



# THE AVIATION & SPACE JOURNAL

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## Aviation

### Liberalization of International Air Transport: the case of North-Atlantic Market

by Valentina Morandi, Paolo Malighetti, Stefano Paleari  
and Renato Redondi<sup>2</sup>

#### 1. INTRODUCTION

Since the sovereignty of States on their airspace and the protectionist attitude that affected the drafting of the Chicago Convention in 1944, international civil aviation developed in accordance with the establishment of bilateral relations by which Governments guarantee and control the expansion of their own air transport industry. Thus, international air transport industry has been traditionally arranged by bilateral air service agreements (ASAs) through which States exchange traffic rights, designate airlines that can provide air services between the signatory Countries and determine capacities, frequencies and fares of their service. Moreover, the ASAs rule the market by specifying which “Freedoms of Air”<sup>3</sup> are granted to designated airlines. Since each Country pair is autonomous in the negotiation of contractual terms, today there are several kinds of active ASAs that, according to the range of granted freedoms, can be classified on a continuous range from highly protectionist to completely liberal.

Like other international markets, the North-Atlantic one, was traditionally governed by bilateral relations between US and each European Country. Yet, in the last two decades, the regulation of the civil aviation between US and Western European Countries evolved from a bundle of traditional bilateral ASAs of rather protectionist nature by following a more liberal approach. At first, this resulted in the coexistence of protectionist agreements and open skies agreements that revoke restrictions in capacity, frequency and price between signatory countries<sup>4</sup>. Later, the liberalization thrust, combined with the need to avoid the fragmentation of internal European Open Aviation Area, led to a multilateral agreement negotiated by the European Commission on behalf of all its Member States with US, the so-called EU-US Open Skies Agreement.

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- 3 For a definition of the “Freedoms of Air” see ICAO “Manual on the Regulation of International Air Transport Services”
- 4 Before the coming into force of the US-EU Open skies agreement, the US had signed bilateral Open Skies Agreements (OSAs) with 16 of the 27 EU Member States (i.e. Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Italy, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Sweden). The first OSA was signed in 1992 with Netherland.

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### 2. THE EU-US OPEN SKIES AGREEMENT

In June 2003, with the aim of setting up a North-Atlantic Open Aviation Area, the European Commission and US began negotiations in order to define an agreement to replace the bilateral agreements that US had signed with individual European Countries since 1992. At the beginning of March 2007 EU and US reached a first stage agreement that came into effect at the end of March 2008. This multilateral agreement extended “Open Skies” principles to other 11 EU countries (i.e. Bulgaria, Cyprus, Estonia, Ireland, Greece, Hungary, Latvia, Lithuania, Spain, Slovenia and UK) whose international air transport traffic from and to US had been ruled by restrictive agreements or lacked legal basis for direct flights from and to US. The EU-US Open Skies Agreement (OSA) removed the “nationality” clause. In other words, the US accepted the concept of “EU carrier” and provided any Community Air carrier the right to fly between any point in the EU to any point in the US without any restrictions on pricing or capacity. EU carriers are also provided with the possibility to continue flights beyond the United States towards third countries (5<sup>th</sup> Freedom) both for passengers and cargo flights and with the so-called 7<sup>th</sup> freedom rights for passenger flights between US and a number of non-EU European Countries (i.e. Croatia and Norway). Mutual rights are granted to US carriers. Moreover, the 2007 agreement provided EU and US carriers with a greater opportunity to enter into commercial cooperative arrangements for code-sharing, franchising and leasing and greater possibility of antitrust immunity for the development of airline alliances. It also established a Joint EU/US Committee to oversee the agreement’s implementation and harmonisation of EU and US air transport industry standards. In particular, it committed EU and US to cooperate in the areas of safety, security and environment. Finally, it provided a road-map for negotiations on further improvements to the agreement.

The second stage of negotiations began just a few days after the coming into force of the first agreement. The second arrangement was signed in June 2010 and is strictly built on the 2007 EU-US Open Skies agreement. In particular, it affirms that the terms of the 2007 agreement will remain in place indefinitely. In addition, it provides the basis for a closer cooperation on environmental norm. The parties agree also on the importance to define high labour standard in the airline industry. A further relevant topic of the negotiation is the boundary of foreign ownership in EU and US airlines. They agree for a reciprocal liberalisation of airline ownership and control but the fulfilment of this measure is postponed after the required legislative changes in the US (i.e. the removal of the cap of 25% on foreign voting rights). Since negotiations do not reach an agreement about the cabotage right, EU carriers are still not able to provide domestic US flights without continuing service to EU and US carriers cannot trade air transport services inside an EU country.

Thus, the EU-US OSA is a step towards an open aviation area. Yet, its action is limited by



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rules about foreign ownership and its inconclusiveness in relation to cabotage.

### The expected changes

Before and during the negotiation, EU and US Governments have commissioned studies to predict the impact of EU-US OSA on air transport industry. All the studies forecast positive direct and indirect effects.

The first attempt to forecast the impact of EU-US OSA goes back to 2002 when the European Commission asked to *The Brattle Group*<sup>5</sup> to estimate the effects of a complete EU-US aviation liberalisation. This study reported that the elimination of all commercial restrictions on competition and investment in EU-US aviation would enable a greater efficiency in air transport industry because the removal of entry barriers would make the more efficient firms replace less efficient ones. Productivity gains were supposed to result from the opportunity of “deep” coordination and integration among EU and US carriers. Potential cost savings to the airline industry from greater productive efficiency were estimated to be about 2.9 billion annually, or 4.2 percent of total costs. These cost savings were supposed to result in fares reduction and consequently to activate a virtuous cycle that would lead to the increase of demand. In particular the Brattle Group estimated that passenger traffic would increase annually by between 4.1 million and 11.0 million passengers on transatlantic routes, and between 13.6 million and 35.7 million on intra-EU routes, for a total increase of 17.7 million to 46.7 million passengers per year.

By predicting indirect effect, the study of The Brattle Group provided evidence that an EU-US Open Aviation Area would not jeopardise the US National Security and it would not harm aviation safety, given the generally high level of regulatory oversight in Europe and the United States.

In 2004, taking into account the benefits obtained by the bilateral Open Skies agreements signed between US and 15 individual EU members states, a report by United States Government Accountability Office (GAO)<sup>6</sup> confirmed the expected positive effects on customer welfare of EU-US OSA. This study remarked that the agreement would enable airlines and alliances to provide on-line service to more locations and at lower fares thanks also to the greater opportunity to exploit alliance and cooperative agreements. According to GAO most of the benefits were due to the gain of open access to London Heathrow airport. However it remarked the need to a greater monitoring from antitrust authorities to guarantee that the benefits of more open markets would go to passengers. This study recognized the risk that potential restructuring gains would be offset by a reduction in competition between airline

<sup>5</sup> Brattle Group, 2002. *The Economic Impact of an EU-US Open Aviation Area*. Brattle Group, Washington, DC.

<sup>6</sup> GAO, 2004. *Transatlantic Aviation. Effects of easing restriction on U.S. - European Markets*. Gao Highlights 04-835, report to congressional requesters.



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alliances. GAO also warned about the probability that benefits would be reduced or delayed by congestion and limited access to key airports.

In 2007 Booz Allen Hamilton Ltd<sup>7</sup> on behalf of DG Energy and Transport of the EU updated and extended the analysis published by the Brattle Group in 2002. As regards the direct impact of the liberalization of North Atlantic market, the study agreed with the previous one in the likelihood of new routes and new market entrants. Yet, the estimation of the growth of passenger traffic was not the same. It counted for 26 million additional passengers over the five year period. Economic benefits from the removal of the output constraints, quantified in the form of a consumer surplus, were 12 billion € over the five year period. It forecasted positive consequences on employment both in the aviation industry and in connected industries. The enhanced level of traffic would lead to the creation of 72,000 new jobs.

### 3. THE IMMEDIATE REACTIONS OF AIR TRANSPORT INDUSTRY

First empirical analyses on the impact of EU-US Open Skies Agreement focused on UK-US and Ireland-US markets since these markets, before the enforcement of the agreement, were affected by the most restrictive bilateral agreement.

By analysing changes occurred in 2008 in air links between Ireland and US, Barrett<sup>8</sup> concludes that, thanks to the introduction of new direct routes that could not be operated before the EU-US OSA, more US destinations are reachable and passengers benefit of an increase of service quality in terms of time savings. The improvement of service quality is partially due to the immediate reaction of the main Irish carrier, Aer Lingus, that enhances its capacity to exploit new market opportunities in long-haul and forecasts to double long-haul services. Barrett highlights also the immediate reaction of the Shannon airport, that before EU-US OSA was the compulsory access point to Ireland from US. This airport shifts its business from long-haul services to short-haul to mainland Europe.

Immediately after the coming into force of the EU-US agreement, Button<sup>9</sup> highlights an increase of direct flights from London Heathrow as well as the increase of carriers that serve the routes London Heathrow-US. This is confirmed by Humphreys and Morrell<sup>10</sup>. Yet, looking at the initial reactions of main UK and US airlines to the liberalization of London-US market in terms of changes in the supply of non-stop flights from and to London, they find that US carriers take advantage of new opportunities more than UK ones by introducing new routes

7 Booz Allen Hamilton, 2007. The Economic Impacts of an Open Aviation Area between the EU and the US. TREN/05/MD/S07.52650. European Commission, Brussels.

8 Barrett, S.D., 2009. EU/US Open Skies - Competition and change in the world aviation market: The implications for the Irish aviation market. *Journal of Air Transport Management*, 15, pp. 78-82.

9 Button, K., 2009. The impact of US-EU "Open Skies" agreement on airline market structures and airline networks. *Journal of Air Transport Management*, 15, pp. 59-71.

10 Humphreys B., Morrell, P. 2009. The potential impacts of the EU/US Open Sky Agreement: What will happen at Heathrow after spring 2008. *Journal of Air Transport Management*, 15, pp.72-77.



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and direct flights. Moreover they highlight that the increase of London Heathrow business is partially due to the shifting of the service from Gatwick to Heathrow by British Airways. This rationalisation of services is confirmed also by Pitfield<sup>11</sup> who, focusing on air transport traffic from London airports to four major US cities, estimates that there is not a significant impact on the overall number of passengers due to EU-US OSA.

### 4. THE EU-US MARKET THREE YEARS LATER THE FIRST STAGE

By taking into account the scheduling of EU-US flights three years after the enforcement of the first stage of the EU-US Open Skies Agreement, a very different scenario from the one reported by previous analyses comes out. By comparing the schedules of EU-US connections in 2007 and 2010<sup>12</sup>, we observe a drop of 8% of the number of non-stop flights and a corresponding fall of 5.5% of offered seats. The trend of direct flights varies across European Countries and American States. Positive trend is observed only in Spain, Sweden and Finland (i.e. +38.4%, +27.8% and +20% in the number of direct flights and +46.7%, +26.6% and 15.2% in available seats, respectively) on the EU side. On the US side, both the number of direct flight and available seats increase in North Carolina, Texas, Florida, District of Columbia and Pennsylvania (i.e. +22.2%, +8.4%, +7.1%, +3.3% and 71.8%, 31.3%, 15.4%, 4.1%, +0.3%) whilst Arizona, Maryland Minnesota are characterised only by the raising of seats (i.e. 15.8%, 16.7% and 32.1% respectively).

It is interesting to note that, although the EU-US OSA provides carriers with the opportunity to fly from any point of US to any point of EU and vice versa, the number of European Countries with direct connections to EU decreased as carriers deleted direct flights from US to Romania and Hungary. These data point out that customer welfare worsens in most of the EU countries and US States. In particular, taking into account that Czech Republic is the EU country with the largest reduction of flights and seats (i.e. -54.5% and -47.7%, respectively), it seems that the East Europe is the area most affected by a negative trend in air transport services to US. On the US side, changes negatively affect in particular Connecticut and Maine that have been deprived of non-stop connections whilst favour Utah, that before the EU-US OSA was not directly linked to EU.

Customer welfare decreased also in terms of the number of options and capillarity of the service. A reduction of airport pairs linked by non-stop and one-stop<sup>13</sup> flights is observed

11 Pitfield, D. 2011. The Impact of the EU-US Open Skies Agreement and the Resulting British Airway's Open Skies Initiative: Passenger Numbers in London, Amsterdam and Paris. *Spatial Economic Analysis*, 6: 2, pp.185 -197.

12 Data about flight scheduling are provided by OAG MAX, a database that collects information about all airline scheduled flights in the world. For each flight, the dataset includes basic information such as departing and arrival times, flight times, carriers, seating capacity.

13 Indirect connections are identified by combining direct transatlantic flights with domestic US and EU non-stop flights so that connecting time is more than 45 minutes and the two segments of the flight are carried out either by the same carrier or by members of a global airline alliance. The examined sample is further reduced by restricting to flights connecting



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(-8% and -10.9% respectively). However, this is due to the decrease of service capillarity only on the EU side. EU airports with direct connections to US reduce from 44 to 37 whilst US airports linked to EU by direct flights remain 30. As regards one-stop flights, in 2010 they link only 205 EU airports to US against the 227 linked in 2007 whilst US airports connected to EU by this kind of connections increase from 287 to 295.

Changes in direct routes observed in 2010 confirm the rationalization of UK traffic that benefits London Heathrow as remarked by Humphrey and Morell in 2008. However, contrarily to 2008, three years after the activation of the EU-US OSA both UK and Ireland offer fewer routes to US. In fact, transatlantic direct service increases only in France, Spain and Sweden (+5, +2, +1 routes). The increase in France is partially due to the new carrier Open Skies, a subsidiary founded by British Airways after the coming into force of EU-US OSA. As regards the US side, a net improvement of customer choice regards North Carolina, Texas, Massachusetts and Florida (+1, +2, +1, +2 routes).

Changes in one-stop flights favour passengers of Boston, Miami and Los Angeles on the US side and travellers of Paris and Frankfurt on the EU side. Among the most connected EU cities, we observe the greatest expansion of Paris. At country level, the changes of domestic flights in EU and in US lead to a particular expansion of service in Portugal and Slovenia on the EU side and in North Dakota and West Virginia on the US side. On the other hand, reduction is observed in Austria, Czech Republic and Hungary on the EU side and in Connecticut, Mississippi and Maine on the US side. Moreover, beyond the reduction of customer choice, the comparison highlights a further degeneration of service quality, that is the increase of travel time of one-stop flights in more than half of the served origin-destination (O-D).

Thus, in general, we expect that passengers of EU-US flights perceive a lower service quality in relation to the one experienced before EU-US OSA because of the reduction of flight frequency, service capillarity and the increase of travel time. However, customer choice is affected mainly by the reduction of service capillarity on EU side and service quality varies across Countries. The difference in trend is not explicable either by difference in national economic performances or difference in previous regulation of North-Atlantic markets. As pointed out, the most negatively affected area is the East Europe that is the Euro-area with the highest economic growth in 2007-2010 (i.e. the highest growth rates of GDP have been registered in Hungary, Romania and Polonia) whilst Finland and Spain whose GDP decreases in the examined period, are characterised by an increase of direct flights (20% and 38.4% respectively). Moreover, in only one country (i.e. Spain) without a bilateral open skies agreement before 2007 the service level is improved. The other Countries interested by

airport pairs (O-D) linked on both directions. Moreover, assuming that passengers are travel time sensitive, the analysis of indirect connections concerns only flights whose total travel time is no more that 20% longer than the quickest alternative connecting the same airport pairs, taking into account both direct and indirect opportunities.



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a change in market openness show negative trends. This suggests that liberalization means more business opportunities for carriers but does not assure that they are able to exploit them. There could be several factors such as the presence of anti-competitive agreements and restrictions on further aviation features. For instance, airport congestion and grandfather rights partially explain the difficulty of carriers in expanding their network and exploiting the opportunities given by EU-US OSA. Yet, the changes related to London Heathrow show that it is possible to overcome these obstacles.

Competition dynamics in direct service and in indirect ones are contrasting. Looking at direct flights we observe that competition decreases in the examined period because of the reduction of players and a redistribution of market shares in favour of the main players. The Gini coefficient, which controls for the inequality in the distribution of available seats among players, moves from 0.69 to 0.76.

Carriers operating North-Atlantic direct routes move from 45 to 33 because of the merger between Delta and Northwest, the bankrupt or the liquidation by some carriers (i.e. FlyGlobeSpan, SilverJet, Zoom Airlines, EOS Airlines) and the stop of operations of airlines with residual market share (i.e. Air India, BMI, Emirates, Malev Hungary, Malaysia Airlines, Maxjet Airlines, Olympic Air, Czech Airlines). Data show also the strengthening of market position of major players. The concentration ratio of the major five carries CR5 moves from 49.4% to 58.2%. Delta's merger makes it the market leader in 2010 (i.e. the growth of Delta market share is +6.21%) although also British Airways, the market leader of 2007, slightly increases its market share (+0.83%). US carriers gain market power, with their share increased from 44.1 to 47.2%, partially to EU carriers' cost whose market share decreases from 51.3% to 50.5%. This could be interpreted as an effect of the asymmetry of benefits that EU-US OSA give to EU and US carriers as well as of the gap between EU and US carriers in terms of efficiency and cost structure.

The affiliation to a global alliance seems even more necessary to compete in the North-Atlantic market. The market share of the three global alliances moves from 83.7% and 89.6%. In 2010 Star Alliance becomes the predominant alliance thanks to the acquisition of Continental Airlines and the increase of 3% of market shares of its senior members.

Looking at the dynamics of industry concentration at a country level and at a route level, we observe that the entry of new carriers in routes with dominant incumbents is difficult. The increase of players relates mainly to the introduction of new routes.

Contrarily, competition enhances in indirect flights (i.e. one-stop flights). The percentage of routes that are served by more than one carrier increased from 34.4% to 38.6% and the routes served by more than one global alliance increased from 7.3% to 9.8%. The new





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competitive landscape makes Star Alliance reduce its market share and both SkyTeam and OneWorld benefit while Delta and Continental Airlines remain the market leaders.

Origin-destination linked by only one offer lowers from 55.1 to 52.4%. Passengers have now greater choices in particular when they are planning itineraries that in 2007 had only one hub opportunity. Different hubbing strategies favour in particular EU airports. Even the high congested London Heathrow increases the share of O-D in which is the intermediate airport (from 22.7% to 34%).

Thus, although the competition level enhances only in the supply of one-stop flights, a different competition landscape is evolving. US carriers as well as airlines belonging to global alliances are favoured while EU airports enhance their attractiveness as intermediate airports.



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### The devastating 'Blue Sky' judgment compels the member states of the European Union to adopt the Cape Town convention

by B. Patrick Honnebier

#### 1. INTRODUCTION

The Convention on International Interests in Mobile Equipment (Convention/CIME) and the Aircraft Equipment Protocol (Protocol/AEP) were realised in Cape Town, South Africa in November, 2001. In practice, together the instruments are called the Cape Town Convention. The structure of the CIME is not equipment-specific. It is a framework Convention incorporating general provisions. The Convention only concerns specific categories of *mobile equipment*, which are defined in separate Protocols<sup>2</sup>. In general, the term mobile equipment includes objects which by their very nature are used internationally. For example, the definition covers aircraft, commercial satellites, trains, containers and ships. For the purpose of the CIME, however, it includes only airframes, aircraft engines and helicopters. The AEP is the first protocol that has been completed. The Railway Rolling Stock Protocol has been adopted in Luxemburg in February, 2007. The Space Assets Protocol was concluded in Berlin in March, 2012. However, the last two instruments have not yet entered into force. Protocols for containers, ships and other forms of mobile equipment may follow in due course.

This contribution to the Aviation and Space Journal focuses on the merits of the Cape Town Convention. It argues below that this instrument is needed to solve the legal and practical problems that currently exist in the European Union concerning the financing and leasing of aircraft equipment. These difficulties arise because there is no consistency among the national aviation finance and lease laws of its Member States. The devastating outcome of the recent *Blue Sky v. Mahan Air*<sup>3</sup> judgement (hereinafter 'Blue Sky') confirms this is not just an academic issue. The case has direct contacts with two European Union states and it has a major impact on all the Member States. *Blue Sky* is discussed more detailed subsequently. The primary goal of the Convention and Protocol is to provide for a set of stable international *substantive* property laws which make the financing and leasing of aircraft equipment more available and at lower costs. The significance of the instruments is obvious as, just within ten years, 51 states have already accepted the Convention and 44 of these the Protocol. These

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2 For an extensive overview of the effects of the Cape Town Convention and the (forthcoming) Protocols in European States, see the Special Issue of the *European Review of Private Law (ERPL)*, 2003, no. 5.

3 *Blue Sky One Limited & O'rs v Mahan Air & Ano'r* [2010] EWHC 631 (Comm).



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countries represent the economically developed and the developing regions. Furthermore, they are representative of aircraft manufacturing and purchasing states.

It is evident that the Cape Town Convention can provide the overdue uniformity of the European aviation finance laws. Therefore, the European Union itself has already acceded to the Convention and Protocol in 2009. However, until today individually most of the Member States have not yet adopted the instruments. As a result, there still exist fundamental problems in Europe concerning the financing and leasing of aircraft. Consequently, the banks are not adequately protected. This means that they will not provide credit to the airlines or they will substantially increase the financing costs. The present situation is regretted as, in turn, it leads to an unnecessary increase of airline ticket prices and air cargo fares in the European Union.

## 2. THE BLUE SKY CASE ILLUSTRATES THE IMPROPER CONFLICT OF LAWS RULES COVERING AVIATION FINANCING IN THE EUROPEAN UNION

### 2.1 *The proper conflict of laws rule governing the consensual rights in aircraft.*

The following structures are generally used in regard to purchasing and using aircraft equipment: charges under security agreements, conditional sales under title reservation agreements and financial and operational lease agreements. If these transactions are to work effectively, to reduce economic risk and to promote the availability of funds from the banks they require a secure legal regime<sup>4</sup>. This is because the international financing and leasing of aircraft and engines requires substantial investments. The price of an aircraft may run up to \$ 100 million and of an engine \$ 20 million. Accordingly, it is essential that this legal regime adequately ensures that the financiers can enforce their *consensually created* rights in the event that the debtor defaults or goes bankrupt. However, currently the grave problem exists that there is no uniformity in the national *conflict of laws rules* regarding the validity, enforcement and priority status of proprietary interests in aircraft equipment. As a result, particularly in the European Union there is a large degree of legal uncertainty. The reason is that, traditionally, most Member States apply the *lex rei sitae*, also known as the *lex situs*, conflict of laws rule in relation to the creation and validity of *voluntarily* and *non-voluntarily created* property rights in movables. In general, applicable is the *substantive property law* of the situs where the equipment is situated at the time that the secured right is created in the aircraft object<sup>5</sup>. In a practical sense, however, aircraft do not have a specific situs. As

<sup>4</sup> R.M. Goode, 'The Official Commentary' to the Cape Town Convention, 2008. See [www.unidroit.org](http://www.unidroit.org)

<sup>5</sup> See B.P. Honnebler, The real rights of Dutch airline companies can be the basis of international interests under the convention of Cape Town, 5 ERPL, 2003; E-M.0



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these objects are continuously moving from state to state in the course of business, they are only temporarily or coincidentally connected to a state. The right of the financier may be constituted while the aircraft was situated in a casual situs which is totally unfamiliar with this type of interest. Consequently, there is a danger that each time that an aircraft crosses a border the right which is consensually established therein cannot be enforced abroad.

The English *Blue Sky v. Mahan Air* case demonstrates that due to the absence of adequate national and European regimes many validly created mortgages and other secured interests are unenforceable when the aircraft are operated in other states. In 2010 the English High Court<sup>6</sup> had to address the validity of the English mortgages in, and the ownership of, in total six Boeing 747 aircraft. The owners (lessors) were English Special Purpose Vehicles. They had leased the aircraft to an Armenian lessee. The airplanes were registered as to nationality in various states. For example, one had the English nationality (hereinafter 'the first aircraft') and another had the Armenian nationality (hereinafter 'the second aircraft'). This article only addresses the dispute that arose in connection with these aircraft. Later in time, and undisclosed to the financier, the two aircraft were chartered by the Iranian company Mahan Air. On 21 December 2006, their owners had provided valid English mortgages to a United States financier. On the same day the first aircraft, was situated in the Netherlands. In the mortgage agreements the parties had 'chosen' English law to be applied and the English Courts had been afforded jurisdiction. The debtor defaulted under the lease and finance agreements. Thus, the financier initiated proceedings in England to *repossess* the two aircraft. However, Mahan Air disputed the validity of the two mortgages.

To sum up, the *Blue Sky* case had real contacts with England, the Netherlands, Armenia and Iran. However, the (two European Union) states had entirely differing substantive property laws. Therefore, the English Court had to rule on the following matter. Which national laws had to determine the validity of the mortgages? The Iranian operator Mahan Air submitted that the Court should apply the *lex situs* conflict of laws rule. The Court agreed that this rule was applicable in England. At the same time it refused to apply the English substantive mortgage law which was chosen by the parties. The Court determined that Dutch substantive property laws had to decide the validity of the mortgage as on the decisive day it was located in the Netherlands. The judge ruled that under Dutch laws the interest of the financier was invalidly established. On the other hand, it decided that the mortgage was validly created under English laws. Nevertheless, the Court concluded that the English mortgage was *unenforceable*

<sup>6</sup> See B. P. Honnebier, Rectified contribution to Contemporary Issues and Future Challenges in Air and Space Law, Leiden, November 2011; The English "Blue Sky" case Shows that the Aircraft Finance Practice Needs Uniform International Substantive Mortgage Laws as the Existing Conflict Rules Fail, *Tijdschrift Vervoer & Recht*, 2011-2, p. 70.



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in England. As a result the mortgagee was not entitled to collect its U.S. \$ 43.1 million damages. The disastrous outcome of Blue Sky in regard to the first aircraft, and primarily involving two European Union states, is discussed further subsequently. Furthermore, the financier could not prove in which country the second aircraft was situated on 21 December, 2006. As a result, the Court could not apply the *lex situs* conflict of laws rule. Therefore, the Court determined that it had to apply the English substantive property laws under which the mortgage was valid.

Besides, the English Court refused to apply the *lex registri(i)* choice of laws rule in relation to property rights in aircraft<sup>7</sup>. Since the beginning of private aircraft financing, worldwide it has been argued that the laws of the *flag-state* should govern the creation, validity and effects of *voluntarily created* rights in aircraft. The reason for this is that the aircraft has a *real connection* with the state of registry. Contrarily, it is submitted that the aircraft has *no* pertinent relationship with the country of the casual situs. While not seriously<sup>8</sup>, also the lawyer of the financier had proposed that the *lex registrii* conflict rule should be applied in England. The Court did not concur with this view. It reasoned as follows: “Even recognising that [...] the aim of our private international law is to identify “the most appropriate law” and “appropriate principles to meet particular situations” this is a bold submission. It finds virtually *no* support in English *cases* or *commentaries*”. The Court’s decision has been criticized as extensive legal research has established the opposite<sup>9</sup>. The *lex rei sitae* conflict of laws rule finds *no* support *at all* in *specialized* English writings dealing with aviation financing law<sup>10</sup>. Moreover, there is *virtually no* endorsement of this rule in English cases. Thus, considering the Court’s reasoning that English cases and legal writings determine the proper *special* English aviation finance conflict rule, the *lex situs* rule should have been rejected.

However, it is emphasised that in regard to the transfer of the ownership of a ‘thing’ the *lex situs* conflict of laws rule is *universally* applied. Also in most European Union states this rule is applicable to virtually all property interests, regardless whether they are *consensual* or

7 Paras. 73 and 168, The Blue Sky Judgment.

8 Dicey, Morris & Collins, Commentary, The Conflict of Laws, Third Cumulative Supplement to the 14<sup>th</sup> Edition, 2010, p. 213. See the comments of the English Courts in *Dornoch Ltd. v Boskalis, The WD Fairway 2* [2009] and *Air Foyle Ltd v Center Capital Ltd.* [2002] stating that the lawyer did not (seriously) argue the case..

9 B.P. Honnebier, The English Blue Sky Case About the Enforcement of Aircraft Mortgages and its Impact on the Global Financial Market, 2011 (1) Zeitschrift fuer Luft- und Weltraumrecht, 2011-1, p. 47.

10 R.O. Wilberforce, later Lord Justice in the House of Lords, having a special interest in aviation finance laws and representing the United Kingdom at the Geneva Convention conference, 1948; Report of the Forty-Fourth Conference at Copenhagen, *Air Law*, 1952, p. 239; R.O. Wilberforce, The international recognition of rights in aircraft, 2 *International Law Quarterly*, 1948, p. 425; P. Lalive, The Transfer of Chattels in the Conflict of Laws, treatise, Cambridge, England, 1955, p. 191; R.M. Goode, International interests in mobile equipment and the Cape Town Convention and Aircraft Protocol: adding a new dimension to international law-making, 2007, p. 434. The author is the most esteemed contemporary legal expert on international mobile equipment financing; R.C.C. Cuming, Canada, International regulation of aspects of security interests in mobile equipment (the worldwide, including the U.K., conclusion in the Cuming Report), 1989, p. 16 and 38.



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*non-consensual* in kind. Just in relation to very few subjects an exception to this principle is accepted by the international treaties, domestic laws and Courts. In addition, it is unquestioned that the legitimate interests of the country of the situs must be observed. Accordingly, in most of the Member States of the European Union *in principle* the rights of the lessors, banks and airlines in aircraft and aircraft engines are covered by the lex situs rule. Basically, an exception is merely permitted in the event that a special aviation related conflict of laws rule has been codified (*lex specialis*). Alternatively, if such a special conflict rule has been acknowledged in precedent decisions which must be followed by the Courts (*stare decisis*) of a certain state. As is mentioned above, on 21 December, 2006 the first aircraft was located in the Netherlands. While there were no legal data supporting the application of the lex registrii rule in the Netherlands at that time, some Dutch lawyers had proposed that this rule was applicable in this country. Therefore, they suggested, the English Court should also apply it. In Blue Sky the lex registrii rule would have referred to the substantive property laws of England, which was the 'flag-state' of the first aircraft. Under these laws the mortgage would have been valid and enforceable. The present publication does not agree with the opinion of the aforementioned Dutch lawyers concerning the appropriate conflict of laws rule in the Netherlands in 2006. The pertinent Dutch governmental documents and the rulings of the Supreme Court of the Netherlands support the view that until 1 May, 2008 the applicable conflict rule covering all the rights in aircraft was the lex situs. On this date the 'Conflict Rule for Property Law' entered into force which introduced the lex registri(i) in the Netherlands. The erroneous view of the Dutch lawyers will not be addressed any further as it is beyond the scope of this article.

In summary, the Blue Sky case demonstrates that the lex situs rule is manifestly inadequate in relation to the financing of aircraft. The possibility that the consensually created English rights of the financiers may not be upheld in England or in other European states is regarded as a considerable economic risk. It negatively influences the confidence of the banks in the financial transactions. As major economic risk leads to substantial costs, the lex situs rule hinders the financing of aircraft equipment. The present article concludes that the lex registri(i) rule is the proper conflict of laws rule to cover consensually created rights in 'aircraft', provided that the applicable (case) law explicitly dictates its application<sup>11</sup>.

### **2.2 The proper conflict of laws rule governing the non-consensual rights in aircraft.**

This article stresses that the financing and leasing of 'aircraft engines' regards entirely

<sup>11</sup> For a detailed discussion of the proper conflict rules to aviation financing, see B.P. Honnebier, The Netherlands is blacklisted due to its ambiguous aviation financing laws and only the Cape Town Convention can solve this problem, *Journaal LuchtRecht/Netherlands Journal of Aviation Law (JLR)*, 2012-2, p. 48.



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different legal issues<sup>12</sup>. More specifically, the alleged application of the *doctrine of accession* to engines raises major problems in the international aviation finance practice. Some European lawyers have proposed that under their national laws the ownership of an engine transfers to the owner of the aircraft (airframe) as soon as the former object is attached to the latter. The shift of the title to an aircraft engine by virtue of this accretion theory occurs *by operation of law*. Therefore, the alleged accession of the engine is *non-consensual* in kind. It regards an involuntary shift of ownership as it is not based on the intent of the parties that are involved. To the contrary, the owner of the engine strongly disagrees to the transfer as the price of an engine may run up to \$ 20 million. Accordingly, due to the accession doctrine this party is substantially damaged. Besides, from a legal perspective there exists a *real connection* with the situs where the engine is connected to the aircraft. For instance, the owner or lessor of the engine is located in the state of the situs. Additionally, this party will install the engine on the airframe. As discussed above, the primary reason for deviating from the *lex rei sitae* conflict of laws rule is that in certain cases the situs of the aircraft is fortuitous. In the situation in question, however, the issue of a casual situs does not arise. The opposite is true, as there is a proper connection with the country where the engine is attached to the aircraft (airframe). Accordingly, there is no necessity to make an exception to universally applied *lex situs* rule.

In addition, applying the *lex registri(i)* conflict of laws rule to non-consensually created rights in aircraft is contrary to the primary reason for making modern aviation finance laws. While these special laws aim to enhance the financing of aircraft equipment, the *lex registri(i)* rule hinders the *separate* purchase, finance and lease of aircraft engines. This is because in most of the European Union and other states the doctrine of accession is *not* applicable to engines. However, factually the *lex registri(i)* rule provides a 'universal effect' to the property laws of the handful of countries where this theory is allegedly applied. It is unjustifiable that due to the application of *lex registri(i)* rule to the constitution of non-consensual rights in aircraft, the inappropriate foreign substantive laws of these very few states are afforded an extra-territorial effect. The undesirable result would be that in the European Union the Courts would have to legalize the *stealing*<sup>13</sup> of engines. This article concludes that the *lex situs* conflict rule must cover the creation and enforcement of non-consensual rights in aircraft and engines.

12 B.P. Honnebier, JLR, 2012-2, p. 48; B.P. Honnebier, Clarifying the alleged issues concerning the financing of aircraft engines, *Zeitschrift für Luft- und Weltraumrecht*, 2007-3, p. 383; C. Karako, Separate financing of aircraft engines: legal obstacles, 2010, p. 20; D.P. Hanley, Aircraft Operating Leasing, 2011, p. 112; B.J.H. Crans, Airfinance below sea level, *Airfinance Journal*, July 2008, p. 2.

13 CITEJA draft Conventions, 1932, Doc. 162, 1932, p. 40; Geneva Convention ICAO, Doc. 4635, 1948, p. 34.



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### 3. THE BLUE SKY CASE CONFIRMS THE INADEQUACY OF THE SUBSTANTIVE AVIATION FINANCING LAWS IN THE EUROPEAN UNION

Even if a 'suitable' and uniformly applied conflict of laws rule could be created, it could not solve the problem that presently the *national substantive* property laws dominate the financing of aircraft and engines. In general, there exists a great diversity of property law regimes at the global level. This problem is even more apparent in the European Union as no uniform law dealing with security interests in aircraft equipment is available. Moreover, previous international attempts at codifying secured interests in aircraft have been unsuccessful.<sup>14</sup> To a large extent this was due to the complexity and diversity of the national European property rights. The past has proved how difficult it is to transcend the dogmatic issues that exist in the legal proprietary regimes of the Member States of the European Union. A comparative study has shown that there is a fundamental difference between the flexible approach of the *common law* states (England and Ireland in Europe) and the parochial attitude of the *civil law* jurisdictions (Scotland and the continental European countries) in relation to the validity and recognition<sup>15</sup> of foreign secured interests. Furthermore, currently some states of the European Union are more or less hostile to *non possessory* security interests. As a result, the proprietary interests of the financiers differ from state to state. Accordingly, it is uncertain whether their rights can be upheld against third parties in other European Union states.

The Blue Sky case is a primary example of the difficulties that arise in the European Union due to the rigidity of the property laws of the continental civil law states. As is discussed above, the English Court ruled that the English mortgage in the first aircraft was invalid under Dutch property laws. Allegedly, the foreign right in the English aircraft would not be recognised in the Netherlands. Therefore, the Court decided that despite the fact that this mortgage was validly created in England, it was unenforceable in England. This controversial case had grave results for the European aviation finance practice in general and the English practice in particular. Until recently, London was viewed by many financiers and lessors as the centre of international aviation financing. England had convinced the rest of the international legal practice that it had adequate, modern aviation finance laws and that the English Court-system was very sophisticated. Consequently, in many international aircraft finance transactions the parties would 'choose' English law and they would include a jurisdiction clause referring to the English Courts. This custom has contributed to the fact that London contains the highest concentration of aviation lawyers in the European Union.

14 In 1932 the Comité International Technique d' Experts Juridiques Aérien (CITEJA) produced two draft Conventions, one relating to registration and the other concerning mortgages and other secured interests in aircraft. The CITEJA was dominated by European states and their colonies. The United States was ultimately only an observer. CITEJA Doc. 162, 158-164. However, the time was not ripe for either of these Conventions.

15 R.C.C. Cumming, *International regulation of aspects of security interests in mobile equipment*, 1989, p. 16.





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Nonetheless, Blue Sky demonstrates that in England the substantial financial interests of the investors are *not* secured. This case confirms that in regard to international aviation finance matters choosing English law is useless as it has no effect in the English Courts. In addition, the mortgages which are validly created under the allegedly advanced English aircraft finance laws may not be enforceable in the Courts of England<sup>16</sup>. Moreover, the interests of the investors may not be upheld in the continental European states where the aircraft are used. In England some scenarios have been proposed to 'solve' these problems. For example, many aircraft which are permanently operated in other states, for example Italy, have been flown across England. Alternatively, they have been temporarily parked at English airports. At the same time the existing English mortgages in these aircraft have been 'restructured'. This is because English lawyers proposed that flying the aircraft to or above England would create the needed (casual) legal situs. Therefore, the *lex situs* conflict of laws rule would refer to English substantive law. Alternatively, the aircraft are flown across the oceans where no substantive property regime applies. It has been suggested that these procedures would avoid the application of the mortgage law of a foreign state. Nevertheless, this activity involving tremendous legal fees and during which no commercial operation of the aircraft is possible, does *not* ensure that the mortgages can be enforced in England or internationally. The reason is that in the future the seized English or foreign Court may apply a different conflict rule. For example, the *lex registri(i)*, *lex debitoris*, *lex domicili*, *lex fori* or another rule may be applicable, which refers to entirely different substantive property laws. Therefore, the absence of uniformity in the European Union in governing the security interests of the financiers *and* airline companies hinders the financing of aircraft equipment. This article concludes that in the European Union a secure international legal regime is needed which will make the financing and leasing of aircraft more available and at lower costs.

### 4. THE INADEQUACY OF THE GENEVA CONVENTION

The existing 'Convention on the International Recognition of Rights in Aircraft' (Geneva Convention, 1948) is inadequate. Clearly, the realisation of an international agreement on one jurisdiction *recognising* specific proprietary interests duly created and recorded under the laws of another state was an achievement in 1948. Nevertheless, it has been regarded from the outset as no more than a provisional body of rules<sup>17</sup>. The major problem is that being merely a conflict of laws treaty, it does not provide for uniform substantive property law. As the name of the treaty indicates, it solely requires that its Contracting States recognize *four* categories of *consensually created* rights in aircraft. Consequently, *no* proprietary rights can

<sup>16</sup> For other controversial aviation finance and lease related English Court decisions, see D.P. Hanley, 2011, p. 245.

<sup>17</sup> ICAO Doc. 5722, p. 345.



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be derived therefrom. The reason for this shortcoming is that in 1948 a Convention providing for uniform rules for aircraft financing was politically not an option. Moreover, the four types of consensual rights in aircraft that have to be recognised under the convention are of American origin. The foreign rights that must be recognised are: ownership, secured interests and the rights of an airline-lessee to *purchase* or *lease* the aircraft for a period longer than six months. The last two typical American security interests have *not* been incorporated into the national property law regimes of most European states. This is because these secured rights of the airline-lessees are totally unknown in the 'closed' property law systems of these countries. For example the rights of an airline-lessee to acquire or possess an aircraft for a period longer than six months has been introduced in the Netherlands, while this is not the case in Germany. On the other hand, Germany has incorporated the right to *extend* mortgages to the *spare parts* of aircraft, while the Netherlands explicitly refused to do such. As a result of the different implementation of the Geneva Convention, the aviation property laws of the Netherlands and Germany are fundamentally different. The current situation in Belgium is even more alarming, as the Geneva Convention was never implemented in this state. The absence of special Belgian laws governing *non-possessory* rights in aircraft created the issue that until today no mortgages can be created in aircraft. The outdated Belgian substantive property law makes the financing of aircraft unnecessarily problematic. Therefore, the present article submits that the Geneva Convention has considerably contributed to the diversity of property law regimes that presently exist in the European Union. Furthermore, the treaty will *not* be ratified at the global level, as during the last ten years just ten states adopted it. Moreover, a third of the Member States of the European Union have not accepted it, including the United Kingdom. In addition, the treaty takes no account of the fact that at present aircraft engines are financed and leased separately.

Besides, in the Blue Sky case the financier had suggested that the Geneva Convention would include the (strict) *lex registrii* conflict of laws rule. The financier had also submitted that the adoption of this rule would have the merit of mirroring the position recognized at the international level *as formulated in this treaty*. This assumption is *incorrect* for the following reasons. As is mentioned above, the Geneva Convention does *not* cover the validity of a mortgage or any other substantive property law aspects *at all*. It is merely a 'private international laws treaty' that intends to give minimal protection by *recognising* certain consensual foreign rights in aircraft. In addition, this treaty does *not* exclusively provide for the 'strict' *lex registri(i)* conflict of laws rule<sup>18</sup>. It has been established that it does not solely

18 Art. I(1)(i) Geneva Convention. B. P. Honnebier, 'Analysing the Conflict of Laws Rule of the Convention on the International Recognition of Rights in Aircraft: A Topical Issue', ZLW, 2010-1, p. 23.



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refer to the substantive property laws of the state of registration as to nationality. To the contrary, its reference is to 'the law' of the flag-state of the aircraft. This is the *entire* law<sup>19</sup> of this jurisdiction, including its conflict of laws rules. As is discussed supra, in most European countries the *lex situs* rule is still applicable as far as rights in aircraft are concerned. The Blue Sky case has proved, however, that the application of this conflict of laws rule to consensually created rights in aircraft leads to grave consequences in the European Union.

### 5. THE REGIME OF THE CAPE TOWN CONVENTION SOLVES THE PROBLEMS AT HAND

The Cape Town Convention solves the problems at hand. Without any doubt, these instruments represent the most innovative set of instruments in the history of property law. The key objective of the new regime is to facilitate the asset-based financing and leasing of aircraft objects, to increase their availability and to reduce their costs. The CIME and AEP contain a set of uniform *substantive* provisions relating to property law. Furthermore, these instruments introduce rules in respect of the *recognition, enforcement and priority status* of interests in aircraft equipment. For this purpose, the Convention and Protocol provide for the creation of an autonomous *international interest* which has a proprietary character. The Convention has a pragmatic approach in relation to the establishment of such an interest. The definition of an international interest accommodates both the traditional civil law and the functional North American common law systems of property law. The unique international interest encompasses the following *national* interests: a) security agreements; b) title reservation agreements; and c) various forms of leasing agreements and the equivalents thereof. As is stated above, these are the methods of finance which are used most often in respect of aircraft equipment. Furthermore, the Convention and Protocol establish an *International Registry* at which an international interest may be registered. Following international registration, and depending on its priority status, the holder can exercise its international interest against any party in any Contracting State. This rule applies both in the case of and outside the *insolvency* of the debtor. Just assuming for the sake of argumentation that the Cape Town Convention would have applied in the Blue Sky case, the rights of the mortgagee would have been properly secured.

Additionally, in a detailed manner the Convention and its Protocol lay down the extensive *remedies* of the holder of an international interest in the event that the other party defaults. These important remedies only relate to the parties *inter se* (article IX(3) AEP and 7(2) CIME). However, the regime draws an important distinction<sup>20</sup> between the remedies which

<sup>19</sup> Shawcross and Beaumont, *Air Law* (1966), 586, particularly footnote 14.

<sup>20</sup> This crucial distinction under CIME/AEP is *not* understood. See B.J.H. Crans, *The UNIDROIT Convention on International Interests/Aircraft Equipment Protocol: some critical observations*, ASL, 1998, p. 256.



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may be granted by the parties to the *chargee*, the person entitled under a security agreement, on the one hand, and the remedies which are available to a *conditional seller* or *lessor*, on the other (articles IX AEP and 10 CIME). The CIME and AEP incorporate this distinction since extensive remedies can be made available to the holder of an international interest. In many *common law* and *civil law* countries these remedies are available to a conditional seller or lessor *by law*, or may be granted to them, as they are the owners of the aircraft. However, in the majority of *civil law* countries the same remedies are *not* available to a *chargee* and cannot be granted to it by the parties. For these reasons, under the Convention and Protocol the above-mentioned special rights are available to the chargee *only* where the *chargor* has agreed to such remedies (articles IX AEP and 8 CIME). In this respect, the CIME/AEP regime proceeds from the *freedom of the parties to contract*. The parties may agree between themselves on the remedies set out in the CIME/AEP which they regard as desirable in respect of their specific legal relationship<sup>21</sup>. The new regime reflects the fact that the market in aircraft is characterised by the extremely high standard of the sophisticated market participants. For example, in Europe some airlines are (to a large extent) still owned by the state or they have other affiliations with it. Furthermore, the parties to international aircraft financing structures are experienced in negotiating and concluding such transactions. Besides, the parties concerned traditionally commission highly qualified financial and legal experts to represent them when concluding these complicated transactions. For that reason, some kind of “mandatory consumer-related law” to protect (national) airline companies is non-existent in current European air law<sup>22</sup>, and the same is valid for the CIME and AEP. The creation of inequality is disadvantageous for a market in which only equal parties come together. This holds true both for the law and the economy. Consequently, it is legitimate for the Convention and Protocol to expect that the parties will lay down their mutual rights and obligations in agreements which are tailor-made to suit them. Obviously, which remedies the holders of an international interest will in fact be able to stipulate depends entirely on the economic and financial leverage of the parties in a specific situation. For instance, currently it is definitely a ‘buyers-market’ as far as the purchase of aircraft and engines is concerned.

As pointed out *supra*, the principle objective of the Cape Town Convention is to facilitate the financing and leasing of aircraft objects and to reduce their costs. For that purpose it

21 For instance, the property law of the Netherlands provides for the creation of the *rights in rem* (security interests/liens/charges) to *acquire* or *possess* aircraft which can be vested in Dutch *airline companies* (articles 8:1308 and 8:1309 Dutch Civil Code). In turn, these full real rights can be the basis of an *international interest* under the CIME/AEP (article 2(2)(a) CIME). This means that, for example, the owner of an aircraft (*chargor*) may grant the special remedies to a Dutch airline (*chargee*) under a security agreement (articles IX AEP and 8 CIME). See B.P. Honnebier, The new international regimen proposed by UNIDROIT as a means of safeguarding rights in rem of the holder of an aircraft under Netherlands law, *Uniform Law Review/Revue de Droit Uniforme*, 2001, no. 1. ([www.unidroit.org](http://www.unidroit.org), under leading articles).

22 The Geneva Convention (1948), too, acknowledges the freedom of the parties to contract.



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establishes the above-mentioned comprehensive legal framework to protect security and leasing interests in such objects. As a *decrease* in legal risk will lead to a *decrease* in overall expense, in the future the financing of mobile equipment may also become less costly in the European Union. A globally performed economic studies on the matter at hand shows that the CIME and AEP will generate, on a conservative basis, billions of dollars in savings on a yearly basis. The new regime will attract significant, long-lasting micro-economic and macro-economic benefits. The beneficial impact of the Convention and Protocol on the cost of obtaining aircraft financing will be shared not only among the financiers and manufacturers, but also among airlines, their shareholders, employees and passengers<sup>23</sup>.

### 6. THE STATUS OF THE EUROPEAN UNION UNDER THE CAPE TOWN CONVENTION

As is discussed above, in the European Union the law in relation to aircraft financing is still a national affair. However, the Cape Town Convention provides explicitly that a “Regional Economic Integration Organisation” (REIO) may accede to these documents. Already in 2003, the European Commission<sup>24</sup> put the acceptance of the CIME and the AEP on its agenda. The European Commission and the European Parliament came to the conclusion that the Convention and Protocol would be *advantageous* to the financiers, airline companies and consumers of the Member States. It endorsed the opinion that the CIME/AEP could provide for the needed solid uniform European property regime which could help to make the financing of aircraft objects more available and less costly. This point of view persuaded the European Union to adopt the Cape Town Convention in 2009. When a REIO accedes to the CIME/AEP, it has the rights and obligations of a Contracting State. Thus, the Member States of this REIO no longer have independent authority in regard to the legal issues that are covered by its regime.

The Council<sup>25</sup> of the European Union made at the time of the accession to the Cape Town Convention the following formal Declarations under this instrument.

I. Declaration made pursuant to Article 48(2) concerning the competence of the European Community over matters governed by the Cape Town Convention in respect of which the Member States have transferred their competence to the Community:

1. The Community has decided to accede to the Cape Town Convention and is accordingly making that Declaration.

23 V. Linetsky, Economic benefits of the Cape Town treaty, 18 October, 2009, A. Saunders and I. Walter, The proposed Convention: an economic impact assessment, 1998; The economic implications of international secured transactions: a case study, University of Pennsylvania Journal of International Economic Law, 1999.

24 Bulletin of the European Union, “Two proposals concerning signature and conclusion of the Convention adopted by the European Commission on 3 March 2003”. Bulletin EU-2003, Transport (22/22).

25 See EU Council Decision OJL 121 of 15 May 2009.



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2. However, this Declaration does not apply to the Kingdom of Denmark.
3. This Declaration is not applicable in the case of the territories of the Member States in which the Treaty establishing the European Community does not apply.
4. The Member States of the European Community have transferred their competence to the Community as regards matters which affect:
  - a. the Council Regulation on *jurisdiction* and the *recognition and enforcement of judgments in civil and commercial matters*; and
  - b. the Council Regulation on *insolvency proceedings*; and
  - c. the Regulation on the law applicable to *contractual obligations* (Rome I).
5. At the time of accession to the Cape Town Convention, the Community will not make any of the declarations permitted under the Articles referred to in Article 56 of the said Convention, with the exception of a declaration concerning Article 55. The Member States keep their competence concerning the rules of *substantive law as regards insolvency*.
6. The exercise of the competence which the Member States have transferred to the Community pursuant to the Treaty establishing the European Community is, by its nature, liable to continuous development. In the framework of that Treaty, the competent institutions may take decisions which determine the extent of the competence of the Community. The latter therefore reserves the right to amend this Declaration accordingly, without this constituting a prerequisite for the exercise of its competence with regard to matters governed by the Cape Town Convention.

In summary, in the Member States of the European Union, except in Denmark, the Convention and Protocol are applicable in relation to:

- jurisdiction and the recognition and enforcement of judgments in civil and commercial matters;
- *insolvency proceedings*;
- the law applicable to contractual obligations (Rome I).

The Member States keep their competence concerning the *substantive laws* governing insolvency matters. Therefore, in the European Union the absence in uniformity of the substantive aviation finance laws, particularly governing bankruptcy situations, still exists. The Blue Sky judgement has proven that there is an immediate need for harmony in European aircraft finance laws. This fact compels the Member States to establish the desired consistency by individually adopting the Cape Town Convention. Nevertheless, as to date only Ireland, Latvia, Luxemburg, Malta and the Kingdom of the Netherlands<sup>26</sup> have accepted

<sup>26</sup> See the Declarations made by the Kingdom of the Netherlands at the time of accession to the Cape Town Convention and



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the instrument. Germany, Italy and the United Kingdom have just signed, so not yet adopted, the Convention and Protocol. At present, the United Kingdom<sup>27</sup> and several other European states are in the midst of ratification procedures. Other (non-EU) states in Europe having acceded to the Cape Town Convention are Albania, Belarus, Kazakhstan, Norway, the Russian Federation, Tajikistan and Turkey.

### 7. CONCLUDING REMARKS

It is the common opinion of the European aviation finance industry that the proprietary rights of the owners, lessors and financiers of aircraft equipment must be sufficiently secured. The banks may provide credit to purchase or lease aircraft and aircraft engines under the condition that the loans are guaranteed by secured interests which are established in the aircraft equipment. If a debtor is in default or it becomes a bankrupt, in principle these rights give the creditor *national* recourse to the value of the asset. However, the financing and leasing of aircraft equipment is inherently an *international* enterprise. Therefore, in the event that litigation is started in a Member State of the European Union regarding the validity and enforcement of a secured interest in an aircraft, the seized Court must decide which domestic law determines this matter. In such a situation the Court is referred by its own conflict of laws rule to the substantive property law of the (foreign European) state which determines the raised issue. The problem exists, however, that every Member State of the European Union has its own conflict rule which may vary substantially from other countries. In most jurisdictions the disputes relating to movable property, including aircraft, are covered by the *lex rei sitae* conflict of laws rule. This conflict rule refers the Court to the substantive property law of the situs where the aircraft is situated at the time that the proprietary interest is established. The national substantive law decides whether the right in the aircraft is valid, its effects and its enforceability. It is submitted that the *lex situs* rule is inadequate in relation to consensually, as opposed to non-consensually, created rights in aircraft. Moreover, even if a satisfactory conflict of laws rule would be uniformly applied in the European Union, this would not solve the problem that its Member States have entirely different substantive aviation finance laws. The important English *Blue Sky* case (2010) affirms that at present many mortgages and other property rights in aircraft are useless in other states. This is because the English Court applied the *lex situs* conflict of laws rule, while an extensive legal analysis shows that it should have applied *lex registri(i)* conflict rule to issues regarding the validity of consensually created property rights. The outcome of *Blue*

the other documents regarding the territorial units in which the Cape Town applies (Article 52(1) Convention and Article XXIX Protocol). [www.unidroit.org](http://www.unidroit.org) See also B.P. Honnebler and A.P. Berkhout, The new legal and fiscal finance and lease opportunities in the Kingdom of the Netherlands, JLR, 2012-2, p. 38.

<sup>27</sup> See the United Kingdom, Department for Business Innovation and Skills, Call for Evidence, July, 2010.



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Sky is detrimental to the European aviation finance practice. It affirms that many mortgages in aircraft which have been validly created in one Member State cannot be upheld in the other European countries. Moreover, it shows that such a right cannot even be enforced in the national Courts of the state in which it is created. On the other hand, the application of the Cape Town Convention solves these problems. It provides for a modern international substantive aviation property laws regime, which guaranties that the registered international interests of the financiers, lessors and airlines can be enforced. However, at present merely the European Union itself and a minority of its Member States have adopted the instrument. This is unfortunate, as the devastating outcome of the Blue Sky case necessitates all the European countries to adopt the Cape Town Convention. In the meantime, there still exist major problems in the European Union concerning the financing of aircraft and aircraft engines. Only the registered international interests in aircraft that fly under the flags of the aforementioned Member States are secured in the Contracting States of the Cape Town Convention and in the other jurisdictions applying its regime. Consequently, the substantial interests of the financiers and lessors are still not adequately protected. As a result, they may not grant the needed credit to the airline companies or they may raise the financing costs. The present situation leads to unnecessary high prices of airline tickets and air cargo in the European Union.





## Space

### The Emerging Implications of Life on Mars

by Danielle DeLatte, Stavros Georgakas, Shripathi Hadigal,  
Rafael Hernandez, Yufei Wei

#### INTRODUCTION: PLANETARY MISSIONS DISCOVERING LIFE ON MARS<sup>1</sup>

*"The significance of a finding that there are other beings who share this universe with us would be absolutely phenomenal, it would be an epochal event in human history"*

*"If there is life on Mars, I believe we should do nothing with Mars. Mars then belongs to the Martians; even if the Martians are only microbes."*

These quotations from Carl Sagan sum up the profound implications of finding life in outer space. The search for life in the cosmos has been one of the foremost objectives behind many space missions. Since Mars is the closest of the possible life-supporting astronomical bodies, there have been numerous technological missions to Mars in the last five decades. Although possible hints of life were found on the surface of Mars, a verified life signature has not yet been discovered. With all the prospects of new technologies and mission capabilities carried out by Mars missions, humankind may be nearing an important epoch in its history where a mission finds plausible life on the Red Planet.

The section provides an overview of the main Mars missions, which were designed for the search of life on the planet.

Although NASA's Mariner 4 mission in 1965 [COSPAR ID 1964-077A] confirmed that extreme conditions prevented the formation of evolved life, the search for microbial life increased with the next missions. In 1975, the NASA Viking Program [COSPAR ID for Mission Viking 1 Orbiter: 1975-075A, Lander: 1975-075C; Viking 2 Orbiter: 1975-083A, Lander: 1975-083C] revealed new discoveries about the Martian atmosphere and surface. The Viking orbiter's discovery of geological structures such as huge river valleys and canyons resulted in new excitement among scientists and the general public. The biological experiments carried out on the surface of Mars by the Viking landers tried to discover biosignatures on the planet, with largely inconclusive results. However, NASA's Phoenix lander (2008) [COSPAR ID 2007-034A] detected perchlorate. Any organic compounds present in the Martian soil sample tested during Viking experiments would have broken down by the perchlorates.<sup>2</sup> The Phoenix mission was designed to find the 'habitable zone' on the planet and to do a detailed study on the geological history of water on Mars. There have been many discussions and theories

1 This article is derived from a workshop, led by Hugh Hill (ISU) and Veronica La Regina, "The Implications of the discovery of life on Mars", which was undertaken as a part of the ISU Master Program 2012. It reflects the ISU's Credo of 3-Is as interdisciplinary, international and intercultural.

2 Rafael Navarro-González et al., Reanalysis of the Viking results suggests perchlorate and organics at mid-latitudes on Mars, 2010.



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constructed around the discoveries of the Viking and Phoenix experiments. The discoveries from future missions such as ExoMars and Mars Science Laboratory may shed more light on the unsolved question of life on Mars.

The current NASA mission Mars Science Laboratory (MSL) [COSPAR ID 2011-070A] with its rover Curiosity is on route to Mars in order to unravel some of the longstanding questions on the existence of any form of life on the planet. As one part of the four major mission goals, Curiosity will chemically analyze samples in various ways, including scooping up soil, drilling rocks, and using a laser and sensor system. One of the major life-detection instruments on Curiosity is Sample Analysis at Mars (SAM), provided by NASA Goddard Space Flight Center. It will search for organic compounds, including methane, that are associated with life and explore ways in which these compounds are generated and destroyed in the Martian ecosphere. SAM consists of three instruments including a mass spectrometer, gas chromatograph, and tunable laser spectrometer. It also looks for and measures the quantitative presence of other light elements associated with life such as hydrogen, oxygen, and nitrogen. By exploring the compounds and their relative abundances, Curiosity will help to discover whether there was, or is, any life on Mars. Major challenges that lie ahead for astrobiologists and other scientists include the detection of organics. As Chris McKay of NASA Ames suggests, if we find a way to tell whether discovered organic material is biological or non-biological through analyzing amino acids' chirality, understanding the differences between life or non-life is close.

The technical and scientific questions are not the only drivers of present and future missions. As the groundbreaking discoveries of possible life on Mars being to accumulate, a well-constructed framework to tackle interdisciplinary issues from the legal and humanitarian perspectives is necessary. In the following sections, these aspects are considered and a discussion is undertaken of the possible outcomes of a Mars Treaty resulting from the discovery of life on Mars by future missions.

The present work is done with the imaginary assumption that extant or extinct life on Mars has been detected and verified.

### INTERDISCIPLINARY IMPLICATIONS

The discovery of credible evidence for the existence of life on Mars would be significant news not only for the scientific community but also for the public at large. Such a discovery would entail implications and challenges for scientists, space agencies, economists, and lawyers. In fact, when dealing with such an important event, one cannot focus only on the meaning *per se*. In fact, one must also go beyond the scientific and consider the potential human actions on it, or from it, as well as the societal, policy, legal, ethical, and theological implications<sup>3</sup>.

<sup>3</sup> Margaret S. Race, *Communicating about the discovery of extraterrestrial life: Different searches, different issues*, Acta



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A huge debate and related literature comes from the Search for Extra Terrestrial Intelligence (SETI) community, and partially by analogy it can be considered for this purpose. This community is conducting serious international discussions on how to respond *if* and *when* a signal from ETI is detected. A set of “SETI Principles” was developed over a period of years and approved by the SETI Committee of the International Academy of Astronautics (IAA) in 1989. These are not legally binding and are without enforcement provision, but they are endorsed by different organizations. Here, the requirement is more ambitious than the case of the discovery of life on Mars because it also includes the element of intelligence. Thus, two ethical concerns emerge in the discussion: “when is life also a sign of intelligence?” and “when is intelligence a necessary condition for the concept of life?” The homocentric ethics should be reviewed and an adaptation envisaged in order to avoiding harmful discrimination and damage to a wealthy ecosystem suitable for sustaining life.

Life on Mars, intelligent or not, raises serious questions related to laboratory based and astronaut safety. Additional concerns include the rights and duties of this life and responsibilities toward it. In addition, environmental ethics and future actions by governments and the private sector with the potential for large scale or global impacts (e.g., colonization, commercialization, extractive industries, tourism, terraforming, etc.) arise. Above all, since all policies, laws, and ethics on Earth are based upon life as we know it, some have even suggested the need for a comprehensive setting from a cosmos centric and homocentric perspective if life is present.

The issues related to property rights, economic use, and further potential commercial exploitation raise the concern of the required efforts and resources for dedicated exploration missions to Mars due to the presence of life. A crewed mission to further explore Mars and investigate life could cost USD 1 trillion. Such an extreme cost is a constraint by itself, and it would easily jeopardize the support of tax-payers. In addition, the interest of younger generations for space, and in particular for Mars missions, is declining<sup>4</sup>. This raises concern amongst scientists and space agencies because the lack of public support is a potential threat to the viability of expensive government missions. In line with this perception, most people do not see the benefits coming from budgets allocated by governmental space agencies for space exploration and technologies. The general perception is *just expenditure to indulge scientists*.

In this case with verified evidence of life on Mars, there is a higher probability of generating interest and awareness of the benefits coming from space for the society. Thus, it is likely to raise a stronger emphasis on space education at all levels, especially in primary and secondary education, because current schoolchildren will be the generation who will witness

Astronautica, Volume 62, Issue 1, January 2008, Pages 71-78

4 Sarah Joyce, Chantal Ferguson, Philip Weinstein, *Public support for Mars missions: The importance of informing the next generation*, Acta Astronautica, Volume 64, Issues 7-8, April-May 2009, Pages 718-723



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the launch of such missions. On the other hand, the intensification of interests requires more missions to Mars. Thus, the agency budget allocation is again under discussion, but it is also more probable that the private sector would be willing to participate.

Rationales in favor of private funding are: cost efficiency, better commercialization, and comprehensive information for dissemination of space products. However, the involvement of the private sector in Mars exploration requires some previous achievements that must be provided<sup>5</sup> including: the existence of a market for the products with potential solid customers (e.g. the states as governmental actors); a reasonable payback time has been foreseen; a fair access to resources and technologies has to be guaranteed; and a regulatory framework for promotion and liberalization of commercial space activities and protection of property rights<sup>6</sup>. Public-Private Partnerships (PPP) have resulted in rewarding outcomes for both sides in past projects. In the case of Mars exploration, it poses a challenging debate: who is the public entity? Mars exploration arises as an endeavor of the whole humankind, so different or all states may be involved in that public entity. Following this line, considering the fairest solution should be a multi-private-multi-public partnership in which all the private companies and states are potentially involved take part in the mission under a clear and comprehensive regulatory framework.

The proposed framework would not only have to deal with the commercial and property rights aspects but also with space ethics, previously mentioned. The discovery of life on Mars would raise philosophical issues such as the meaning of life, the evolution of humankind, and the future of life on the Earth. Space ethics would address the impact of humankind's actions in Outer Space on each other, on each other's property, on the Earth and the space environment, assuring its preservation for future generations. The regulatory framework would have to be a trade-off between commercial opportunity and excessive protection.

Insight into Law and Policy implications

Space treaties have a tendency to describe space activities before they happen. The Outer Space Treaty (1967) was ratified in advance of humankind's Moon landing. While this gives a framework to work within, it also can be severely limiting to missions that occur decades later. In this scenario, where life has already been discovered on Mars, this adds complexity. This only underscores the importance of investigating these issues in advance of such life being discovered.

Discovery of life on Mars raises immediate concerns with respect to planetary protection. Several treaties and soft-laws in the existing legal framework make reference to planetary protection. Treaties such as the Environmental Modification Convention (ENMOD, 1976), Outer

<sup>5</sup> Ram Jakhu, Maria Buzdugan, *The Role of Private Actors: Commercial Development of the Outer Space Resources, Including Those of the Moon and other Celestial Bodies: Economic and Legal Implications*, McGill University, 2006.

<sup>6</sup> *Idem supra*



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Space Treaty (OST, 1967), and Moon Agreement (MA, 1979) contain clauses that pertain to planetary protection on an international level.

The Environmental Modification Convention contains three articles with planetary protection implications. *Ex Article 1 ENMOD* explicitly states that environmental modification techniques (EMT) with *“widespread, long lasting or severe effects”* are not allowed. In addition, article 2 ENMOD defines environmental modification techniques as *“changing, through the deliberate manipulation of natural processes, the dynamics, composition or structure of the Earth or of outer space.”* Finally, Article 3 ENMOD allows environmental modification techniques to be used for peaceful purposes. This convention protects the terrain and environment of other planets through Article 2. Because of this treaty, significant terraforming of Mars would be prohibited for military purposes, but could be used for peaceful ones, such as a Mars colony. The Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, commonly known as the Outer Space Treaty (1967), has two primary articles of interest, such as Article IX and Article XI. Article IX OST establishes that nations that conduct space activities on other celestial bodies should avoid contamination and environmental changes on Earth *“resulting from the introduction of extraterrestrial matter”* and should *“adopt appropriate measures for this purpose,”* and *“undertake appropriate international consultations”* prior to continuing experiments. Article XI OST describes the obligations states have to report findings: *“inform the Secretary-General of the United Nations as well as the public and the international scientific community, to the greatest extent feasible and practicable, of the nature, conduct, locations and results of such activities.”* The UN Secretary General must then disseminate the information immediately. Article IX’s lack of specificity in defining the *“appropriate measures”* necessary to prevent harmful contamination would be fine for an international treaty if other standards were defined and widely utilized, but that has not happened in full. The Committee on Space Research (COSPAR) has released a five-tier standards system, the COSPAR Planetary Protection Policy, but it is not enforced by international law. NASA’s Planetary Policy provides a comprehensive set of rules, but the related policies are only enforced in the United States. This is an area where the Mars treaty could assist with developing an international standard.

The Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, commonly known as the Moon Agreement (MA, 1979), is ratified by only four countries, which severely limits its effectiveness; none are major space-faring nations. However, the MA did contain several articles pertaining to planetary protection and future planetary treaties. First, article 1-1 comments on the use of future treaties, *“The provisions of this Agreement relating to the Moon shall also apply to other celestial bodies within the solar system, other than the Earth, except insofar as specific legal norms enter into force with respect to any of these*



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*celestial bodies.*" This Article would allow the States that have signed the Moon Agreement to also follow more specific legislation, such as an emerging Mars Treaty. Article 5-1 provides an update to Article XI OST with a more specific definition of the obligations of States to report findings. Article 5-1 dictates that states inform the UNSG, scientific community, and public of scientific results after each mission and give monthly updates during long missions. Article 7-1 provides guidance and largely repeats Article IX OST: states must take measures to prevent the disruption of the environmental balance of both the celestial body and the Earth due to cross-contamination. Article 14-1 underscores the international responsibility states bear for their actions on celestial bodies. Interestingly, Article 18 MA states that the Moon Agreement can be revisited after five years has passed. Despite the Moon Agreement not having been ratified widely, its articles provide inspiration for what the Mars Treaty could include.

The analysis of existing Space Law includes also the Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space (1968), the Convention on International Liability for Damage Caused by Space Objects (1972) and also the Convention on Registration of Objects Launched into Outer Space (1976).

The Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space (1968), commonly known as the Rescue Agreement, describes the rights and implications regarding the rescue of people in distress or emergency on a mission in the space environment. This Agreement should be expanded to include, by analogy, contamination from extraterrestrial organisms and specimens as one of those instances of distress or accidents. Such clauses must be accurate and descriptive, to avoid adding to the vague nature of the articles of this agreement so that it can be interpreted in a broader, generic spectrum.

The Convention on International Liability for Damage Caused by Space Objects (1972), commonly known as the Liability Convention, established an international legal regime to assess liability and compensation for damage, injury, or death resulting from space activities. This Convention expands upon the principles of liability for damage caused by space objects introduced in Article VII OST. Article I of the Liability Convention defines the term "space object" as, "... to include component parts of a space object as well as its launch vehicle and parts thereof." According to this article, any component of a space object and its modules or a transfer vehicle could be considered a "space object", regardless of size and origin (explosion, collision, etc.). In the case of newfound microbial life on Mars, there is always the possibility of contamination of the crew or other people on Earth, upon landing and examining the specimen or even during return to Earth. There needs to be a provision to include a definition of "extraterrestrial life" and to establish protective clauses for people and environment in missions and on Earth. The concept of liability may be expanded to



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include hazardous effects of extraterrestrial organisms. The launching countries should have the same responsibilities regarding risks from microbial specimens as they have for damages caused by space objects.

The Convention on Registration of Objects Launched into Outer Space (1976), also referred to as the Registration Convention, makes provisions for a centralized registry of space objects maintained by the Secretary General of the United Nations. The Liability Convention is incorporated by reference in the Registration Convention, which describes the criteria to determine who would be considered the launching State for determining liability. For an expanded Liability Convention to include matters of extraterrestrial life, the Registration Convention could potentially be applied, too.

The extended application of existing space law and the other mentioned treaties are not widely accepted due to the many concerns already presented. In dealing with the important issue of planetary protection, a new international treaty is needed. The tremendous technology advancements that have been made in the last forty-five years in computing, space technology, and biomedical science could not have been conceived by the 1967 treaty-writers. Yet, the only accepted international and comprehensive treaty was written in 1967. Since then, other treaties such as the Environmental Modification Convention and the Moon Agreement have made further reference to planetary protection, but more must be considered. Leading NASA Ames Mars researcher, Dr. Chris McKay considers detecting life on Mars a real possibility with the advanced instruments on their way to Mars through the NASA mission, Mars Science Laboratory.

Several treaties in the existing legal framework make reference to planetary protection, but there is a lack of specificity at the international level. Because of this lack of specificity a new Mars Treaty is proposed which would help close some of the gaps in the existing legal framework. The purpose of the Mars Treaty would be the provision of a legal framework in the case of anticipated or realized life on other planets. The Outer Space Treaty (1967) needs a contemporary treaty to consider the increased complexity of exploring and living in outer space in the presence of other biological organisms.

In addition, astronauts who travelled to the Moon in the Apollo missions brought microbial to the Moon with them. Some microorganisms that had originally travelled to the Moon on a Surveyor 3 TV camera survived the high radiation, vacuum, and extreme cold of the lunar night and were brought back by the Apollo 12 crew under sterile conditions. This amazing feat reminds scientists both of the possibility of contaminating other planets and that extremophiles can survive harsh conditions. Contamination through human or robotic missions is a real possibility. As Sterns and Tennen<sup>7</sup> highlight *ex art. IX OST, "in the event*

7 P.M. Sterns, L.I. Tennen, *Private enterprises and the resources of outer space*, 48 IISL Proceedings, 2005.



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*contaminations of the natural environment were to occur, the rights of all states to use and explore the cosmos would be jeopardized.*" The obligations of *corpus juris spatialis* need both definition and enforcement of international legal standards.

Two policy issues identified by Mark Lupisella include: "how will we obtain confidence regarding the status of life on Mars and our effect on it before going there with biologically intrusive missions such as life implantation or human missions?" and "how and what will we decide to do following such a discovery?" Carl Sagan took one view when he wrote, "if there is life on Mars, we should do nothing with Mars even if they are only microbes."

The answers to these and many other questions must be explored at international level in new Mars Treaty.

### EMERGING NEED FOR MARS TREATY

In proposing a new international treaty, such as the Mars treaty, the first challenge is the identification of the proper "chestnut". An international and interdisciplinary committee would be the appropriate entity for breaking down the guidelines regarding the issues underlined above, and drafting the treaty. COSPAR and the United Nations Committee on the Peaceful Uses of Outer Space (UNCOPUOS) would be the best solution, given their relation to previous treaties and agreements. Before an inclusive approach is attempted, it is necessary for Russia, USA, and China to reach an agreement to ratify the new treaty. These are the present space-faring nations; they often have different approaches and interests in space activities. When an adequate degree of consensus is reached, the rest of the interested states are more likely to follow.

The following challenge is the proposal for the definition of the aim, the objective and related purposes of the new treaty. After reaching an initial consensus, the *aim* of the international meeting would be to stress the necessity of elaborating the principles governing the use (by States of Mars) land showing signs of life. The international agreement would have the *objective* of establishing a long-term international cooperative framework among the Partners for the detailed design, development, operation, and utilization of Mars and its resources and to exploit the presence of life on Mars with the respect of human rights and biodiversity in accordance with international law. In addition, among the purposes previously discussed, the agreement would enhance the scientific, technological, and commercial use of Mars as an element of Outer Space.

The required work for this agreement would take into account the moral and ethical impact of actions on extra-terrestrial life. In the past, negligible care of Earth's ecosystem has been quite evident, and the same mistakes should not be repeated on Mars. Surface or subsurface life could be jeopardized due to human interference and biologically intrusive missions. In





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addition, the scenario of Earth extremophiles transported to Mars in a future mission must be addressed. Without taking into account the debate about ethics and law, the new treaty is envisaged to consider the change of perspective from an ethics point of view<sup>8</sup>. Within this geocentrism, there are three central ethical perspectives: anthropocentrism, zoocentrism, and ecocentrism. Furthermore, the ethical settlement of the new treaty would have some cosmic preservationism balanced by restorationism to eventually improve Mars' environment in favor of life and the asymptotical limit of inventionism.

This issue raises, from legal point of view, the need for defining the legal status of extraterrestrial life. As Mars becomes increasingly available for use and exploration, some opinions for use appear, such as terraformation. If life is discovered or strong evidence of existence life is found, there would be debates, since some have the opinion that Mars belongs to the Martians. So, a clear definition of the legal status of life on Mars is needed. It is the foundation of human use and information disclosure. For example, if the legal status of Martian life is defined, relevant information can be disclosed immediately due to the reduced social, ethical and legal risks.

After these issues, the presence of life on Mars can easily raise a new perspective from space exploration to space exploitation and consequently the current legal framework has some weaknesses to support or regulate the scientific research, commercial exploitation and other activities on Mars. Therefore, a new Mars treaty is an emerging need for future in-depth exploration on Mars and other planets, especially in the context of finding life. Mars is a celestial body which has many different characteristics from the Moon. For example, Mars is a planet while the Moon is a satellite of Earth; Mars has quite different environment from the Moon, including the temperature, atmosphere, etc; people are more interested in Mars than the Moon for finding life. Mars has important scientific characteristics due to its position of the nearest planet to Earth, especially in extraterrestrial life discovery. Thus, the extended application of the Moon Agreement to Mars with respect of the main principles requires making some distinctions and being aware of *caveats*.

Certainly, one particular issue is about life, which leads to other important environmental protection matters such as the governance of samples returning to Earth. Lastly, international cooperation should be included in the new treaty, since Mars exploration activities will face greater technological, scientific and social challenges than current space activities.

A Mars treaty would be a more specific one, which would have improvements in order to allow the commercial exploitation of Mars that permits to gather more resources with the application of public-private partnerships. Consequently, more concrete outcomes could improve general

<sup>8</sup> See, Robert D. Pinson, *Ethical Considerations for Terraforming Mars*, Copyright © 2002 Environmental Law Institute®, Washington, DC. reprinted with permission from ELR®.



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public perception. Hence more democratic would be achieved for parliamentary budget approval. However, commercial uses could create barriers for new states, and exclude states without space capability. This would cause either monopoly or oligopoly contexts, limiting the benefit for all humankind. In addition, the profile of biodiversity protection would be extended from the Earth and its ecosystem to a higher dimension - the interplanetary space - where interaction between Earth and Mars is increasing. Meanwhile, international cooperation, coordination, or mere collaboration may be another important trend; this treaty should provide some recommendations in favor of fair participation and distribution of benefits, since these activities could influence all the humankind.

In order to clarify the emerging required regime, a choice has been made with the aim of efficient allocation of real property rights on Mars. As defined in the existing regime of space law, Mars is the “common heritage of [humankind]”; and the use of Mars is the right of all humankind for the benefits of economic or scientific development. As described in the Interdisciplinary Implications section, the private sector would be the long-term protagonist in Mars exploration, so the regulatory framework for commercial space activities is an emerging need. If Mars is considered a sort of *res communes omnium*, with common ownership, the resulting sharing of benefits derived from its exploration and development disregard the unequal cost burdens and associated risks. This would discourage also investment and productive use. Several authors<sup>9</sup> have proposed that the opportunity for private profit, in one form or another, is an essential incentive for the advancement of space exploration, especially as the expected gains are of high uncertainty.

The new treaty on Mars should provide the legal framework, which respects both the common heritage principle and the encouragement for exploration. For example, the property rights of Mars belong to all humankind, but the private sector can use the Martian resources in a harmless and sustainable way, such as Mars tourism. One particular scenario should be stated in the treaty: once life or strong evidence for life is found on Mars, the use of Mars should be at a lower priority level due to the need for environment protection.

The emerging deep space activities on Mars with the aim of enhancing international collaboration, sharing global returns, and sharing benefits, will obviously have to serve a duty of information. This aspect could be improved based on the Moon Agreement Article 5, especially for life exploration missions. Due to the potential influence on all humankind, the information of finding life or strong evidence on Mars should be disclosed in time. In the Mars treaty, enunciation of information duty about life and evidence needs to be clearly

<sup>9</sup> See *inter alia*, Brian Hoffstadt, *Moving the Heavens: Lunar Mining and the Common Heritage of Mankind in the Moon Treaty*, 42 UCLA L. REV. 575 (1994); James J. Trimble, *International Law of Outer Space and Its Effect on Commercial Space Activity*, 11 PEPPERDINE L. REV. 521 (1983-84); Andrew H. Pontious, *A Proposed Regime and Its Ramifications on the Commercialization of Outer Space* 7 SANTA CLARA COMPUTER & HIGH TECH. L.J. 157 (1991); Jeremy Zell, *Putting a Mine on the Moon: Creating an International Authority to Regulate Mining Rights in Outer Space* 15 MINN. J. INT'L L. 489 (2006).



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stated, including the time limitation, information contents, etc.

### CONCLUSIONS

The establishment of a Mars Treaty will foresee legal challenges, clarify existing framework, identify the most efficient workplace for building the new treaty, and anticipate the shift from exploration to exploitation. This implies a new shared vision between public entities and private actors, which will address the needs of private/commercial actors in order to encouraging investment and innovation.

Establishing Mars treaty is a crucial need for the increasing interests and exploration capabilities to Mars. It could bring many potential benefits, such as:

- Provide a legal basis for ways to manage and lead in the event of finding life or strong evidence on Mars: It could defense the legal status of the extraterrestrial life, which is the foundation of human use and information disclosure. An intentional information blockade could be legally prevented if life were to be found, and the social responses could be mitigated.
- Provide a specific legal framework for the exploration activities of Mars: It could give a clear legal explanation of some issues and activities to reduce uncertainties and ambiguity, such as scientific and commercial use.
- Make the environment protection regulation more clear and effective. For example, rules of sample return to Earth would be clearly defined to avoid potential harmful effects, and the principles of international environmental law could be introduced to be applicable to outer space.
- Encourage the international sharing mechanisms for participating in deep space exploration and exploitation.



## Case Law Commentary

### THE SALARY SCALE OF CABIN CREW MEMBERS (COURT OF JUSTICE OF THE EUROPEAN UNION, 7 JUNE 2012, JUDGMENT IN CASE C-132/2011)

*by Alessandra Laconi*

The discussed judgment followed a reference for preliminary ruling about the interpretation of Article 21(1) of the Charter of Fundamental Rights of the European Union and Articles 1, 2 and 6 of Council Directive 2000/78/EC of 27 November 2000 establishing a general framework for equal treatment in employment and occupation.

The reference has been made in proceedings between Tyrolean Airways and the works council of that airline, the Betriebsrat, on the interpretation of the collective agreement relating to the Tyrolean Airways cabin crew, and, in particular, the question whether periods of service completed with two other subsidiaries of the Austrian Airlines group should be taken into account.

The clause at issue in the Tyrolean Airways collective agreement provides that advancement from employment category A to employment category B is to occur on the completion of three years of service. Such a provision therefore affects the determination of the employment category in which workers are placed when recruited by that airline, consequently affecting their pay.

According to the regulatory framework, this kind of clause must be regarded as establishing rules relating to conditions for access to employment, recruitment and pay, within the meaning of Article 3(1)(a) and (c) of Directive 2000/78, thus the aforementioned particular case has been correctly considered as included in the scope of the directive.

The first question referred for a preliminary ruling relies on the circumstance that discrimination on the grounds of age, as considered at Article 21(1) of the Charter of European Rights of the European Union, could arise as a result of the failure to take into account periods of service completed with other airlines in the group.

The Court underlines that considering Article 2(1) of Directive 2000/78, read in conjunction with Article 1, the principle of equal treatment requires that there be no direct or indirect discrimination whatsoever on the grounds of, *inter alia*, age.

Moreover, Article 2(2)(b) of that directive establishes that indirect discrimination on grounds of age occurs where an apparently neutral provision, criterion or practice would put persons having a particular age at a particular disadvantage compared with other persons, unless that provision, criterion or practice is objectively justified by a legitimate aim and the means of achieving that aim are appropriate and necessary.

The Court correctly affirms that a provision of a collective agreement which takes into account, for the purposes of grading in the employment categories provided for in that



agreement, only the professional experience acquired as a cabin crew member of a specific airline, while excluding substantively similar or identical experience acquired in the service of another airline belonging to the same group of companies, is likely to entail a difference in treatment according to the date of recruitment by the employer concerned.

However, such a difference is not based on age or on an event which could be considered as necessarily linked to age.

The Court of Justice coherently underlines that it is the experience which may have been acquired by a cabin crew member with another airline in the same group of companies which is not taken into account for grading, irrespective of the age of that cabin crew member at the time of his or her recruitment.

That provision is therefore based on a criterion which is not directly or indirectly linked to the age of employees, even if the application of the criterion at issue may, in some individual cases, bring to the consequence that the time of advancement of the cabin crew members concerned from employment category A to employment category B is at a later age than the time of advancement of staff members who have acquired equivalent experience with Tyrolean Airways.

Considering the normative framework, the Court concludes that the clause at issue in the Tyrolean Airways collective agreement must not be intended as a difference of treatment on grounds of age, in terms of the combined provisions of Article 1 and Article 2(2)(b) of Directive 2000/78.

It can thus be affirmed that the conclusions reached by the European Court of Justice in the analyzed case are consistent in relation to the relevant normative context, both with Directive 2000/78 and with the case law of the same Court, and therefore with the general principle of non discrimination on the grounds of age as set forth in the known *Mangold* case C-144/04, now established at Article 21 of the Charter of Fundamental Rights of the European Union.



## Miscellaneous material of interest

### ENAC'S REGULATION ON CERTIFICATION OF GROUND HANDLING SERVICE PROVIDERS

by Silvia Ceccarelli<sup>1</sup>

On 23<sup>rd</sup> April 2012, the National Authority for Civil Aviation (ENAC) adopted the fifth edition of the Regulation "Certification of ground handling service providers" (handling), which governs the certification issued to ground handling service providers, including complementary and instrumental activities carried out by the air carrier in the airport.

In general, these airport ground handling services are related to the assistance to passengers, luggage, cargo and mail and to the aircraft. In airports with a traffic volume exceeding certain levels, handling services were liberalized and it has been recognized a free access to its market to entities, including the airport operators, that were provided with certain requirements.

The new edition of the Regulation which came into force on 8<sup>th</sup> May 2012, the date of its publication, was approved as a result of some administrative judges' decisions on subcontracting, work and financial and economic requirements of handling operators, that even partially superseded the fourth edition of 23<sup>rd</sup> March 2011 of the same Regulation.

The Regulation states that to airport services providers in Europe and belonging to non - member States subjected to reciprocity, will be issued by ENAC, after the completion of special investigations, a certificate stating the eligibility requirements set by the legislative decree of 13<sup>th</sup> January 1999 no. 18 implementation of directive 96/97CE on market access of ground handling services at European airports, that ensures compliance with appropriate standards of quality and safety.

In the certification specification attached to the certificate issued to individual handling operators are specified airport services for which they have demonstrated appropriate requirements.

These requirements are subjective, economic - financial, organizational and technical and should be maintained throughout the period of validity of the certificate, which can not be sold to other parties.

For this purpose ENAC has the task of supervising the activities carried out by the handling operator, a task to be accomplished through inspection.

ENAC is entitled to suspend the certificate for a period non exceeding six months, among

<sup>1</sup> ENAC



other things, in case of temporary loss of the requirements needed to obtain and maintain the certification as well as non-compliance of the provisions concerning social security, welfare and contributions, the rules of airport security, environment and work.

The certificate is valid for three years. Its validity is limited to airports and airport services specified in the certification specification attached to the same certification. The provider is obliged to start the airport service within six months from the issue of the certificate. The violation of this provision shall result in the forfeiture of the certification.

On the other hand, the handling operator is entitled to perform different activities than those indicated in the specific certification, as long as ENAC, upon the request of that provider, has extended and amended the specification.

Furthermore, the Regulation provides, subject to certain conditions, the possibility for the operator to subcontract part of the activities for which he obtained the certification. In particular, the activities to be subcontracted can not exceed in value thirty percent of the turnover achieved by the provider for the airport where he works. Moreover, the use of subcontracting must be authorized by ENAC and communicated to the airport operator where the handling tasks must be performed. The violation of this provision determines the suspension of the certification.

Finally, the regulation lists the cases in which ENAC is legitimated to revoke or declare the revocation of the certificate issued to an airport ground handling service provider. The violation of the provisions contained in that regulation determines the financial penalties provided under article 1174 of the Navigation Laws with reference to policing at airports.



## FLIGHT DELAY AND DAMAGES PAYMENT OBLIGATION

by *Vincenzo Scaglione*

On the 15<sup>th</sup> May 2012 the Advocate General of the European Court of Justice (ECJ) issued his opinions concerning the cases C-581/10 (Nelson and Others against Deutsche Lufthansa AG) and C-629/10 (TUI Travel plc and Others against Civil Aviation Authority).

The opinion was based on the 2009 Sturgeon judgment (19<sup>th</sup> November, case C-402/07 and C-432/07, C-402/07 e C-432/07, Sturgeon/Condor Flugdienst GmbH e Böck e a./Air France SA), through which the European Court of Justice established that passengers that suffered a long flight delay are entitled to a pecuniary compensation.

When the passengers arrive at their destination with a delay of at least three hours after the time of arrival estimated by the carrier, they may demand, as already recognized in cases of flight cancellation, a flat - rate compensation (between € 250,00 and 600,00), unless the delay is due to exceptional circumstances.

After the Sturgeon judgment, several references for preliminary ruling and actions under national laws have been proposed.

In the UK, TUI, easyJet, British Airways and IATA brought a review proceeding against the UK Civil Aviation Authority in order to obtain a reconsideration of the question by the ECJ. The German flight delay case Nelson vs Lufthansa showed the possible doubts with regard to the compatibility of the 261/2004 Regulation provisions, as interpreted by the ECJ in the Sturgeon judgments, with the Montreal Convention 1999 (on air carrier liability).

In March 2012, the oral argument was heard by eight interested parties (TUI, easyJet, British Airways, IATA, Lufthansa, Germany, Poland, UK, EU Parliament, EU Council and EU Commission). All but two of those parties (the EU Commission and Poland) urged the ECJ to overturn the earlier Sturgeon decision.

Advocate General Bot argued that:

- the Court of Justice should rule that passengers (falling under the scope of the Regulation) that reach their final destination three hours or more after the time of arrival estimated by the carrier are entitled to a flat rate compensation under Regulation 261/2004. Following the Sturgeon decision and applying the principle of equal treatment, passengers whose flights have been cancelled and passengers affected by a flight delay suffer a similar damage consisting in a loss of time, and thus they find themselves in a comparable situation.
- An entitlement to compensation for delays pursuant to Regulation 261/2004 does not conflict with the delay provisions of the Montreal Convention 1999. The Advocate General relied on previous ECJ case law (case C-344/04, IATA e ELFAA) in which the Court held that any delay in air transport may cause two types of damage, notably damages which





identically concern all passengers (standardized compensation) and particular damages (to be ascertained and calculated on an individual basis).

- The latter case is regulated by the Montreal Convention (art 19 e 29), while with regard to the first hypothesis, Article 7 of Regulation 261/2004 provides for a standardized measure to compensate direct and immediate prejudices deriving from the loss of time.
- As a consequence, the particular compensation complies with the Montreal Convention, which provides different compensations depending on the type of damage.
- Considering the principle of proportionality, the compensation due to passengers whose flights have been delayed does not result in an arbitrary and excessive financial burden on air carriers.
- Finally, the Advocate General considered the possible existence of extraordinary circumstances that may exempt the carrier from compensating passengers that suffered a delay. He declared that technical problems or failures which give rise to delay will rarely give the carrier a defence.

Following Advocate General's opinion, the Sturgeon judgement would be confirmed: airlines falling under the scope of the Regulation should pay up to €600 per passenger in the event of a delayed arrival of more than three hours.

In the meanwhile, the European Commission recently started a consultation in view of a possible revision of Regulation 261/2004.



## MANY DAILY CASES OF DISCRIMINATION FOR PEOPLE WITH REDUCED MOBILITY TRAVELLING BY AIR: THE EUROPEAN COMMISSION PUBLISHED GUIDELINES TO CLARIFY THEIR RIGHTS.

by *Adeliana Carpineta*

On 14 June 2012, the European Commission published guidelines with a few basic rules, in order to clarify the Regulation protecting the rights of persons with disabilities travelling by plane<sup>1</sup>.

Despite the above mentioned Regulation has been in force for more than four years<sup>2</sup>, several issues still remain unresolved for air carriers and airports on the one hand and for disabled passengers and passengers with reduced mobility on the other.

The European Disability Forum has reported many daily cases of discrimination where passengers suffer unjustified refusal or restrictions on reservations or boarding, based on unclear safety reasons.

The guidelines cover travellers at all EU airports and the operations of EU and non-EU carriers landing in or taking off from European airports. They presented 22 questions and answers on a variety of areas.

The most common issues clarified by the European Commission concern:

- **the definition of passenger with reduced mobility.** In the Regulation it is indicated as *«any person whose mobility when using transport is reduced due to any physical disability (sensory or locomotors, permanent or temporary), intellectual disability or impairment, or any other cause of disability, or age and whose situation needs appropriate attention»*. Therefore, the guidelines underline that, whilst the largest categories are disabled and elderly passengers, there are some other vulnerable citizens who are deprived of their full mobility that might need assistance depending on the circumstances of their travel, only at the airport, for large airports with long distances to cover or at connecting points, or only on-board of a plane;
- **the pre-notification** concerning the necessity of assistance during the air travel. The guidelines underline that, although it is essential to inform the air carrier at least 48 hours in advance of departure to ensure the required assistance at the best quality, service providers need to make reasonable efforts to assist also passengers who have not pre-notified their needs;
- **the medical certificate** to get free assistance. The European Commission highlights that air carriers and service providers at airports can only ask for medical certificates if the health and safety of the passenger, other passengers or crew-members might be at risk;

1 Regulation (EC) No 1107/2006 of the European Parliament and of the Council of 5 July 2006, *«concerning the rights of disabled people and people with reduced mobility when travelling by air»*.

2 Since July 2008.



- **the accompaniment** of persons with reduced mobility. Apart from the case of impossibility to meet the appropriate safety requirements, normally if the passenger is self-reliant, he is able to travel alone.

European Disability Forum reacted positively to the guidelines, but said they would have liked more clarity in some areas. The group underlines that the main problems hindering compliance are lack of enforcement by member states and insufficient training of airline staff.



## ENAC MEETINGS REGARDING LIQUID TRANSPORT LIBERALIZATION

*by Alessandra Laconi*

The Italian Civil Aviation Authority (ENAC), as the competent authority on the national territory in the field of civil aviation safety, started a series of meetings with the industry operators in view of the liberalization of the transport of liquids on the aircraft which, as provided by European regulations, will start on 29 April 2013.

As known, Europe's air passengers will be able to take on board water bottles, gels and sprays, when the general ban on liquids will be replaced by better screening technology. European airports are thus required to adopt and install new technologies, which must be capable of detecting liquid explosives.

Drinks, gels, pastes, lotions and sprays in bottles of less than 100ml are currently allowed on planes if they are carried in clear plastic bags. For passengers, the aim is now to simplify wherever possible the necessary security controls.

Therefore, following up the liberalization liquids could be carried again on board of aircraft, but just after controls operated with highly specialized machinery meant to detect liquids not in keeping with transportation.

On the 11<sup>th</sup> June 2012, ENAC's Security office had a first meeting with the representatives of Assaeroporti, Assaereo and Ibar, the associations representing the operators mostly interested to this aspect.

During the meeting, the crucial aspects of the procedures to utilize to make functional the control operations without compromising the airport practicality were approached.

The first meeting focused thus on the individuation of alternative solutions in relation to the total removal of limitations, considering the necessary and adequate protection of passengers, balancing all the involved exigencies.

When such alternative solutions will be approved, experimental tests could be disposed in some airports, in order to test both the procedures and the technologies to be adopted.

The aforementioned tests must anyway be consistent with the joint statement recently signed by the European Commission's Directorate General for Mobility and Transport and the United States' Transportation Security Administration (TSA), together with the main European and American aviation stakeholders (airlines, airports, retail associations and liquids equipment manufacturers).

Such a joint statement confirms the intention to cooperate towards the screening of liquids at EU and US airports, representing an expression of due transoceanic cooperation in the field of aviation security and concerning interests involving both business and stakeholders.



A common solution will thus facilitate the progressive decrease of restrictions, in the meantime guaranteeing the necessary security and simplifying the exigencies of passengers and trade in the international civil aviation.

Anyway, considering all the mentioned questions, the European Commission has just announced the postponement of the previously fixed term of April 2013 for the liberalization of the transport of liquids on the aircraft due to the need of a more realistic revision.

European airports underlined the complexity of the theme and that the revision should both improve air passengers' practical exigencies and maintain the integrity of airport operations. The postponement of the term will be followed by more precise indications about the gradual removal of restrictions. This roadmap will be tailored in collaboration with European and international partners of the European Commission, including the stakeholders of the aviation field.



**ASSISTANCE TO PASSENGERS IN THE EVENT OF FLIGHT'S CANCELLATION FOR VOLCANIC ERUPTION (Advocate General's Opinion in case C-12/11 - Denise Mc Donagh V Ryanair Ltd)**  
*by Isabella Colucci*

On March 22, 2012 the Advocate General delivered his opinion on a preliminary ruling from the Dublin Metropolitan District Court (Ireland) on a case presented by Mrs McDonagh, against Ryanair, as one of the passengers whose flights were cancelled because of the volcanic eruption did not receive the necessary assistance from Ryanair.

This case essentially hinges on the question whether an air carrier must be released from its obligation to provide care for passengers when their flights have been cancelled because of the closure of airspace due to volcano eruptions.

In other words, it is necessary to ascertain if an event such as the closure of airspace as a consequence of the eruption of a volcano in Iceland can be considered an "extraordinary circumstance" as per Regulation UE Nr 261/2004/EC, requiring the air carrier to provide care for passengers whose flights have been cancelled, in accordance with Articles Nr 5 and 9 of that Regulation, or if it falls within a category of events above and beyond those "extraordinary circumstances", thus releasing the carrier from such an obligation.

First of all the Advocate General points out that the concept of "extraordinary circumstances" is not defined in the EU law.

It should be noted that under article Nr 5 paragraph 1 letter b) of Regulation Nr 261/2004 the operating air carrier has to provide care for passengers whose flight have been cancelled. By contrast with the obligation under article Nr 5 paragraph 1 letter c) of that Regulation to pay compensation, the obligation to provide care for passengers applies even where the cancellation is caused by "extraordinary circumstances".

He explains that in his opinion the notion of "extraordinary circumstances" also encompasses all exceptional events, such as the closure of airspace due to volcano eruptions. Moreover, as the Court has consistently held the meaning and scope of terms for which EU law provides no definition, the notion of "extraordinary circumstances" must be interpreted in accordance with their usual meaning in everyday language. The term "extraordinary" is defined in everyday language as something which is out of the usual course of order for that the choice of that term clearly shows that the EU legislator intended the notion of "extraordinary circumstances" to embrace all circumstances over which the air carrier has no control.



On this basis, the Advocate General concludes that an event as the eruption of the Iceland volcano certainly constitutes an example of extraordinary circumstances for the purposes of Regulation Nr 261/2004, triggering for the air carrier the attendant obligation of providing care for passengers whose flights have been cancelled as a consequence of the volcano eruption.

At the end of his conclusion, the Advocate General points out that the provision to provide care to passengers is particularly important in the case of extraordinary circumstances which persist over a long time and this obligation must remain compelling, whatever the event which resulted in the cancellation and whether or not the air carrier was responsible for the event. It is in situations where the waiting time occasioned by the cancellation of a flight is particularly long that is necessary to ensure that an air passenger whose flight has been cancelled can have access to essential goods and services throughout that time.



## **PUBLIC SERVICE OBLIGATION FOR ROUTES LINKING SMALLER SICILIAN ISLANDS WITH MAINLAND ITALY**

*by Alessandra Laconi*

As known, in order to maintain appropriate scheduled air services on routes which are vital for the economic development of the region they serve, Member States may impose public service obligations on these routes. Therefore, they must respect the conditions and the requirements set out in Article 16 of the Air Services Regulation 1008/2008.

In occasion of the meeting which took place on the 3<sup>rd</sup> May 2012 among ENAC (Italian Civil Aviation Authority), the management of the Meridiana airline and ENAC competent bodies, the possibility to extend Public Service Obligations concerning routes linking Pantelleria and Lampedusa islands with mainland Italy has been evaluated and verified.

At the end of the meeting, Meridiana accepted the proposal of ENAC consisting in extending Public Service Obligations to the 27<sup>th</sup> October 2012, in order to adequately guarantee the due continuity of the scheduled air services in the summer season.

The costs deriving from the exposed extension will be entirely sustained by ENAC.

However, ENAC underlined that, after the aforementioned date, it will not be in condition to guarantee further economic resources and therefore the following financial coverage for these Public Service Obligations will necessarily be directly maintained both by the Minister of Infrastructures and Transport and by the Sicily region.

Meridiana ensured the publication on its website of the new timetable of scheduled flights from/to Lampedusa and Pantelleria.





## SOME POINTS ON THE EU'S LEGISLATIVE FRAMEWORK AIMED AT COPING INCREASE IN EU AIR TRAFFIC

*by Dorianò Ricciutelli*

The EU is proving to be forward-looking when it comes to finding adequate solutions to face the exponential growth in air traffic. However, even an optimist might have to concede that the search for these solutions, in the short term, may be compromised by the systemic economic crisis which most Member States face, and which has weakened the country-Europe relationship. According to Eurocontrol statistics<sup>1</sup>, the number of air passengers will increase from 400 million in 2009 to 740 million in 2030.

In the face of this, the EU proposes a series of legislative measures in various fields, aimed at, on the one hand improving aviation security, and, on the other, facilitating the crossing of air borders.

Amongst the most important initiatives, which are taken in the framework of Title V of the Treaty of the European Union, and are aimed at improving the functioning of airports in order to resolve the capacity crisis, are undoubtedly the two recent Commission draft Regulations concerning "ground-handling" services (CION doc. 18008/11 of 5<sup>th</sup> December 2011 and doc. 8050/12 of 26<sup>th</sup> March 2012) and concerning the reduction of noise levels (doc. 10229/12 of 30<sup>th</sup> May 2012).

The documents in question received general support during the Transport Councils of 22<sup>th</sup> March and 6<sup>th</sup> June 2012<sup>2</sup>. They are part of the 'Airport Package' which was announced on 1<sup>st</sup> December 2011 (COM(2011)823 final), which contains a third, innovative, proposal regarding airport slots. This proposal would enable airports to handle 24 million passengers more by the year 2025, which would yield more income and generate jobs. (Still according to official EU sources: EU press release IP/11/1484).

Ground handling services, in particular, should contribute to an improved performance by airports in terms of efficiency, quality and resilience. They cover a vast array of support activities, technical in nature, but also aimed at improving passengers' security and comfort, such as check-in, catering, baggage handling and airport transport.

<sup>1</sup> Eurocontrol's long-term forecast for the next 20 years' was published on 17<sup>th</sup> December 2010;

<sup>2</sup> See: PRE 017/12 (Press) of 20<sup>th</sup> March 2012; 3156<sup>th</sup> Transport, Telecommunications and Energy Council meeting, B item, (Aviation), doc. 10479/12, PR C033 3171<sup>st</sup> Council meeting of June 2012. See for ref. 2007 Action Plan of 24<sup>th</sup> January 2007, COM (2006) 819 final;



The noise level proposal gives the Commission, in addition to the Member States, a supervisory role. Moreover, the proposal should lead to a more transparent process for determining noise level restrictions, aimed at reducing the acoustic pollution caused by the increase in air traffic. The Transport Council has tried to harmonize, clarify and strengthen the criteria which have to be met in order to reduce noise levels.

The second intervention area is in the context of the free circulation of citizens, Title IV of the TEU. In its Communication of 25<sup>th</sup> October 2011<sup>3</sup>, the Commission launched its 'Smart Borders' initiative, thereby reacting to the Council's invitation of 24<sup>th</sup> June 2011<sup>4</sup> to accelerate work in this field. The idea would be to approve by 2014, with entry into force in 2015, the so-called entry/exit system, which would replace the stamping of passports by an electronic registry, or a biometrics system, coupled with a programme for registered travellers, who would benefit from simplified border controls. This would mean a speedier border crossing for 4 to 5 million passengers a year, e.g. by means of automated gates, and, in a general way, a more modern and efficient management of traffic at the external borders, in particular air borders.

Said systems must be implemented taking into account technical-legal developments in other areas, such as VIS, SIS and the future SIS II (whose state of play was discussed in the margins of the JHA Council on 7<sup>th</sup> June 2012), certain prior control systems, such as API and PNR (the EP<sup>5</sup> approved on 27<sup>th</sup> October 2011 the agreement on data exchange with Australia, and on 19<sup>th</sup> April 2012 with the US), as well as guaranteeing the integrity, and therefore the security of borders in the Schengen area<sup>6</sup>. At the same time they offer opportunities when confronting the challenge of an ever-expanding, technologically ever more advanced world.

A third area of EU action is infrastructure and co-modality. On 22<sup>th</sup> March 2012 the Transport Council<sup>7</sup> expressed a favourable opinion on draft Regulation COM(2011)650 final of 19<sup>th</sup> October 2011 regarding EU guidelines for the development of the TEN-T which replaces Decision 661/2010. The aim of the proposal is to establish, in a renewed fashion, a complete Transeuropean transport network which can cope with traffic fluxes, and connects the whole EU territory in an intermodal and interoperable way.

3 COM (2011)680 final;

4 COM (2011)248 final;

5 Resolutions 17433/2011 - C7-0511/2011 - 2011/0382(NLE) and 09825/2011 - C7- 0304/2011 - 2011/0126(NLE);

6 See COM(2011)559 final, COM(2011)560 final and COM(2011)561 final; Com(2012)final of 16<sup>th</sup> May 2012; See Press 94, 3151<sup>st</sup> Council meeting of 8<sup>th</sup> March 2012;

7 Doc. 7847/12 of 22nd March 2012; (8) COM (2011)923, see also COM (2008)389 final;



What is important, is that under the above-mentioned Ten-T guidelines the new core European transport network will link 37 key airports with rail connections into major cities, and will improve significantly the absorption capacity of the total volume of traffic.

According to the new orientations, EU airports have to meet precise criteria regarding passenger and cargo traffic, and contribute to the completion of the Single European Sky. On the 22<sup>nd</sup> of December 2011, the Commission adopted, at the request of the Council, its Communication on the preparation of the deployment phase of SESAR<sup>8</sup>, the Single European Sky ATM Research. According to the Commission, SESAR has the potential to expand airport capacity, meet growing demand, reduce the number of flight delays or cancellations, thus raising activity and mobility levels.

Last but not least, there is the security component, based on Articles 91 and 222 of the TEU, which undoubtedly plays a key role in the expanding air traffic of the EU and the world as a whole. The second generation -as I would call them- of European Regulations which arrived in the wake of the tragic events of 9/11 (Regulations 300/2008, 272/2009, 185/2010<sup>9</sup>, 720/2011, 1147/2011 and 173/2012, to name but the most important ones), aims to lay down harmonised rules for secure and speedy controls of passengers, luggage, goods and aircraft.

The Commission Staff Working Document on Transport Security of 31<sup>st</sup> May 2012<sup>10</sup> reiterates that the approach followed so far, has proven beneficial, developing specific measures, in particular the concept of 'one stop security', the risk-based regime and the introduction of new technologies (body and liquid scanners), which simplify matters for transport operators, passengers, and providers by having common security requirements, with consequential cost savings.

Against this background, the White Paper 'Roadmap to a single European Transport Area - Towards a competitive and resource-efficient transport system' (COM(2011)144 final, promotes the idea of more efficient control methods, which respect fundamental rights, like the check points of the future, such as security corridors which would allow a large number of passengers to be controlled without hassle and intrusion. The White Paper also refers to the development of more effective and privacy-friendly technologies (scanners, detectors of new explosives,

8 COM(2011) 923

9 The new security programme (PNS) for Italy, ref. EU 185, published on 19<sup>th</sup> March 2012 by ENAC (00001/DG);

10 SWD (2012)143 final



smart chips etc.), as well as the definition of common performance standards and certification procedures for detection equipment.

In conclusion, we think that the above-mentioned proposals set ambitious goals to attain, taking into account the various, read economic, negative circumstances, which, by the way, emerged also in the debates held during the afore-mentioned Transport Council of 7<sup>th</sup> June 2012 on the draft Regulation establishing the Connecting Europe Facility (CEF), the future funding instrument for the TEN-T (doc. 10564/12 of 1<sup>st</sup> June 2012).

On the whole, however, we can safely say that the European Union is taking a series of decisive measures which will influence both the quality and capacity of air traffic in years to come, enhance the competition amongst all airport stakeholders, increase the number of airports, streamline aviation security and improve services in their entirety.



## EU'S DEVELOPMENT OF SESAR

by *Doriano Ricciutelli*

On 22<sup>nd</sup> December 2011, at the request of the Council, the Commission adopted its Communication on the preparation of the deployment phase of the SESAR Programme. SESAR (Single European Sky ATM Research) is the technology pillar of the SES policy.

In its Communication, the Commission sets out the path for establishing governance and incentive mechanisms, so that SESAR can be deployed in a timely and synchronised manner. In particular, it proposes to make use of 'common projects' and 'guidance material'<sup>1</sup>. Incentive mechanisms, aimed at, amongst others, industrialising the results achieved in the development phase, will include EU financial support<sup>2</sup> that will be channelled through the common projects. Before the end of 2012, having consulted the Member States and stakeholders, the Commission will establish guidance material for the common projects. It will contain details about the 3 governance levels and the eligibility criteria for the common projects.

With a view to a smooth transition to the deployment phase the Commission will ensure that the network strategy plan<sup>3</sup> and the Master Plan<sup>4</sup> are consistent.

Given that SESAR deployment will take many years, ATM R&D will have to remain closely linked to deployment and not lose track of the changing operational environment.

In its development phase, SESAR is managed by the SESAR Joint Undertaking (SJU)<sup>4</sup>, whose mandate expires in 2016. The Commission will organise the necessary consultations and evaluation, in order to submit a proposal in view of extending SJU's mandate.

The Commission will enhance its cooperation with Eurocontrol within the SES framework as well as conclude a high level agreement between the EU and Eurocontrol<sup>5</sup>.

It is useful to point out that the Commission will implement the Single Sky Committee's<sup>6</sup> recommendations to strengthen the steering process in the early deployment phase and

1 Regulation (EC) 550/2004 amended by Regulation (EC) 1070/2009, Article 15a, OJ L300, p.34, 14.11.2009.

2 See: European Master Plan and Proposal for a Regulation of the European Parliament and the Council establishing the Connecting European Facility (Com(2011) 665 of 19.10.2011).

3 Regulation (EU) 677/2011, Annex IV, OJ L 185, p.22, 15.7.2011

4 Regulation (EC) 219/2007 OJ L 64 p.1, 27.2.2007

5 Council's mandate of 6.10.2011

6 See: Regulation (EC) 549/2004, Article 5.1, OJ L96, p.6, 31.3.2004 and Council Resolution on endorsement of the European Air Traffic Management Master Plan.



ensure continuity with the future deployment governance system.

Moreover, in the proposal for a Regulation of the European Parliament and the Council on Union guidelines for the development of the Trans-European Transport Network<sup>7</sup>, it says in art. 31 that 'in the framework for priority infrastructure development', 'Member States and other project promoters, when promoting projects of common interest and in addition to the priorities set out in Article 10, shall give consideration to: (...) c) supporting the implementation of the Single European Sky and of air traffic management systems, in particular those deploying SESAR'.

Finally, during the TEN-T Days Event which was held in Antwerp, Belgium, on 29<sup>th</sup> and 30<sup>th</sup> November 2011, the above-mentioned legislative proposal was dealt with during a workshop on 'Innovation and New Technologies'. At the end of the workshop, participants drew up conclusions underlining the importance of synchronised efforts and timing for SESAR and of the introduction of accompanying instruments. It was also said that SESAR, being one of the traffic management systems with the highest EU added value, would be able to count on the highest European financing rates.

7 COM (2011) 650 650 of 19.10.2011.



## EU GUIDELINES FOR THE DEVELOPMENT OF THE TRANS - EUROPEAN TRANSPORT NETWORK

by *Doriano Ricciutelli*

On the 12<sup>th</sup> December 2011, the Transport Council took note of a report by the Polish presidency on the proposed regulation (COM (2011) 650 final of the 19<sup>th</sup> of October 2011) regarding EU guidelines for the development of the TEN-T.

On the 24<sup>th</sup> of October the proposal has been transmitted by the European Commission to the Council for approval. The aim of the proposal, which will supersede Decision 661/2010<sup>1</sup>, is to establish, in a renewed fashion, a complete trans-European transport network, TEN-T, which can cope with traffic fluxes, and connects the whole Union territory in an intermodal and interoperable way.

The legislator opted for a regulation as a legal instrument, in order to impose uniform legal requirements for the completion and maintenance of infrastructure, requirements which must be respected not only by the Member States, but also by whichever entity, be it public or private, which is responsible for the TEN-T network.

In this way, existing weaknesses in the infrastructure should be resolved, fragmentation and 'bottlenecks' in passenger and freight transport eliminated, as well as the, often varied, national operating standards aligned.

This in turn, should lead to a better functioning of the internal market, and an enhanced economic, social and territorial cohesion<sup>2</sup>.

The challenges for the TEN-T policy are identified in the Commission's White Paper, 'Roadmap to a Single European Transport Area - Towards a competitive and resource-efficient transport system'<sup>3</sup>. Those challenges will have to be met by a long-term strategy up to 2030-2050.

TEN-T will be developed gradually by means of a dual layer approach, consisting of a core and a comprehensive network. By comprehensive network is meant a European-wide transport network assuring the accessibility of all regions in the Union, including peripheral regions. It should be in place by 31<sup>st</sup> of December 2050 at the latest. The core network should be a subset of the comprehensive network, representing the most important nodes and links. It should be completed by 31<sup>st</sup> of December 2030.

### AIR TRANSPORT

As far as air transport is concerned, the proposal contains in its Annex I a series of maps

1 Decision 661/2010 /EU, a recast of the previous TEN-T Guidelines (Decision 1692/96/CE and Decision 884/2004/CE);

2 TEN-T funding should be based on the "Connecting Europe Facility (Proposal for a Regulation 665/2011/0302(Cod));

3 COM(2011)144;



which indicated those airports that are part of the comprehensive network. Air transport infrastructure includes in particular air space, routes and airways, and airports, as well as associated equipment and ITS<sup>4</sup>.

Moreover, it is stated that an airport shall comply with one of the following criteria:

- passenger airports should have a total annual passenger traffic of at least 0,1% of that of all Union airports, based on Eurostat figures, unless the airport is at a distance of at least a 100 km from the nearest airport in the comprehensive network, or at least 200 km, if the region has a high-speed railway line.

- cargo airports should have a total annual cargo volume of at least 0,2% of the total of all Union airports, again based on Eurostat figures.

It is also foreseen that Member States and airport operators offer at least one terminal open to all operators in a non-discriminatory way, and that they apply transparent charges. Together with air carriers, they must ensure that air traffic management infrastructure enables the implementation of the Single European Sky.<sup>5</sup>

What is important is that under the present Ten-T Guidelines the new core European transport network will link 37 key airports with rail connections into major cities.

The proposal dedicates a lot of attention to the sensitive field of security, stipulating that all three above-mentioned parties shall ensure that common basic standards for safeguarding civil aviation against acts of unlawful interference, as set out in Regulation 300/2008, apply to the air transport infrastructure of the comprehensive network. I would like to refer in this context to Commission Regulation 185/2010, which contains detailed measures for the implementation of the afore-said Regulation.

Moreover, recital 24 of the proposal says that the guidelines should contain provisions regarding the safety and security of passengers and freight, the impact of climate change and of natural and man-made disasters.

Apart from the priorities set out in the proposal, Member States and project promoters should pay special attention to optimising the existing infrastructure, increasing airport capacity, implementing the Single European Sky and air traffic systems, in particular those deploying SESAR (as part of the intelligent transport systems, ITS), and the usage of clean fuels.

Finally, as far as external relations are concerned, the proposed Regulation allows the Union to cooperate with Third Countries in projects of mutual interest, which facilitate air transport to and from Third Countries, in particular by extending the Single European Sky and air traffic management cooperation.

<sup>4</sup> Decision 661/2010 only describes the "characteristics of the Air traffic management network";

<sup>5</sup> In accordance with (the framework) Regulation 549/2004, (the service provision). Regulation 550/2004, (the air space) Regulation 551/2004 and (the interoperability) Regulation 552/2004.





### RECENT DEVELOPMENTS AND CONCLUSION

During their meeting of the 12<sup>th</sup> of December 2011, the Member States endorsed the dual layer approach, although a number of points needed further clarification, such as the deadlines for the completion of both type of networks, the cost of adapting to the requirements for the various transport modes, in particular the railways, and the choice of a Regulation as a legal instrument, which is binding for all those concerned, therefore not only the Member States, but also local and regional authorities as well private entities, instead of a Decision, as is the case of the existing guidelines.

On the whole, however, Ministers expressed a favourable opinion on the general approach to the new rules, and, during the Transport Council of the 22<sup>nd</sup> of March 2012 they reached an agreement on the proposal.

Finally, the proposed regulation will have to be examined by the European Parliament, which is expected to approve the text by mid 2013.