing states.

The question that arises is whether this lack of differentiation and general application constitutes a breach of the principle of common but differentiated responsibilities.

Regarding this point, the EU argues that the Directive exempts the application of the EU ETS to air transport operators operating "fewer than 243 flights per period for three consecu-

⁵⁶ Ibid, U.S. Government Accountability Office (GAO), GAO-09-554, available at: http:// www.gao.gov/htext/d09554.html.

⁵⁷ Paul G. Harris. COMMON BUT DIFFERENTIATED RESPONSIBILITY: THE KYOTO PROTOCOL AND UNITED STATES POLICY, N.Y.U. Environmental Law Journal, Volume 7, at 2. Available at: http://www1.law.nyu.edu/journals/envtllaw/issues/ vol7/1/nye102.pdf.

⁵⁸ Ibid, Harris, at 2.

tive four-month periods; or flights with total annual emissions lower than 10000 tonnes per year³⁵⁹. They argue, then, that this exemption "would benefit airlines operating limited services within the scope of the Community scheme, including airlines from developing countries⁶⁰ in compliance with the principle of common but differentiated responsibilities.

I do not find this argument convincing. After a careful review of the Commission Regulation (EU) No 82/2010 which lists the aircraft operators subject to the EU ETS, it is obvious that the mentioned exemption does not prevent airlines from developing countries from participating in the EU ETS. Just to give some few examples; Forest George Airlines and Hera Bora Airways from Congo, Silverback Cargo from Rwanda, Aerotrans Kazakhstan, Iranian Air Transport and Eagle Air from Sierra Leone (among others) are included in the EU ETS. This makes it clear that many airlines constituted in developing countries have more than 243 flights per period for three consecutive fourmonth periods, and, therefore, Directive 2008/101/EC does not exempts developing countries airline's from being included in the EU ETS. Consequently Directive 2008/101/EC is in violation of the principle of common but differentiated responsibilities.

Another argument that the EU could make is that since the Kyoto Protocol in article 2.2 explicitly excludes aviation from its application, the principle of common but differentiated responsibilities is not applicable to the aviation industry.

Notwithstanding, the text of article 2.2 textually states as follows:

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, respectively⁶¹.

⁵⁹ Annex I. (c)(j). Directive2008/101/EC.

⁶⁰ Directive 2008/101/EC.

⁶¹ Article 2.2. Kyoto Protocol.

As you can see, article 2.2, although excluding aviation from the Kyoto Protocol commitments, makes clear reference to the "parties in annex I", reason why it is evident that commitments in the aviation industry can just be imposed to develop countries. In my opinion, therefore, the principle of common but differentiated responsibilities applies also to the aviation industry.

In conclusion I consider that Directive 2008/101/EC breaches the principle of common but differentiated responsibilities.

c) Directive 2008/101/EC under article 15 of the Chicago Convention:

An additional argument held, principally, by the U.S. and by the ATA against the EU ETS for aviation is that it is inconsistent with article 15 of the Chicago Convention since this measure "imposes a de facto charge for the right to enter or exit an EU member state"⁶².

Said article 15 states as follows:

Airport and similar charges

Every airport in a contracting State which is open to public use by its national aircraft shall likewise, subject to the provisions of Article 68, be open under uniform conditions to the aircraft of all the other contracting States. The like uniform conditions shall apply to the use, by aircraft of every contracting State, of all air navigation facilities, including radio and meteorological services, which may be provided for public use for the safety and expedition of air navigation.

Any charges that may be imposed or permitted to be imposed by a contracting State for the use of such airports and air navigation facilities by the aircraft of any other contracting State shall not be higher,

(a) As to aircraft not engaged in scheduled international air services, than those that would be paid by its national aircraft of the same class engaged in similar operations, and

(b) As to aircraft engaged in scheduled international air services, than those that would be paid by its national aircraft engaged in similar international air services.

⁶² Op. Cit, U.S. Government Accountability Office (GAO), GAO-09-554, available at: http://www.gao.gov/htext/d09554.html.

All such charges shall be published and communicated to the International Civil Aviation Organization: provided that, upon representation by an interested contracting State, the charges imposed for the use of airports and other facilities shall be subject to review by the Council, which shall report and make recommendations thereon for the consideration of the State or States concerned. No fees, dues or other charges shall be imposed by any contracting State in respect solely of the right of transit over or entry into or exit from its territory of any aircraft of a contracting State or persons or property thereon⁶³ (emphasis added).

As stated by Macintosh:

there are two main schools of thought on the interpretation of Article 15 in relation to carbon pricing. The European approach has been to argue that the final sentence should be read in context and that Article 15 is concerned solely with fees and charges for the use of airports and navigation facilities. Emission charges are not design to raise revenue to cover the costs of these facilities and, as a result, they fall outside of the scope of the article⁶⁴.

On the other hand,

[t[he alternative position is that the final sentence of Article 15 must be read in light of Council Resolutions and State practice, whereby it has become generally accepted that Article 15 prohibits the imposition of fees and charges unless they are related to the provisions of services and facilities, or damage remediation costs⁶⁵.

Under the general rule of interpretation established in article 31 of the Vienna Convention on the Law of Treaties "a treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose"⁶⁶.

Following that rule of interpretation, when two different interpretations are possible, the one which has a legal effect (purpose) should prevail over the one that does not.

⁶³ Chicago Convention, article 15.

⁶⁴ Andrew Macintosh, "Overcoming the barriers to International Aviation Greenhouse Gas Emissions Abatement", 33 Air and Space Law 403 (2008) at 415.

⁶⁵ Ibid, Macintosh.

⁶⁶ Vienna Convention on the Law of Treaties.

Under that rule, the second interpretation of the final sentence should prevail over the European interpretation, given that under the European approach the final sentence would be unnecessary and, therefore, it would not have an effect in article 15.

In this sense, I consider that the final sentence of article 15 prevents a member State from making any charge unless they are related to the provisions of services and facilities.

Accordingly, since the EU ETS is not related to the services or facilities it could be considered under the scope of the article.

However, now we have to define if the EU ETS is a charge imposed by the EU "in respect **solely** of the right of transit over or **entry into or exit from its territory** of any aircraft of a contracting State or persons or property thereon" (emphasis added).

It is clear that the EU ETS is not charged exclusively in respect of the "right of transit" since the EU ETS applies only for arrivals or departures within the territory of Europe and not to flights that cross (transit) the EU territory. Nevertheless it is more ambiguous if it is a charge imposed "solely" in respect of the entry into or exit from its territory.

Taking into account that the EU ETS does not apply to flights crossing over the European territory which do not arrive or departure in a European airport, it is apparent, in my opinion, that the EU ETS is not imposed solely of the right of entry or exit from the European territory. Additionally, considering that the purpose of the EU ETS is to reduce the greenhouse gas emissions it is very difficult for me to consider that it is imposed "solely" in respect of the entry or exit of its territory.

For the given reason I consider that Directive 2008/101/EC does not violate article 15 of the Chicago Convention.

d) Directive 2008/101/EC under article 24 of the Chicago Convention:

Finally, ATA argues that the EU ETS for aviation would violate article 24 of the Chicago Convention which exempts fuel on board of an aircraft from duties, fees, and charges.

In the relevant part article 24 states that

[f]uel, lubricating oils, spare parts, regular equipment and aircraft stores on board an aircraft of a contracting State, on arrival in the territory of another contracting State and retained on board on leaving the territory of that State shall be exempt from customs duty, inspection fees or similar national or local duties and charges⁶⁷.

The issue regarding this point is whether the EU ETS can be held as a customs duty, inspection fees or similar national or local duties and charges imposed to fuel.

According to ATA "because the law calculates emissions based on fuel consumption, the purchase of greenhouse gas permits may constitute a 'similar [...] charge' of fuel on board"⁶⁸.

I disagree with ATA's argument since the EU ETS, even if calculated based on fuel consumption, does not impose a duty on the fuel on board on arrival in the territory of the EU territory. Therefore, I consider Directive 2008/101/EC does not breach article 24 of the Chicago Convention.

⁶⁷ Chicago Convention. Article 24.

⁶⁸ Op. Cit, U.S. Government Accountability Office (GAO), GAO-09-554, available at: http:// www.gao.gov/htext/d09554.html.

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CONCLUSION

The inclusion of aviation in the EU ETS generated an interesting debate that will not be easily resolved by the courts and tribunals in charge of deciding it. The decision taken by the courts in this case will define if the transboundary harm may or may not be regulated through unilateral practices of a State where the multilateral system is not effective in addressing it. This case is therefore transcendental since it will define the dilemma between state sovereignty and the care of the planet and between multilateralism and unilateral regulation of transboundary harms.

In my opinion, however, Directive 2008/101/EC constitutes a breach of international law. Specifically, Directive 2008/101/ EC violates the principle of sovereignty established in article 1 of the Chicago Convention on International Civil Aviation. Additionally, the mentioned Directive breaches the principle of common but differentiated responsibilities recognized by the Kyoto Protocol. Nonetheless, in my opinion, Directive 2008/101/ EC does not constitute a violation of articles 15 and 24 of the Chicago Convention.

BIBLIOGRAPHY

- Air Transport Association in Colombia (ATAC). Available at: http://www.atac. aero/contenidos/economico/panoramas/2009/noviembre.pdf.
- Air Transport Association. Available at: https://www.airlines.org/government/ Court+Filings/Application+of+the+EU+ETS+to+US+Airlines.htm
- Andrew Macintosh, "Overcoming the barriers to International Aviation Greenhouse Gas Emissions Abatement", 33 Air and Space Law 403 (2008) at 415.
- Atmosphere and outer space. Ian H. Rowlands. The Oxford Handbook of International Environmental Law.
- 'Aviation And Climate Change: Aircraft Emissions Expected to Grow, but Technological and Operational Improvements and Government Policies Can Help Control Emissions', U.S. Government Accountability Office (GAO), GAO-09-554, available at: http://www.gao.gov/htext/d09554.html.
- Carl Burleson, E.U. Emissions Trading System Proposal, 21 Air & Space Law. (2006-2008)
- Challenging the EU ETS, Aviation Law Professor Blog, available at: http://lawprofessors.typepad.com/aviation/2010/03/challenging-the-eu-ets.html.
- Chicago Convention
- Directive 2008/101/EC of the European Parliament and of the Council. Available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX-:32008L0101:EN:NOT.
- Dunoff, Ratner and Wippman. International Law. Norms, Actors, Process. A Problem Oriented Approach.
- Enviro.aero. Available at: http://enviro.aero/splash.html.
- Greenair. Independent reporter on Aviation and the Environment. Available at: http://www.greenaironline.com/news.php?viewStory=212
- Günther Handl, *Transboundary Impacts*, The Oxford Handbook of International Environmental Law, at 533.
- IATA. Available at: http://www.iata.org/whatwedo/environment.
- IATA. Building a greener future. 3rd Edition. October 2008. Pg, 3. Available at: http://www.iata.org/NR/rdonlyres/C5840ACD-71AC-4FAA-8FEE-00B21E9961B3/0/building_greener_future_oct08.pdf.
- IPCC. Third Assessment Report.
- Janina Scheelhaase, Wolfgang Grimme, Martin Schaefer, *The inclusion of aviation into the EU emission trading scheme Impacts on competition between European and non-European network airlines*, Transportation Research Part D: Transport and Environment, Volume 15, Issue 1, January 2010, Pages 14-25 Air Transport, Global Warming and the Environment Selected papers from the air Transport Research Society meeting, Berkeley. Available at: http://www.sciencedirect. com/science?_ob=ArticleURL&_udi=B6VH8-4X30C8X-1&_user=142623&_ origUdi=B6VGP-4TW5378-1&_fmt=high&_coverDate=01%2F31%2F2010&_ rdoc=1&_orig=article&_acct=C000000333&_version=1&_urlVersion=0&_
- Int. Law: Rev. Colomb. Derecho Int. Bogotá (Colombia) Nº 20: 103-130, enero junio de 2012

userid=142623&md5=fcd96806efbff1d9a1bcdaea661a708d

Kyoto Protocol to the United Nations Framework Convention on Climate Change

- Paul G. Harris. Common but differentiated responsibility: the Kyoto Protocol and United States Policy, N.Y.U. Environmental Law Journal, Volume 7, at 2. Available at: http://wwwl.law.nyu.edu/journals/envtllaw/issues/vol7/1/nye102.pdf.
- Resolution A35-5 of the ICAO's 35th Assembly.
- Stephen R. Stegich and Laura A. McGinn, *The EU Emissions Trading Scheme and Aviation*, Pg 12. Available at: http://www.condonlaw.com/attachments/ ets_aviation.pdf.
- The EU Emissions Trading Scheme and Aviation, Stephen R. Stegich, Condon & Forsyth LLP, available at: www.condonlaw.com/attachments/ets_aviation.ppt
- Trail Smelter Case (United States v. Canada), Award, 1941, 3 U.N.R.I.A.A. 1905
- Trust and Renewed Multilateralism. Speech to the European Forum Alpbach Political Symposium, Alpbach, 30 August 2009.
- U.S. Government Accountability Office (GAO), GAO-09-554, available at: http:// www.gao.gov/htext/d09554.html

UNFCCC. Article 2.

Vienna Convention on the Law of Treaties.

WWF, Including aviation in the EU Emissions Trading Scheme – an estimate of the potential windfall profit.