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CONTENTS

Implementing SWIM: Technological and Institutional Challenges

*by Giuliano D'Auria**

The management of different types of ATM (Air Traffic Management) information has until now evolved independently as each stakeholder gathers its own data independently and asynchronously. As a result of this bottom-up approach, today's ATM information systems are insufficiently integrated, resulting in organizational and institutional barriers which prevent the timely use of relevant information and the optimization of the entire system.
The problems highlighted here are typical for all those Ultra Large Scale (ULS) systems which embrace geographical areas interconnecting multiple systems and subsystems representing heterogeneous stakeholders each with their specific requirements.

THE NEED FOR SWIM

It is in response to this fundamental challenge that the vision of SWIM (System Wide Information Management) has been identified as a fundamental enabler for the ATM system of the future.
The need for SWIM is widely recognized and lies at the very heart of the future ATM defined within both the SESAR and NEXT Gen initiatives. The main objective of SWIM is to enable a seamless information sharing between the air transport stakeholders as, for example, airports, airlines, military air defense and Air Navigation Service Providers (ANSP).
Swim opens up a collaborative environment within a highly distributed system of systems including the most diverse ATM players, each with their own background and needs.
System Wide Information Management constitutes the future software infrastructure which will interconnect the multiplicity of stakeholder and systems which take part in the ATM domain; its task will be to represent the software bus allowing the realization of seamless integration among geographically distributed and heterogeneous systems providing a common interface to access domain services and a uniform information model for the data exchange and intercommunication among each of such systems as well as, of course, including strict security characteristics together with scalability, performance, reliability, maintainability and evolution.

TECHNOLOGICAL REQUIREMENTS AND SOLUTIONS

When considering the practical development of SWIM, it must be considered that, in real life, these Ultra Large Scale systems are rarely built and deployed in a single point in time; more likely, a number of industrial actors take part in building, testing and turning into

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operation each single instance of a ULS system. To increase complexity, often the operational execution and management of each "piece" of the system falls under the responsibility of yet other parties (the final stakeholders) which will be primarily moved by business efficiency and economic revenue of their specific segment rather than strictly technical considerations relating to the overall system.

From the vision laid out above, it is clear that the complexity of building SWIM, as with any ULS systems, not only resides in technical but also "organizational" considerations which in turn may add requirements to system capabilities and design characteristics. Within this scenario the significance of developing an overall architecture for SWIM which ensures decoupling, flexibility, modularity and interoperability characteristics becomes especially relevant. This is a good example on how the complexities of the institutional environment influence the technical requirements relating to the implementation of SWIM.

Different technologies are able to help the designers to reach the goal of building this kind of system both for distributing data, as well as requesting services to remote system instances. More specifically, principles derived from Service Oriented Architectures (SOA) help in reaching the decoupling and flexibility levels referred to above.

SWIM lies at the very heart of SESAR's vision for the future ATM and therefore figures very prominently in its work programme. The fundamental task of agreeing on a common language allowing the exchange of information among heterogeneous ATM players is responsibility of SESAR WP8. The output of this WP will be the definition of a data model comprising all information domains involved in Air Traffic Management. WP8 therefore represents the necessary foundations for the implementation of SWIM, which is developed within SESAR WP14.

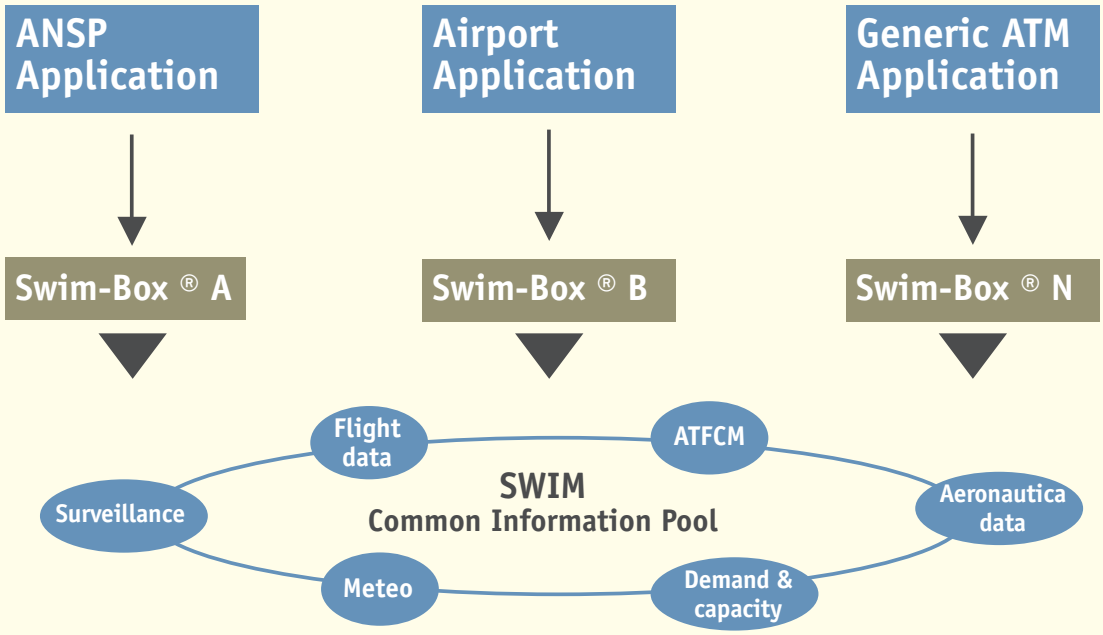
SESAR's work programme is set out to benefit and capitalize from previous experience on SWIM and for this purpose includes a project aimed at capturing the know how gained through the FP6 SWIM-SUIT project.

The recently completed SWIM-SUIT Project involved a large international consortium led by SELEX Sistemi Integrati, with the objective of assessing the feasibility of SWIM through the realization of a first prototype connecting stakeholder applications representative of the future SESAR environment.

The SWIM-SUIT project has given the possibility to the project partners to have hands on experience in realizing a first SWIM prototype. This has provided a unique opportunity to test and experiment solutions and technologies capable of supporting the flexibility and decoupling mentioned above. The architectural solution developed by SWIM-SUIT is based on the Swim-Box®, which represents the access point for stakeholder applications to enter the SWIM world. Swim-Box® has become a recognized baseline for SWIM, which will evolve as standards get better defined within the international scenarios, such as SESAR and NEXT GEN.

Swim-Box® acts as gateway towards the SWIM collaborative environment and shields the applications from the details and complexities of the SWIM technical implementation, thus providing independence from SWIM technological choices.

Swim-Box® therefore provides an entry point and interface for the most diverse applications representing the air transport players to plug into SWIM, taking care of the complex communications patterns supporting the large distributed systems.
This allows Stakeholder applications to focus on their key functions while leaving the management of communication aspects, including security and data distribution, to the Swim-Box®.



TURNING THE VISION INTO REALITY

The SWIM concept is based on the recognition that by sharing information among ATM actors, a collaborative environment will be stimulated setting the foundations for optimizing the overall ATM system. This collaborative model raises issues which go well beyond SWIM as a technical enabler. Technology issues may indeed be minor compared to the complexity of implementing SWIM in the real world, which raises a range of issues related to the institutional framework in which it will be deployed.
For this purpose the SWIM-SUIT project has already made an initial assessment of legal and financial implications of SWIM implementations coming up with an initial set of proposals on the governance and contractual framework regulating the relationship between the owner and/or operator of the system and the vast number of users. This preliminary analysis has been extended to consider the critical implications related to the liabilities arising from a malfunctioning of SWIM.
These are all fundamental issues which will need to be elaborated further in order to turn the SWIM vision into reality.

IATA Conditions of Contract and Carriage:
a Jeopardized Initiative towards the Harmonization of Airline-Passenger Contract

by Francesco Fiorilli *

1. INTRODUCTION

Since the beginning of the commercial aviation, passengers protection has always been an important issue. Warsaw Convention[1] (*hereinafter* 'WC') and its successor Montreal Convention[2] (*hereinafter* 'MC') have provided a set of uniform rules related to the international carriage by air. However, these provisions do not cover the entire spectrum of issues arising from the relationship between air carriers and passengers.

As a consequence, there is a need for other sources of law to supplement these rules.

Being aviation a globalised industry, it is essential, for reasons of efficiency and certainty, to set up (or, at least, trying to) uniform rules. Aware of this, the International Air Transport Association (*hereinafter* 'IATA'), has drafted standard Conditions of Contract and Conditions of Carriage, determining rights and obligations of passengers and air carriers. However, this remarkable idea, has been undermined by regional and national initiatives, among which the EU Regulation 261/2004.[3]

This article will analyse, in a european-oriented approach, the role of the IATA Conditions of Carriage and Contract in the framework of passengers/consumers protection as regulated by international conventions and european regulations. In order to demonstrate the risks inherent to national and regional (EU) initiatives in the aviation industry, references will be made to some practical examples and case law. The main question underlying this contribution will be: are the recent developments a real benefit for air passengers?

2. THE NEED FOR CONTRACTUAL PROVISIONS

As stated before, WC and MC do not regulate all the aspects of the relationship between passengers and air carriers. The title itself, 'Convention for the Unification of Certain Rules...' (emphasis added), clearly shows the limits in the scope of these international instruments.

Even in areas which fall under their scope, there could be a need for supplementary rules to clarify or specify these uniform provisions. For example, the provision dealing with actions for damages, leave unanswered the question of who have the right to bring suits and what are their respective rights.[4] National laws or, if applicable, other sources of law, have to fill this gap.[5]

However, national or regional legislation, does not always give an answer to all the matters

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[1] *Convention for the Unification of Certain Rules Relating to International Carriage by Air (signed at Warsaw 12 October 1929) ICAO Doc 7838 (Warsaw Convention).*

[2] *Convention for the Unification of Certain Rules for International Carriage by Air (signed at Montreal 28 May 1999) ICAO Doc 9740 (Montreal Convention).*

[3] *European Parliament and Council Regulation (EC) 261/2004 Establishing Common Rules on Compensation and Assistance to Passengers in the Event of Denied Boarding and of Cancellation or Long Delay of Flights, and Repealing Regulation (EEC) 295/91 [2004] OJ L46/1.*

[4] *WC, Article 24(2); MC, Article 29.*

[5] *PPC Haanappel 'The Right to Sue in Death Cases Under the Warsaw Convention' (1981)*

falling outside the provisions of the two Conventions. As a consequence, air carriers and passengers have to define their relationship by contract.
Generally speaking, the importance of contractual provision is also given by the fact that a contract is the best and closest instrument available to consumers in order to fully understand their rights and obligation. Whether this assumption is true for air passengers is subject to strong debates at the international, regional and national level.

A. THE ROLE OF IATA

By definition, aviation is one of the principal examples of globalised industry.
Passengers can travel all around the world, both using a single airline or several airlines.
Without taking into consideration code-sharing agreements between airlines, which do not form part of this article, when using multiple airlines passengers would be subject to different conditions of carriage and contract. From a practical point of view, this would lead to huge problems in terms of efficiency and certainty. As correctly stated by IATA, '[c]ommon or compatible systems and standards are needed to enable international networks to meet increasing demand.'[6]
IATA is the global trade organisation of the world's airlines and its Members comprise over 230 airlines, representing 93% of scheduled international air traffic.[7] This clearly shows the importance of its role in the aviation industry.
Although its resolutions do not have the force of law, IATA and its Members have been historically committed in providing rapid and efficient solutions to the need of aviation and in promoting harmonisation at the global level. In this regard, one of the best example is the 1995 IATA Inter-Carrier Agreement, by which airlines agreed to waive the WC's limitation of passenger liability, implementing it in their existing conditions of carriage.
Aware of the aforementioned problems and priorities, IATA developed standard rules governing the contractual relationship between passenger and air carriers, the IATA Conditions of Contract and Conditions of Carriage, which will be discussed in the following paragraphs.

3. IATA CONDITIONS OF CONTRACT

IATA Conditions of Contract, which are printed in all passengers' tickets, are based on IATA Resolution 724 which binds its member airlines. Although IATA doesn't have any sanction mechanism to guarantee the compliance with its resolutions, market forces can be regarded as the main sanction instrument since, as correctly stated by Professor Haanappel, the uniformity of contractual provisions is essential for interline operations,[8] and thus non-compliance with standard terms would cause airlines problems and difficulties when running their business. Without going deeply into all the provision drafted by IATA,[9] it is essential to give a general overview of the Resolution 724 and to point out the most relevant clauses.

[6] *IATA 'Comments on the European Commission's Consultation Paper: Air Passenger Rights in the European Union' (March 2000) p 3 http://www.iata.org/SiteCollectionDocuments/GPcomfinal.pdf.*
[7] *http://www.iata.org/ABOUT/Pages/index.aspx.*
[8] *PPC Haanappel The Law and Policy of Air Space and Outer Space. A Comparative Approach (Kluwer Law International The Hague 2003) 84.*
[9] *http://www.iatatravelcentre.com/e-ticket-notice/General/English/.*

IATA Conditions of Contract can be divided in three parts. The first part, entitled 'NOTICE of Liability Limitations', deals with the application of international conventions:

The Montreal Convention or the Warsaw Convention system may be applicable to your journey and these Conventions govern and may limit the liability of air carrier for death or bodily injury, for loss or damage to baggage and for delay.

The second part, entitled 'Notice of Contract Terms Incorporated by Reference', is set of six clauses which summarise the contents of Conditions of Carriage. The most important clause is clause 3, the text of which reads:

The Conditions, Regulations and any applicable tariffs of each carrier are, by this notice, incorporated by reference into and made part of you contract of carriage.

The third part contains special notices dealing with denied boarding, baggage, check-in times and dangerous goods.

IATA Conditions of Contract have always been under scrutiny of Courts and regulators. The most debated clause was the old clause 9, which reads as follows:

Carrier undertakes to use its best efforts to carry the passenger and baggage with reasonable dispatch. Times shown in timetables or elsewhere are not guaranteed and form no part of this contract. Carrier may without notice substitute alternate carriers or aircraft, and may alter or omit stopping places shown on the ticket in case of necessity. Schedules are subject to change without notice. Carrier assumes no responsibility for making connections.

This clause was a clear violation of Article 19 of the WC and MC, and therefore following several critics from Courts and aviation authorities in different jurisdictions,[10] IATA agreed to amend its Conditions of Contract.

4. IATA CONDITIONS OF CARRIAGE

The rules applicable to international flights operated by member airlines are set out in the Conditions of Carriage. These standard conditions are provided by IATA Recommended Practice 1724 (*hereinafter* 'RP 1724'), which, being only a set of recommended rules, is not binding for its members. The reason why IATA decided to adopt this instrument, instead of a resolution, was the idea of giving airlines discretion in some areas in order to comply with national laws. However, many airlines just incorporated the full text of the RP 1724 in their Conditions of Carriage without question.

RP 1724 is a set of eighteen Articles, regulating the relationship between passenger and airlines. A detailed analysis of these Articles falls outside the scope of this contribution. The most relevant provisions, some of which will be discussed later in this article, deal with applicability (Article 2), tickets (Article 3), refusal and limitations of carriage (Article 7), schedules, delays and cancellation of flights (Article 9), and liability for damage (Article 15).

[10] *See supra footnote 8. Swiss federal authorities obliged Swiss carriers to print on their tickets that, in case of conflicts, Article 19 of the WC would have prevailed over clause 9. In 1983 German Bundesgerichtshof (German Supreme Court), invalidated clause 9 alleging the violation of German legislation on general conditions of business, leaving only the first sentence of clause 9 intact. Therefore Lufthansa had to amend its Conditions of Contract (German Federal Court of Justice, NJW83, 1322ff).*

Unlike the Conditions of Contract, the Conditions of Carriage are not printed on the passenger's ticket which, *prima facie*, is the evidence of the contract.[11]

However, these conditions do form part of the contract pursuant to clause 3 of the Conditions of Contract. Therefore, it is essential that, before entering into a contract, passengers receive adequate information about all the conditions applicable to their flight in order to make informed choices.

According to European Commission, air passengers do not receive from the airlines enough informations about their rights and obligations; this is one of the reasons why it decided to adopt a body of legislation to protect the interests of air passengers.[12]

Apart from few exceptions, which have been reported by Courts in some jurisdictions,[13] the author does not share this view. When booking tickets online, for instance, it is usually quite easy for passengers to read the applicable Conditions of Carriage. However, they often skip this passage and they buy their tickets without reading all the informations at their disposal.

Accordingly, the author share the view expressed by IATA and BAR UK[14] in their answer to the European Commission Consultation Paper on Air Passenger's Rights:[15]

'We also believe that information provided by airlines in sufficient...The information is available, what appears to be lacking is the willingness or need for consumers to consult this information'[16].

5. FREEDOM OF CONTRACT?

The text of Article 27 of the MC reads as follows:

Nothing contained in this Convention shall prevent the carrier... from laying down conditions which do not conflict with the provisions of this Convention.

From the letter of the Article above, it would seem that IATA standard contractual provision may be valid as long as they comply with the rules set up by the MC. However, this is not true for two main reasons:

1) national or regional legislation in areas falling outside the scope of the Convention may have an impact on the contractual relationship between passengers and airlines (see *infra* paragraph 6);
2) in areas falling under the scope of the Convention, national or regional legislation, by

[11] *IATA 'Conditions of Carriage', Article 3(1).*
[12] *European Commission 'Communication from the Commission to the European Parliament and the Council: Protection of Air Passengers in the European Union' COM(2000) 365final http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=COM 2000:0365:FIN:EN:PDF; European Commission 'Consultation paper of Directorate-General for Energy and Transport, with Directorate- General for Health and Consumer Protection: Airlines' contracts with passengers' (June 2002) http://ec.europa.eu/transport/air_portal/consultation/doc/2002_09_30/contrat-cons_en.pdf.*
[13] *See, for instance, Belgian Commercial Courts ruling on Brussels Airlines and Ryanair Conditions of carriage. Report by PD Frühling in International Law Office (July 2010). www.internationallawoffice.com/newsletters/detail.aspx?g=953c7924-9b5d-4644 ac5adb689aeeb7bd.*
[14] *Board of Airline Representatives in the UK.*
[15] *European Commission 'Public Consultation on Air Passenger's Rights' (2010). http://ec.europa.eu/transport/passengers/consultations/doc/2010_03_01_apr_questionnaire.pdf*
[16] *IATA 'Response to European Commission's Public Consultation on Air Passengers' Rights'(2010) p 4. http://www.iata.org/worldwide/europe/Documents/Govaf_1107ec_passenger_rights.pdf BAR UK 'Response to European Commission's Public Consultation on Air Passengers' Rights' (2010) p 3. http://www.bar-uk.org/matter/responses/2010/Response_Pax_Rights_Consultation.pdf.*

getting around the hierarchy between legal instruments, may impose other rights and obligations to passengers and airlines (see *infra* paragraph 7).

As already discussed above, IATA resolutions and recommended practices do not have the force of law. Thus, its Conditions of Contract and Carriage have to comply both with international, regional and national laws. This argument is also confirmed by Article 2(4) of the RP 1724 which reads:

[t]hese Conditions of Carriage are applicable unless they are inconsistent with our Tariffs or applicable law in which event such Tariffs or laws shall prevail.

6. COUNCIL DIRECTIVE 93/13/EEC

In 1993 the Council of the European Union (at that time European Economic Community) adopted the Directive 93/13 on unfair terms in consumer contracts.

The purpose of this Directive was to approximate the laws, regulations and administrative provision of the Member Stases relating to unfair terms in contracts concluded between a seller or supplier and a consumer,[17] and, in particular, to protect consumers from unfair terms contained in pre-formulated standard contract not individually negotiated.

The most important provision is Article 3(1), which reads:

A contractual term which has not been individually negotiated shall be regarded as unfair if, contrary to the requirement of good faith, it causes a significant imbalance in the parties' rights and obligations arising under the contract, to the detriment of the consumer.

Contracts between airlines and passengers are a typical example of 'nonindividually negotiated contracts'. Hence, since the Directive is of general application, the surely fall under its scope. Thus, IATA Conditions of Contract and Conditions of Carriage have been constantly under scrutiny.

In 1997 the European Commission ordered a study about the consistency of IATA Conditions of Carriage with the Directive 93/13. Some revisions were suggested, in particular with regard to the lack of passenger rights in case of delay and cancellation, the non transferability of air tickets, the lost tickets policies and the charging practices for excess baggage.

During the mid-1990ˢ, the Air Transport User Council (*hereinafter* 'AUC') started to challenge actively the fairness of the RP 1724 under the UK's Unfair Terms in Consumer Contract Regulations which implemented the EU Directive 93/13 in the UK. In 1999 it ended up filing a complaint to the UK Office of Fair Trading (*hereinafter* 'OFT') which, after almost a year of negotiations, agreed with IATA to draft a new version of the RP 1724 amending terms potentially unfair.

The most important changes are as follows:[18]

- transferability of tickets: in the revised terms, anyone prevented from travelling b 'force majeure' is now entitled to a credit note for non-refundable travel which ca also be used to buy a flight for another person.

[17] *Directive 93/13/EEC, Article 1.*
[18] *Barlow Lyde & Gilbert 'BLG Aviation News. Issue 3 Winter 2000' http://www.blg.co.uk/pdf/Aerospace%20News-3-01.12.2000.pdf.*

- schedules: the revised terms state that ticket purchasers should be told of a flight time change as soon as possible. Passengers also have the right to a refund if there is a significant change in the flight time and the airline is not able to book an acceptable alternative flight.
- agents: a term under which airlines could evade responsibility for what their agent agreed has been deleted from contracts.
- code sharing: where an airline operates a code share, passengers now have the right to be told this at the time of buying the ticket.

Although the application of the EU Directive brought several benefits for consumers, there is an important issue undermining its purpose: Member States are responsible for its enforcement. Therefore, the same term, which is regarded as fair in one jurisdiction, may be interpreted, under the same law, as unfair in other jurisdiction. The practical outcomes, in terms of certainty and uniformity, are devastating.

The following example gives and overview on how the same term can be interpreted in different ways by Courts in different jurisdiction or even by Courts within the same jurisdiction.

A. SEQUENTIAL USE OF COUPONS

Article 3.3.1 of the RP 1724 states as follows:

The Ticket you have purchased is valid only for the transportation as shown on th Ticket, from the place of departure via any Agreed Stopping Places to the final destination. The fare you have paid is based upon our Tariff and is for the transportation as shown on the Ticket. It forms an essential part of our contract with you. The ticket will not be honored and will lose its validity if all the Coupons are non used in the sequence provided in the Ticket. (emphasis added)

Airlines' tariff system is based on complicated market studies. Ticket prices are usually determined by offer and demand, including factors like minimum duration of the stay, refundability etc. As an example, Alitalia would consider flights from Rome to Frankfurt and flights from Frankfurt to Rome as being two different markets, although they cover the same distance, and thus it would apply different fares.

Booking a one-way ticket or a return ticket is also part of the airlines' pricing strategy. For instance, a one-way ticket from Milan-Linate to Amsterdam with Alitalia costs around 800 euros, while a return ticket costs around 120 euros. Passengers would then find cheaper to buy a return ticket and use it only for the needed leg of the journey (so called 'smart-ticketing').

In accordance with the above provision, however, airlines have started to deny boarding if such behaviour is discovered. Consumers' Associations and individuals challenged this conditions as being unfair before Courts in their jurisdictions.

The followings are few examples of Courts' judgements dealing with the sequential use of coupons:

- 2002, French Cour de Cassation: in accordance with the decisions of lower courts the Court confirmed the right of the carrier (AF in this case) of requiring the complete and sequential use of ticket coupons.[19]

[19] *BRU Av. Rep. 07/03.*

- 2006, Cologne Court of Small Claims: a carrier (LH in this case) is not allowed to cancel a booked return flight if the passenger fails to make use of the first leg of journey. A passenger is allowed to decide which leg of a booked roundtrip he will use.[20]
- 2009, Frankfurt District Court: a carrier (BA in this case) cannot enforce provision of carriage requiring the sequential and complete use of flights coupons.[21]
- 2009, Cologne District Court: airline (LH in this case) tariff system justify such provision. It avoids 'smart-ticketing' practices.[22]
- 2010, German Federal Court of Justice: passengers, as long as they're not acting in breach of good faith, are not obliged to use every coupon of the ticket.[23]

The answers are far from being the same, leaving the problem unsolved and increasing the level of uncertainty among passengers and airlines. The first four decisions are quite straightforward allowing or forbidding airlines' practice. Even the decision of the German Federal Court of Justice, which seems to be the most balanced one, does not provide a clear element to figure out if, and to what extent, airlines are allowed to deny boarding when passengers do not use coupons in sequence. The 'good faith' requirement is indeed blurry and leaves the question open to different interpretations.

7. REGULATION (EC) 261/2004

Regulation 261/2004 (*hereinafter* 'Regulation') provides a set of rules on compensation and assistance to passengers in the event of denied boarding, cancellation and delay. Although these provisions seem to fall under the scope of the WC and MC, therefore resulting in the violation of their exclusivity, the Court of Justice of the European Union shared a different view in its 2006 decision.

Airlines affected by the Regulation have to comply with the strict and costly duties set up by its provision, amending accordingly their conditions of carriage. This causes huge disparities between airlines, undermining the idea of uniformity at a global level which IATA tried to promote with its Conditions of Contract and Conditions of Carriage.

The delusion of IATA is clearly expressed in the 2006 Annual Report:

In the long run, the worst consequence of this ruling will not be the US$779 million that it will cost the airlines annually but the blessing it gives to the further fragmentation of international aviation standards. Other regulators will be encouraged to impose their own passenger protection regulations, which will undoubtedly clash with EU regulations because both will allow for extraterritorial application.[24]

8. CONCLUSION

From the above paragraphs it is clear that, in the framework of passengers protection, there's

[20] *Case No. 119, C 353/06, (2007) XXXII/3 Air and Space Law 233; see also Case No. 117, C 269/05, Reise Recht aktuell 1.*
[21] *Frankfurt am Main Oberlandesgericht, Case No 16 U 76/08.*
[22] *Köln Oberlandesgericht, Case No 6 U 224/08.*
[23] *Appealing the 2009 decisions of Frankfurt and Cologne District Courts, Case No Xa ZR 5/09.*
[24] *IATA 'Annual Report 2006' (2006) 32.*

a need for supplementary provisions integrating those of WC and MC.
This brings the attention to the old dispute between 'soft law' instruments and 'hard law' instruments. On the one hand, 'soft law'[25] guarantees a gradual and flexible approach to the arising issues, while, on the other hand, 'hard law'[26] guarantees (*rectius* should guarantee) certainty.
In the international context, where consensus on 'hard law' instruments is difficult to reach, 'soft law' is, at least at the early stage, the best instrument. IATA's initiative creating a standard form for air transport contracts in surely remarkable.
However, creating harmonised private law instruments by an international private association is a difficult task, since, as pointed out in this article, it may be undermined by national law or regional law.
European initiative by Regulation 261/2004 is indeed questionable. Although European Court of Justice ruled in favour of the compatibility between the EU Regulation and Montreal Convention, the author has still doubts about its validity.[27]
The risk is that, following EU initiative e ECJ decision, other countries may decide to adopt similar legislations, nullifying the benefits, in terms of certainty and uniformity, obtained by the adoption of the Warsaw Convention and its successor Montreal Convention. Aviation industry, because of its international dimension, would surely be damaged: the confusion created by this inauspicious scenario would then result in higher costs for airlines, which will have to be recouped from passengers, as the main source for airlines' revenues. Oxymoronly, rules set up with the aim of protecting air passengers would then cause damages to them.
In such event, in the international air transport, the role of IATA Conditions of Contract and Conditions of Carriage, and its underlying 'dream' of uniformity, will definitely come to an end.

The Review of some Aspects of State Sovereignty in the Airspace

by Małgorzata Polkowska[*]

Air sovereignty, considered as a principle of contemporary international law, is subject to change when it comes to the scope and manner of its performance. Factors such as the development of technology, economic factors, and specific interests of the countries, play important role in approach to the scope of this institution of international law.
Sovereignty as one of the fundamental concepts in international public law is recognized, in particular, as a "territorial sovereignty", including the state's airspace. It seems that in the literature there is no comprehensive and current study on the evolution of sovereignty in the airspace. In international public law, one can find only notion of the general principle of state sovereignty in the air, in accordance with Article 1 of the Chicago Convention.[28] This article

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[25] *Defined as a set of rules of conduct which in principle have no legally binding force but which nevertheless have practical effects.*
[26] *Defined as a set of binding rules.*
[27] *See in this regard JJ Wegter 'The ECJ Decision of 10 January 2006 on the Validity of Regulation 261/2004: Ignoring the Exclusivity of the Montreal Convention' (2006) XXXI/2 Air and Space Law 133.*
[28] *Convention on International Civil Aviation, signed at Chicago, on 7 December 1944- ICAO Doc. 7300/8*

recognizes that contracting states have complete and exclusive sovereignty over the airspace above its territory. Each country has the right to restrict the traffic rights on the domestic market for domestic and foreign carriers. This sovereignty is complete (Fr. complète) and exclusive (Fr. exclusive). A State may freely exercise all rights over their airspace, prohibit, order or permit, and to take any action in it (provided that they are not prohibited by international law). Sharing air space depends on the will of the state. At this time no state allows the use of its airspace by foreign aircraft without explicit consent. Conditions of the using of the airspace are governed by national law or international agreements which the State is a party to. Consent to be bound by an international agreement (multilateral or bilateral) is an act of the will of the state.

The principle of freedom of the air allows all aircraft, regardless of their nature, type, ownership and nationality, to operate in an arbitrary manner over the territory of a State. Some authors, however, deny the existence of this concept (regardless of the denial of the rule) in the era of the evolution of aviation law.[29]

While the Chicago Convention affirms the sovereignty of the air of all states, there are a number of contentious issues in its theoretical and practical application. Some of these problems stem from the lack of a clear definition of the limits of the vertical and horizontal borders in the Chicago Convention (important for the demarcation of the geographical extent of the sovereignty of airspace). Lack of international consensus on the delimitation of airspace and outer space remains the fundamental problem of international law. The opinion of a particular state usually depends on its level of participation in the space activities, or geographical location (geostationary orbit - GEO).

Problems related to the limits of air sovereignty tried (though unsuccessfully) to solve Article 2 of the Chicago Convention (Territory). There is no precise definition of the boundary of air (Fr. frontière aérienne) on the air or sea territories. Traditionally it is considered that state sovereignty must be effectively controlled, hence the vertical sovereignty must reach as high as the state can control it.[30] But there would be a dispute that countries technically developed have more sovereignty than the less developed.[31] One of the oldest proposals for the demarcation of air and space is to reduce the vertical sovereignty to the physical point where space begins, but there is no natural dividing line between the two spaces.[32]

One of the fundamental problems associated with the sovereignty of the airspace is the safety and supervision of civil aviation (safety and security). Safety has become one of the guiding principles, of the Chicago Convention. Any sovereign state is required to comply with and create its own supervision of the procedures concerning safety and security. When the safety standards and procedures relate to an international flight, non-application may affect

[29] *J. Naveau, Liberté de l'air, la grande illusion? Evolution et révolution du droit des transport aériens, Bruxelles 1996, p. 199–204; H.A Wassenbergh, Post – war international civil aviation policy and the law of the air, The Hague 1962, p. 130.*

[30] *P. Huet, La frontiere aérienne, limite des compétences de l'état dans l'espace atmosphérique, Revue Générale de Droit International Public, I-III, 1971, nr 1 p. 122- 133*

[31] *A. K. Kuhn, International aerial navigation and the peace conference, American Journal of International Law, 1920, p. 369-388*

[32] *H. A. Wassenbergh, Post- war international civil aviation policy and the law of the air, The Hague 1962, p. 138.*

citizens of many states. The process of applying ICAO's SARP set by the Chicago Convention, gives to a state, which allows the flights operated by a foreign aircraft and crew - to, from, or over its territory, right to expect that the aircraft and its crew comply with established ICAO - SARP's rules.

In addition, for the protection of its security, the United States, France, Canada, Italy, Korea and Taiwan have created separate areas called Air Defense Identification Zones (ADIZ) [33], or "zone of special responsibility." In the event of unauthorized intrusions there is a threat of penalties (e.g. U.S.A.), interception (e.g. Canada) or bringing down (e.g. France). Some ADIZ zones prohibit overflight by both military and civilian foreign aircraft. Thus, the establishment of ADIZ zones can be challenged under international law. Tacit approval by states may be the evidence that countries do not consider ADIZ as an extension of territorial sovereignty and the plane has the same right of free flight through the adjacent sea area, as well as the over the open sea.[34]

Member States have discretion in deciding what is appropriate to them. To choose between absolute independence and national freedom, on the one hand, and international economic, financial, technological, social and environmental mutual relations and international cooperation, on the other. Safety of air navigation, regularity and profitability are dependent on air traffic services, which are currently based on the organization of the flight information regions (Flight Information Region - referred to as FIR). In many countries navigation services are provided at the national level (national basis), rather than on the basis of cooperation (cooperative basis), while the FIR-s are closer to the national boundaries. Further efficiency and savings could be achieved in a situation where the neighboring countries together provide air traffic services over large geographic area. Increasing levels of cooperation between the States ensure, inter alia, the use of satellite technology for communication, navigation and surveillance systems that transcend national boundaries. The concept of global air traffic is widely recognized as essential. In this context, there is a fear of losing national sovereignty. There also exist physical limitations of the number of ground stations to support air traffic in each region. Hence, many sovereign states must rely on the equipment located in other countries. Another challenge to the concept of the "sovereignty of the sky" is due to the current legal framework of the Global Navigation Satellite System (GNSS). Full implementation of an integrated global system based on satellite navigation could undermine the principle of state sovereignty.

Article 28 of the Chicago Convention provides that State is responsible for providing air navigation (it is a public function of the State). In many opinions, the state under Article 28ª of the Chicago Convention will always be responsible for provided services, including any consequences arising from the activities of relevant air traffic services. States delegate

[33] *ADIZ- 35 aircraft identification zone in the air defense system. U.S. and Canada set up the zone in 1950. ADIZ is more than 200 miles wide across the Atlantic and between 10 and 150 miles wide over the Pacific, CADIZ (Canadian ADIZ) is about 65 miles wide.*

[34] *Shawcross and Beaumont Air Law, 1977 r. (last updated in 2005), vol. I, p. 26 and p. IV-2*

their sovereign rights to other appropriate authorities or air traffic agencies (in the era of commercialization and privatization they can often be private bodies) through contracts-Letters of agreements. Delegation of powers is associated with the expansion of its control (with the consent of other countries) for some, and with limiting the sovereignty of other countries in the field of air traffic management. There are not, as in the case of any implemented ADIZ zones, unilateral actions. Delegation of power of the states in the management of air traffic may affect parts of the space over the territory of other countries; bordering lying in one geographic region but also in the areas lying outside the land, such as the open sea, and ensuring some services such as air traffic control and information. In practice, countries willing to conclude bilateral and multilateral agreements (often for economic reasons and in order to increase the efficient use of airspace), create so-called "Common Airspace Blocks" for greater uniformity in the management of the airspace. States are looking for different ways to achieve further cooperation in joint management of the airspace. An example of such an initiative is the creation of a "common sky"-SES (Single European Sky). This system has a significant impact on the navigation system in Europe. Participation in the system is not based on territorial boundaries, but is based on technical and operational needs of the European air navigation. The system requires the participating countries to make concessions over their national sovereignty; the SES is thus a typical example of erosion of the traditional concept of sovereignty based on the Chicago Convention. The intend to conclude an agreement on the delegation of the providing of air traffic services is the desire to facilitate the safe performance of international air operations crossing state borders, in the interests of airspace users and their passengers, as well as to promote cooperation between the air traffic services of the contracting states. The conclusions of such agreements do not infringe on the principle of absolute and exclusive sovereignty in the airspace above its territory, or the law of each country. States still want to exercise their prerogatives relating to the protection and defense of their national airspace. Models of contracts between service providers of air traffic control have been laid down by the international aviation organizations such as ICAO and the European Organization for the Safety of Air Navigation-EUROCONTROL. [35]

Cooperation of States in the field of air traffic services reaches the beginning of the twentieth century, when the first international aviation organizations were created. The main animators of cooperation at the international level are the civil and military aviation organizations. They differ in their competence and scope of activity, but each has a definite influence on the legal regulations, operating procedures and the operation of air traffic management authorities in the aviation environment and states. Some countries implementing international commitments in its internal law, gave up some of their sovereign powers to specialized international organizations.

Another aspect of the air rights associated with sovereignty is the regulation of international

[35] *Common Format Letter of Agreement Between Air Traffic Services Units, ASM. ET1.ST015 DEL01/02, 1 January 2005 (European Air Traffic Management Programme)*

commercial air transport. New issues have emerged, such as ownership and control of air carriers. Establishing of the World Trade Organization (WTO) and GATS [36] were very important stages of cooperation in the field of international air transport liberalization.[37] The concept of sovereignty in view of processes such as airline alliances, state aid, protection of national carriers, is important and raises many legal questions. However, as was highlighted at ICAO transport conference in 1994, the concept of sovereignty is still strong, but is under pressure from the changing realities.[38]

Given that there is no general freedom to use airspace, air navigation took and takes place on the basis of multilateral, regional and bilateral air transport agreements on air services between countries, as well as in line with domestic laws or decisions of the State. The main characteristic of air transport agreements between the countries is the establishment of international air services and to this end States grant each other air freedoms. States still want to carry on their aviation policy and decide with whom they want to be associated by means of air transport agreements and to whom permit to engage in commercial flights, over or through its territory. It is worth noting that bilateral agreements are restrictive by nature, since the states grant the air freedoms and other privileges (e.g., related to capacity, frequency, choice of airports) on the basis of reciprocity and proportionality of the privileges granted. It seems, therefore, that sovereignty is not limited by the extent of granted traffic rights.

Sovereignty issues can also be observed in Aviation criminal law. Tokyo Convention - the first criminal law Aviation Convention of 1963[39] established the principle of state non-interference in the exercise of criminal jurisdiction over perpetrators of crimes committed on board aircraft. This means that the state recognized the need to limit the jurisdiction (being part of exercising their sovereignty) of the State in the face of threats of terrorist acts. Only the exceptions set out in Article 3 of the Tokyo Convention allowed for the possibility of punishing criminals by the state over whose territory the crime was committed. It seems that this situation shows that the international community recognized the need for sanction of state jurisdiction against crimes committed on board aircraft. Hague Convention (1970)[40] and Montreal (1971), [41] by analogy to the Tokyo Convention in relation to crimes of terrorism, have also adopted similar rules by which one can determine which states are responsible for carrying out criminal proceedings against the persons responsible for the acts of air terrorism. They also allow the possibility of overlapping jurisdictional powers of several countries in the

[36] *GATS - General Agreements on Trade in Services is a multilateral agreement establishing the legal and treaty framework for international trade in services; D. Sinha, Deregulation and liberalization of the airline industry (Asia, Europe, North America and Oceania), Aldershot, England, 2001, p. 10, 11*

[37] *H. Wassenbergh, Open skies/open markets: the limits to competition, w: The use of airspace and outer space for all mankind in the 21st century- edited by C. J. Cheng, The Hague 1995, p. 195-196*

[38] *A. Kotaite, Sovereignty under great pressure to accommodate the growing need for global cooperation, ICAO Journal 1999, p. 20-29*

[39] *Convention on Offences and Certain Other Act Committed on Board Aircraft, signed at Tokyo, on 14 September 1963 (Tokyo Convention), ICAO Doc. 8364*

[40] *Convention for the Suppression of Unlawful Seizure of Aircraft, signed at The Hague, on 16 December 1970 (The Hague Convention) ICAO Doc. 8920*

[41] *Convention for The Suppression of Unlawful Act against The Safety of Civil Aviation, signed at Montreal, on 23 September 1971 (Montreal Convention) ICAO Doc. 8966*

case of committing one of these acts. In accordance with the provisions of both conventions on combating acts of terrorism, each contracting state shall take such measures as may be necessary to establish its jurisdiction over the offences in the following cases: when the offence is committed in the territory of that state, when the offence is committed against or on board an aircraft registered in that State, when the aircraft on board which the offence is committed lands in its territory with the alleged offender still on board, when the offence is committed against or on board an aircraft leased without crew to a lessee who has his principal place of business or, if the lessee has no such place of business, his permanent residence in that State (Article 5).

In addition, both The Hague and Montreal Conventions by adopting the principle of universal prosecution of perpetrators of acts of air terrorism, provide for the right and obligation to take the necessary measures to establish jurisdiction by each contracting State on whose territory the criminal is found and will not be released by way of extradition for a crime which is the subject of these Conventions.

It seems that the U.S. terrorist events of 11 September 2001 changed understanding of the concept of state sovereignty in Europe and North America. Europe has placed emphasis on creation of the SES, which caused that traditionally understood concept of sovereignty has ceased to be relevant (State decided to create a common system that safeguards the interests of safety). In the U.S the opposite took place - state sovereignty, in the traditional understanding gained in importance, including control and attention to the national security. This difference in the evolution of the concept of sovereignty in two different parts of the world can be explained by the geographical locations. U.S air space is much larger and more uniform than the EU. The implementation of the idea of free flow of traffic in practice may be difficult. There will always be different types of barriers, including the desire of a country to have as much sovereignty as possible. It is worth mentioning that for many countries (especially small) tradition, culture and ideology play important role. For many countries the national carrier (as well as sea carrier) is a symbol of sovereignty and independence.[42] Opening the sky is a threat to the national carrier, since it is not known whether in a new situation it will be able to survive.

The reviews of various aspects of air traffic regulations demonstrate that the concept of "sovereignty of state" in its airspace is subject of evolution since the beginning of aviation law (and the formation of the concept of "space") until modern times. In addition:

- the notion of "sovereignty" has been affected by various aspects of the political and economic nature;
- state still put forward new claims for the extension of its sphere of sovereignty in the airspace;
- despite the above, States voluntarily waive certain attributes of their sovereignty, share it, and delegate their powers to manage air traffic to other countries or international

[42] *J. Naveau, Liberté, op.cit., p. 188*

organizations, in particular:

a)the importance of the boundary of the airspace and the open space loses its former importance in connection with the operation of some states in the outer space, States limit their sovereignty in air space on a voluntary basis;

b)states restrict their powers of jurisdiction in relation to the overflying and transgressing by foreign aircraft and refrain from the use of force against aircraft;

c)states still retain their sovereign powers in the performance of commercial activities but established same exceptions.

The principle of the sovereignty of the state in the airspace is still present and functioning, both in acts of domestic law and international law. However, it seems that the principle of state sovereignty in general, and air sovereignty, in particular, is changing and evolves and the concept of "sovereign" begins to take on a new meaning. For this reason, the meaning of "state sovereignty" in the field of international law, in particular with regard to aviation law, can not be understood as having absolute and unchanging meaning. The principle of state sovereignty is still recognized in international agreements and relations between states. Voluntary reduction of the legal powers by the States should not be seen as a decrease of sovereignty. Acting in terms of increasing international interdependence, states may delegate some powers (for example, the control and security of air navigation, safety and security of its citizens or the exercise of jurisdiction) to supranational institutions in the hope that participation in the structure of the integration will enable them to exert influence on the formula and content of cooperation, and will better shape the international environment, which, in turn, will improve implementation of the state functions (ICAO regulations, European Union).

International law as a product of the states is considered to be an instrument to protect the country, including its sovereignty. Nothing in this regard does alter the process of reduction by state of its responsibility since it is, usually, the result of the commitment on a voluntary basis. Freedom in the exercise of powers is also limited by the generally accepted standards, such as banning of the use of force or obligation to comply with certain standards of humanitarian law (ius cogens). No one argues, however, that it makes a state less sovereign.

Aerospace multilateral conventions have proven that they are a useful tool in international relations. The accession to the Convention is an act of sovereignty, by which the State accepts to be bound by the Convention, and its rules and to bear all the consequences in case of non-compliance with the obligations imposed on them. Thus, the state restricts some of their sovereign powers, while the principle of complete and exclusive sovereignty in the airspace above its territory is provided by the Chicago Convention of 1944. This principle became not only the basis of customary, but also of international law and contractual air law. Explicit recognition of the principle of state sovereignty in its airspace has its roots in international law and in the concern about the protection and safety of its territory. Important (as in the Law of the Sea) are also economic considerations.

An important feature of the sovereignty of airspace is that while it is entire and exclusive, it is not absolute, since it is limited by international law (created by the sovereign states themselves).

The Role of SatCom in European Policy Initiatives

by Veronica La Regina[*]

During the last decade, the field of communication has seen many changes in terms of user needs and related technologies. The entire phenomenon is named *convergence* and it can be classified into four categories: *convergence of services*, *convergence of transmission lines*, *convergence of terminals* and *convergence of providers*. The driver of this phenomenon is user mobility and the desire to know increasingly about where the user is, where other users are and what is available in the vicinity. This situation implies a continuous *local awareness* of people who travel and move very often. The condition of mobility implies, on its side, having a comfortable and convenient technology in terms of fast connectivity, deployment and hand-usage. Thus great efforts have been made in the development of broadband and large-capacity, info-communications network technology and the improvement of mobile communications technology resulting in the explosive growth of the Internet in terms of infrastructure and the number of users. Accordingly, prompt action to formulate and implement policies that can deal with these realities is an urgent matter in order to increase the growth and the competitiveness of EU.

SatCom, as satellite communications, can provide communication (one-to-one) and broadcasting (one-to-many) services. The sector plays a significant role in TV broadcasting due to its ability to transmit content from a single point to many users, localized in a huge area, in a very cost-effective way. This has been the pot of gold for TV broadcasting services for 30 years that has enabled the enhancement of the market power of satellite operators in economic and financial terms. The economic and social importance of this sector has induced many governments to reduce State regulation and intervention and to leave the floor to market competition forces. Nowadays, with the greater *convergence* between the two fields mentioned above, SatCom is at a relative disadvantage for the mass market when compared with traditional communication that receives higher policy attention. This has created a gap in attention to some relevant elements of user rights in the sense of the exercise of citizenship. This issue is going to be increasingly important with the advent of e-government, i.e. digital interaction between citizens and public institutions. Users/citizens, located in remote locations where terrestrial infrastructures are unaffordable to provide digital communication, cannot easily interact with government with respect to e-government services (requests for transcripts, certifications, enrolment procedures, tax

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payment system, e-justice, e-wealth, e-learning and so on). This development creates an exclusion of certain parts of society and consequently creates inefficiency and barriers to the *inclusive* growth of Europe.

In order to fill this gap in a strategic way, the European Commission has adopted a policy initiative, *Europe 2020*, establishing three imperatives for the concept of European growth: *smart*, *sustainable* and *inclusive*. The ambition is to include every European citizen in the growth of Europe and this must be achieved with the minimum level of inefficiency and with no harmful inflationary impact. This target is becoming increasingly problematic due to the continuing demand side effects of the 2008-2009 financial crisis on the market confidence of consumers. This issue has been addressed in another EU policy initiative, the *European Economic Recovery Plan*, which is an anti-cyclical measure to offset the financial crunch by providing a demand *stimulus* through four initiatives including *High Speed – Internet for Everyone,* for which purposes SatCom is potentially a highly contributive element. SatCom can also be appreciated as providing a cost-effective solution to the implementation of the EU Digital Agenda with the ambition of making *every European digital*.

The social inclusion dimension is also enhanced by other EU policy initiatives that are part of the strategic plan of *Europe 2020*, such as *New Skills & Jobs*, *Fighting Poverty* and *Youth on the Move*. For these purposes, SatCom can play a significant role providing connectivity infrastructures and services as well as requiring a high level of qualified job-skills and relevant job-mobility for employees throughout European countries. SatCom industrial capacity is not uniformly distributed among European countries; some Member States have a developed space industry and others do not. Thus a degree of transfer of knowledge and expertise is required. Moreover, in emerging European space States there is a clear trend towards the establishment of new companies belonging to the main holding groups. For instance, the establishment of corporate entities of EADS, Finmeccanica, Thales is common in the new Eastern European countries, above all when they became ESA Member States acquiring the right of *just return* on investments made for ESA programs.

Continuing with the political target of European growth, SatCom can also be an element of two other essential attributes - *smart* and *sustainable* - mainly through the policy initiatives of *Innovation Policy* and *Resource Efficiency & Energy*. SatCom can also contribute to the aim for a better life in providing near-real time communication and alert messaging systems for air and maritime safety, military communications, disaster management procedures and monitoring energy infrastructures with their high degree of criticality. In addition, SatCom is a front-runner technology in terms of performance and it can inter-play actions between the public and private actors to enhance the benefits of the investments.
All these issues indicate the magnitude of the potential contribution of SatCom to European growth as a means of advanced digital communications. In addition, as an asset located in

outer space it falls within the common policy field of European Space Policy (ESP), which has been addressed through seven space councils from 2004 to 2010. In this context, a *paradox* exists because it does not have any specific policy line. The main attention of ESP focuses on the delivery of the two flagship programs, Galileo and GMES, losing, at the same time, the necessary interaction with SatCom. SatCom will play a key role in Galileo-derived applications and services and in maximizing the value of GMES data. There is also an ESA program (ARTES 7) for a European Data Relay Satellite that could improve the data delivery system to the ground of the Sentinels, which are the EU space components of GMES. While SatCom is part of this link, any specific *ad hoc* policy for SatCom is not easy to find in the ESP. Moreover, this linkage in itself is insufficient to complete the strategic vision of the ESP because the absence of efforts to develop SatCom means, in a certain way, reducing the autonomy of Europe. SatCom provides the largest number of launches thus enhancing the performance of the European launcher – Arianne-; it permits Europe to fill the orbital positions assigned by ITU that would otherwise be lost, it sustains European know-how in digital communication in terms of patents and international relationships from the scientific, military and commercial points of view. All these achievements of European industrial policy should take the opportunity of delivering the EU Digital Agenda.

Underlining the strategic role of SatCom for the Digital Agenda, uniform quality of services over the covered area is assured. Thus, it at last permits countries to be on-line within this context. Policy makers should also consider non-budgetary measures that foster the use of SatCom and improve economic efficiency. SatCom can be the right enabler to deliver millennium goals also to European neighbors, such as Africa and the Middle East in a very cost-effective way because the services are provided with the same investment that is required for development of broadband in EU. In addition, the EU should be autonomous, not a stand-alone actor, with others depending on it. Only SatCom enables this strategic role and it can be a "traded-good" in relations with other countries, such as Russia, USA, and Asia. In addition, the EU has the duty to enhance its own growth and competitiveness also in view of the fact that foreign satellite operators can also serve European consumers; thus an opportune preventative action is required.

In addition, SatCom can enhance the role of Europe in its international relations because it can be an element of the Common Foreign Security Policy (CFSP), the European External Action Service (EEAS), the European Security and Defense Policy (ESDP) and Space Policy as discussed above. Its contribution is in terms of communication services provisions for defense purposes, trans-national borders communication and disaster management issues.

In conclusion, SatCom is an enabler element of several European policy initiatives, as table below presents. They can be grouped into four clusters, namely, *Space Policy*, *Lisbon Strategy*

and its annexed policy for growth, *International Relations* and *Industrial Policy*.

Policy field	Current policy initiatives
Space Policy	• 1st - 7th Space Councils

Lisbon Strategy	• European Economic Recovery Plan
	• Europe 2020:
	  • Digital Agenda,
	  • Fighting Poverty,
	  • Innovation Policy,
	  • New Skills & Jobs,
	  • Resource Efficiency & Energy,
	  • Youth on the Move.

International Relations	• European External Action Service • Common Foreign Security Policy • European Security & Defence Policy
Industrial Policy	• Integrated Industrial Policy • FP7:Space and ICT

Legislative Commentary

by Silvia Ceccarelli and Alessandra Laconi

Creating the Single European Sky: Regulation 176/2011 and the active informative role of Member States in the realization of the Functional Airspace Blocks (FABs).

Member States decided to solve the fragmentation of the European airspace by creating nine geographical areas by December 2012, the Functional Airspace Blocks (FABs), as required by the Single European Sky (SES) Regulations.

This measure is one of the cornerstones of the SES, representing an indispensable instrument to solve the problem of fragmentation. In fact, the FABs will improve current safety standards, help to map out shorter routes and, as a consequence, minimize air transport's detrimental effects on the environment, reduce delays, lower costs for airlines and thus provide cheaper flights for passengers.

With Regulation 176/2011 of the 24th February 2011 (FAB implementing rule), the European Commission specified the information that Member States must provide before the establishment and modification of a FAB. This information must be provided to the European Commission, EASA, other EU Member States, neighboring third countries to a FAB, adjacent air navigation service providers to those in a FAB, relevant airspace users or user groups and staff representative bodies. Furthermore, the Regulation provided the procedures that Member States must follow in providing the information and the procedures of the observations from the above parties.

The Regulation established a comparative evaluation of the efficiency of the FABs, providing for periodic consultations of all the subjects involved, so that the Commission can constantly be informed of their effective status of improvement and cohesion.

Member States will thus be required to activate themselves in order to create a real European airspace, facilitating the implementation of the binding standards set forth by the Single European Sky legislation.

New ENAC procedures for non-EU air carriers with permission to operate scheduled services to and from Italy.

ENAC, the Italian civil aviation authority, modified the established procedures for non-EU air carriers enabled to operate scheduled services to and from Italy.

The amendment concerns the case when an operator wishes to change planned flight operations previously approved under Circular EAL-15. Such a document provides that non-EU carriers must communicate to ENAC all relevant information concerning their flight operations in order to have the permission granted (information like frequency of flights, departure and arrival airports, type and registration marks of aircraft).

Starting from January 31 2011, ENAC expedited the procedure for making changes to authorized scheduled flights, if the airline do not infringe the bilateral agreement between Italy and its

(non-EU) country.
ENAC previous and binding authorization is no longer required for:
- rerouting not involving fifth freedom traffic rights;
- additional flights;
- replacement of aircrafts (if the replacement aircraft is mentioned in the carrier's air operator certificate and in a previously obtained insurance certificate);
- changes in operation date or cancellations.

ENAC must anyway be notified about these changes, and Assoclearance (the Italian agency for airport coordination) must be informed, like every airport managing company.
ENAC can thus communicate its negative opinion or skip to answer to the notification (if the modifications are considered as approved).

Case Law Commentary

by Francesco Alongi

ETS – EMISSION TRADING SCHEME

The Emission Trading Scheme (ETS) is a project launched by the European Union on 1 January 2005 which currently concerns almost 11.500 industrial plants which are collectively responsible for almost half of the EU's emissions of CO_2.
The purpose of the scheme is to monitor and report gas emissions, setting an annual cap, which will be progressively lowered in coming years. Each operator is assigned a cap by the regulatory Authority. If the actual emissions fall short of the cap, the difference can be sold according to the trading scheme set up by the Kyoto Protocol.
The products which can be traded in the carbon market are both allowances (under the ETS system) and credits (under the Kyoto Protocol's offsetting mechanisms). These units can be traded either for immediate delivery ("spot trade") or as derivatives based on allowances, such as futures, swaps and options.
In the 2008-2012 trading period, the EU has allowed operators to use Joint Implementation/ Clean Development Mechanism credits up to a percentage determined in the National Allocation plans. Unused entitlements can be transferred to the next trading period (2013 to 2020).
This project was first set up by Directive 2003/87/EC (a.k.a. "ETS directive") which instituted a trading system for greenhouse gas emissions within the Community.
The Aviation industry, like many other industries, has an impact on the greenhouse effect through the release of Carbon Dioxide, Nitric Oxide, water vapour, Sulphates and Soot Particles. However, it must be acknowledged that the impact of Aviation on climate change is rather modest, amounting to barely 2% of global CO_2 emissions and 1,15% of European CO_2 emissions.
The target of the Emission Trading Scheme is to set, by 2012, a cap to Aircraft Operators' CO_2 emission which should be 3% lower than in the years 2004-2005. The cap is scheduled to be lowered by another 5% in the years 2013-2020.

Consequently, on 24 October 2008, the Council and the European Parliament have adopted Directive 2008/101/CE which amended Directive 2003/87/CE to include air transport in the EU greenhouse emission allowance trading scheme. Directive 2008/101/EC was published in the EU Official Journal on 13 January 2009 and came into force on 2 February 2009.

All aircraft operators which carry out one of the activities listed in Annex I of the Directive are included in the EU emission allowance trading system.

The European Commission has also developed Guidelines on the detailed interpretation of the aviation activities listed in Annex I to the directive 2003/87/EC of the European Parliament and of the Council" (Decision 2009/450/EC).

In accordance with the scope of application of Directive 2008/101/EC and on the basis of the methodology described in its Paper "Aircraft operator allocation by EC Member State", the European Commission has produced a list of aircraft operators which have carried out air transports since the 1st of January 2006, assigning each operator to the administration of a Member State.

The updated list of aircraft operators was approved with a European Commission Regulation and published on the Official Journal on 29 January 2010.

The National Committee for the implementation of Directive 2003/87/EC and for the management of the projects connected with the Kyoto Protocol is the Authority competent for the implementation of Directive 2008/101/EC.

Since the 1st of January 2010, all operators included in the scope of application of the Directive must monitor their emissions and transmit an annual report no later than the 31st of March of each year. The electronic report form of the yearly emissions must be transmitted in the standard digital format set out by Commission Decision 27/2009 and certified through digital signature, to the address aviation-ets@minambiente.it.

The filing of the monitoring plan is a mandatory requirement for the assignation of an allowance pursuant to Article 1.4 of the Directive.

The competent Authority has issued the following decisions approving the monitoring plans compiled by aircraft operators:

Decision n. 03/2011, 18 January 2011

Decision n. 19/2010, 21 September 2010

Decision n. 01/2010, 14 January 2010

Moreover, all amendments to the monitoring method must be approved by the competent Authority. Aircraft operators must file the updated monitoring plan at least 90 days before the amendment to the monitoring plan. If it is not possible to respect the deadline, or if it was not possible to foresee the need for an amendment, the updated monitoring plan can filed within 30 days after the amendment.

With regard to fleet variations, aircraft operators must deliver (to the address: aviation-ets@minambiente.it) an updated monitoring plan at least 90 days before the variation.

Pursuant to letter (j) of Annex I to the Directive, a "de minimis" exemption is applicable when an aircraft operator:

a) is a commercial aircraft operator, in which case it would receive an Aircraft Operator Certificate, pursuant to paragraph 1, Annex 6 of the "Chicago Convention"; and
b) in a period of 12 months it has carried out less than 243 flights for each four-month period, or flies with annual emission below the threshold of 10.000 tons per year.

These operators can adopt simplified procedures for the monitoring of their emissions.

The Emission Trading Scheme concerns all inbound and outbound flights, with the exception of the following ones, which are exempted from the scheme:

1) State Flights,
2) Military Flights,
3) Aircrafts flying according to the Visual Flights Rules,
4) Circular Flights,
5) Test and Training Flights,
6) Rescue Flights,
7) Flights by light aircrafts (i.e. less than 5.700 Kg. of weight),
8) Public Service Obligatory flights carried out on course between the outer countries of the Union or on course with an annual capacity below 30.000 seats,
9) Flights carried out by an aircraft operator which manages less than 243 flights per year or whose emissions do not exceed the 10.000 tons.

Through the Emission Trading Scheme, the EU has put a price on carbon emissions and has demonstrated that it is possible to trade in greenhouse gas emissions. So far, the results have been encouraging: emissions from installations involved in the scheme are steadily decreasing. The effectiveness of the ETS will be greatly enhanced after 2013, when auctioning will become the main allocation method for emission allowances. This reform will be phased in over time, with a view to full auctioning starting from 2027.

Another important goal of the so-called "Auctioning Regulation" (Commission Regulation No. 1031/2010 of 12 November 2010 on the timing, administration and other aspects of auctioning of greenhouse gas emission allowances, OJ L 302, 18.11.2010. p.1) is to set out a framework that aims to ensure the integrity and transparency of the auctions in emission allowances, thus preventing market abuses and other misconducts (see Commission Communication of 21 December 2010, http://ec.europa.eu/clima/news/docs/communication_en.pdf. on carbon market oversight).

During the first half of 2011, the Commission will consult stakeholders and ask for advice on how to safeguard the transparency and integrity of the carbon market.

Miscellaneous Material of Interest

by Alessandra Laconi and Francesco Alongi

European Commission referred Malta to the Court of Justice over airport groundhandling services at Malta-Luqa Airport.

The European Commission referred Malta to the European Court of Justice due to unlawful

application of the rules concerning airport groundhandling. In the reasoned opinion dated 24 June 2010 (IP/10/813), the Commission underlined that Malta failed to comply with its legal obligations because of a lack of effective competition for the supply of fuel at the airport of Luqa-Malta.

Directive 96/67/EC opened the groundhandling services to competition, allowing Member States to limit the opening to a defined number of suppliers subject to certain conditions, particularly concerning the selection procedures (which must based on a non-discriminatory and transparent European call for tender).

Moreover, suppliers carrying out activities other than groundhandling services have to guarantee the separation of the accounts.

In this case, the Commission considered that an independent verification of the separation of accounts was not ensured by the Maltese authorities, since one of the two suppliers of fuel handling services was also the manager of the storage and fuel supply facilities.

According to the Commission, such a situation leads to a lack of effective competition for the supply of fuel at the airport of Luqa-Malta, and can reasonably lead to additional costs to airlines and, ultimately, passengers.

Alessandra Laconi

Commission requested Poland to apply security standards at airports.

The European Commission requested Poland to adequately implement EU legislation on aviation security. The Commission is concerned that Poland is not applying European common security standards in some airports, while failing to put in place any alternative security method.

Regulation 300/2008/EC establishes in fact common basic standards to be applied at all EU airports which are not exclusively used for military purposes. The core purpose of these mutual standards is to protect people and goods by avoiding acts of unlawful interference which might jeopardize security.

Member States are responsible for complying with these standards and, under particular circumstances, they can adopt alternative security measures provided they comply with the criteria set out by Regulation 1254/2009/EC and that they promptly inform the Commission.

Poland did not inform the Commission of the adoption of alternative security measures for certain small airports, alleging that these airports did not fall under EU legislation.

According to the Commission, Poland cannot guarantee that all flights departing from its airports comply with EU aviation security requirements, provoking a potentially high risk for persons and goods.

Following the issuance of the reasoned opinion provided by EU infringement procedures, if the Polish authorities will not inform the Commission within two months about the measures adopted in order to fully comply with EU law, the Commission could refer the case to the Court of Justice.

Alessandra Laconi

Commission launched infringement procedures against six Member States concerning agreements with Russia on equal treatment of EU airlines and Siberian overflights.

The European Commission launched infringement procedures against Cyprus, Ireland, Poland, Portugal, Slovakia and Spain due to their bilateral air service agreements with Russia, sending to each of them a letter of formal notice.

The Commission thinks that such agreements may hinder competition among European airlines and lead to Siberian overflight charges, which are prohibited by EU anti-trust rules.

Bilateral air service agreements between a Member State and a third country must indeed include an "EU designation clause" clarifying that the terms apply equally to all EU airlines. This is a core part of the Single European Aviation Market of the first half of the 1990s, confirmed by the Court of Justice in 2002 with the "Open Skies rulings" (which underlined the significance of the freedom of establishment).

Russia is actually one of the few countries that does not recognize the principle that all EU carriers must be treated equally and that an EU designation clause must be included in any bilateral agreement concluded with a Member State.

With regard to charges which EU airlines have to pay flying over Siberia, the Commission considered it as a breach of EU antitrust law and a potential breach of the Chicago Convention.

Analogous letters of formal notice had already been sent to Austria, Finland, France, Germany, Belgium, Denmark, Italy, Luxembourg, The Netherlands, Sweden and the UK. The fact that European airlines have to pay to fly over Siberia on their way to Asian destinations can lead to unfair competition between EU and non-EU airlines, thus making the flights more expensive.

Alessandra Laconi

Transport 2050: how to increase mobility and reduce emissions.

On the 28 March 2011, the European Commission adopted "Transport 2050", a comprehensive strategy for a competitive transport system capable to increase mobility and remove major barriers in key areas.

Such an objective will require major transformations in the European transport system. In the aviation industry, the objective is to increase the use of sustainable low carbon fuels to 40% of the total before 2050. This achievement would contribute to a global 60% cut in transport emissions by the middle of the century.

The Transport 2050 roadmap provides for a Single European Transport Area, with increased competition and an effectively integrated network linking the different modes of transport.

In particular, with regard to long-distance travel and intercontinental freight, air travel and ships will remain the major modes of transport. New engines, fuels and traffic management systems will increase efficiency and significantly reduce emissions.

The Transport 2050 strategy follows the goals and guidelines of the EU Communication of 17 June 2009, entitled "A sustainable future for transport: towards an integrated, technology-led and user friendly system". This Communication defined policies for sustainable transport

as regards to:

- infrastructure (maintenance, development and integration of modal networks);
- funding (finding of the resources for a sustainable transport);
- technology (acceleration of the transition to a low-carbon system and promotion of global innovation);
- legislation (promotion of free competition and opening of the markets);
- behavior (education, information and involvement).

Clearly, in the future innovation and R&D expenditure will determine not only the success of companies and carriers, but also of the European Market as a whole. It is impossible to exaggerate the importance of an efficient and competitive transport system for Europe's future competitiveness in the global arena, for economic growth, job creation and quality of life.

Alessandra Laconi

Chinese Airlines challenge the EU Emission Trading Scheme.

According to Chinese state media, three Chinese airlines (China Eastern Airlines, China Southern Airlines and Air China), may be preparing to challenge the EU Emission Trading Scheme in Court, claiming that this project, which they consider nothing more than a "carbon tax", would cost them millions of dollars a year.

In a press release on 17th March these airlines claimed that in 2012 alone, the cost of the Emission Trading Scheme for China's aviation sector will be in the region of 800 million yuan renminbi (i.e. $ 122 million). According to Wei Zhengzhong, secretary general of the China Air Transport Association, the costs of the ETS for Chinese airlines could hit the staggering figure of three billion yuan a year by 2020.

According to this press release, "the aviation industry is only slightly profitable. The air companies are very likely to pass the costs on to the passengers". The China Air Transport Association has calculated that the EU "carbon tax" will likely mean a fare increase of 300 yuan renminbi for each economy flight seat.

Hainan Airlines, another large Chinese carrier, has announced that it may also participate in the litigation, however it is still unclear when and, more importantly, where will these Companies be filing their legal action.

Francesco Alongi

EU and US Cooperation Agreement on Civil Aviation Safety.

On 15th March the European Union and the United States, through the exchange of diplomatic notes, finalized an agreement on cooperation in the regulation of civil aviation safety. The agreement had initially been reached in 2008, but it languished in the US Congress for almost two years. However, following the EU's final approval, the agreement is expected to enter into force on 1st May 2011.

According to a EU press release, the agreement will "enable the reciprocal acceptance of findings of compliance and approvals, promote a high degree of safety in air transport and ensure

regulatory cooperation and harmonization between the United States and the EU as regards airworthiness approvals and monitoring of civil aeronautical products, environmental testing and approvals of such products, and approvals and monitoring of maintenance facilities".

In practical terms, the agreement allows the European Aviation Safety Agency and the Federal Aviation Administration to share aviation safety information and cooperate in the certification of civil aircraft. The cooperation between EU and US regulators will extend to inspections and oversight of aeronautical maintenance organizations and in the future might even apply to pilot training and licensing.

The US Ambassador to the EU, William E. Kennard, commented that this agreement "demonstrates our mutual commitment to aviation safety and regulatory cooperation in one of the most important areas of transatlantic trade".

Francesco Alongi

Forthcoming Events

SITA – University of Bologna Conference

TRANSFORMING FOR GROWTH. NEW STRATEGIES FOR THE FUTURE OF AIR TRANSPORT.

Following last year's conference, SITA and University of Bologna are once again offering the Italian aviation industry representatives a platform for thought-provoking presentations and discussions around the problems and opportunities facing the aviation industry and the challenges that will dominate the years ahead.

Today more than ever, companies need to accept that the ability to change is the only way to create value both for the passenger and for their own success.

What are the success criteria and which ones are critical for the aviation industry?

What are the business and technological priorities?

How is it possible to improve the existing processes?

Join this half-day conference to hear presentations on sector economic trends, case studies, new business models for airports and airlines and the new technological trends.

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