



# The Aviation & Space Journal

ISSN 2281-9134  
The Aviation & Space Journal  
[online]

Website: [www.aviationspacejournal.com](http://www.aviationspacejournal.com)

## Editor

*Anna Masutti*

## Board of Editors

*Donatella Catapano*  
*Vincent Correia*  
*Massimo Deiana*  
*Nikolai P. Ehlers*  
*Liu Hao*  
*Stephan Hobe*  
*Pietro Manzini*  
*Sergio Marchisio*  
*Sofia M. Mateou*  
*Pablo Mendes de Leon*  
*Sorana Pop*  
*Wolf Müller-Rostin*  
*Alessio Quaranta*  
*Alfredo Roma*  
*Raffaella Romagnoli*  
*Giovanni Sartor*  
*Kai-Uwe Schrogl*  
*Francis Schubert*  
*Neil Smith*  
*Greta Tellarini*  
*Filippo Tomasello*  
*Leopoldo Tullio*  
*Stefano Zunarelli*  
*Alexander von Ziegler*

## The Issue's

### Contributors:

*Andrea Trimarchi*  
*Bhupendra Singh*  
*Bhatia*  
*Anja Nakarada*  
*Pecujlic*  
*Alfredo Roma*  
*Zsófia Török*

## CONTENTS

### Aviation

Strike as an Extraordinary Circumstance under EU Reg. 261/2004: some Considerations

*Andrea Trimarchi*

*p. 2*

### Space

The Indian Space Applications Program

*Bhupendra Singh Bhatia*

*p.14*

Space Activities. Soft Law – Necessity or Danger?

*Anja Nakarada Pecujlic*

*p.20*

### Miscellaneous material of interest

Outcome of the 39th ICAO Assembly

*Alfredo Roma*

*p.28*

TAP Portugal and Brussels Airlines under Investigation for Potential Breach of EU Antitrust Rules

*Zsófia Török*

*p.31*

### Forthcoming Events

Welcome to the IX WALA Annual Conference

Bologna Italy, on January 18-20, 2017 hosted by Bologna Airport

*p.33*

## Strike as an Extraordinary Circumstance under EU Reg. 261/2004: some Considerations

Andrea Trimarchi\*

*This paper discusses compelling legal issues arising from the intersection of fields of law, such as aviation law, consumer law and labour law. The analysis, focusing on the notion of ‘extraordinary circumstances’, will take into consideration the category of strikes that can affect the normal activity of an air carrier. The paper provides a general introduction to the Regulation 261/2004, while at the same time offering a rather comprehensive study on the legal status of the right to strike, both from an international and regional perspective. In addition, a comparison between the constitutional regimes of the individual EU member States will address the debate on the ‘relative’ or ‘absolute’ supremacy of European law over domestic law. In conclusion, from a practical perspective, an analysis of the recent case law will show that the Regulation, lacking clarity and efficiency, is in need of a comprehensive revision.*

### Introduction

Regulation 261/2004<sup>1</sup> has been raising very interesting legal questions since its adoption in 2004. Although it can be argued that such a piece of legislation has succeeded, at least in theory, in delineating a systematic and structured legal framework governing consumer rights in transportation by air, it is a fact that the Regulation has shown a discrete lack of clarity, receiving for that lots of criticism both by the airline industry and the doctrine.

One of the most controversial aspects of the Regulation is the manner in which the courts interpret the phrase “extraordinary circumstances”. In particular, among the events which may be deemed to constitute extraordinary circumstances, there is the need to scrupulously assess the nature and implications emerging from strikes by employees of the carrier, as well as from strikes put in place by third parties. From a theoretical perspective, this highlights the fact that aviation law is constantly interacting with other branches of law, such as labour law. Moreover, in light of the fact that EU law does not explicitly regulate the right to strike, the paper will focus on a comparison of the constitutional regimes of the different individual EU Member States.

In addition to that, while discussing to which extent consumer protection should be given priority over the right to strike, the paper examines both European and national judicial decisions to provide the reader with a comprehensive idea regarding the debate.

\*Current Adv. LL.M. Candidate in Air & Space Law at the International Institute of Air & Space Law, Leiden University.

*AVIATION***Introduction to EU Regulation 261/2004**

A stimulating analysis pertaining to the classification of strikes as extraordinary circumstances should include some introductory background on Regulation 261.

The Regulation, which has replaced a previous Regulation dealing exclusively with denied boarding compensation<sup>2</sup>, aims at ensuring a high level of protection to consumers (i.e. passengers) and at providing them with an “immediate and standardized compensation<sup>3</sup>” in cases of flight cancellation, delay and denied boarding. In addition, airlines have an accessory obligation consisting in assisting passengers in such events<sup>4</sup>, as well as an obligation to reimburse or re-route the passengers<sup>5</sup>.

On a preliminary level, it should be observed that the scope of application of the Regulation has been extended to also include passengers departing from the airports of third countries, where a Community carrier operates the flight in question<sup>6</sup>. Such extension applies only to events in which passengers have not already received compensation and/or assistance in the third country.

Furthermore, while in order to picture the extent of categories, such as denied boarding and cancellation, reference has to be made to Art. 2 (j) and (l) of the Regulation, the term delay, not having been properly defined, still seems to raise more than one question both in theory and practice. If on the one hand, indeed, delay constitutes, legally speaking, a misfeasance of the contract of carriage by air, on the other, more importantly, the Court of Justice of the European Union (CJEU) has clarified that if a flight is delayed for more than three hours, it is deemed as having been cancelled and, as a result, passengers should be compensated ex Art. 7<sup>7</sup>.

With regard to delay, the analysis would not be complete without addressing the potential overlapping between Regulation 261 and the Montreal Convention 1999<sup>8</sup>. Both these legal instruments formally encompass damage occasioned by delay. Although such a theoretical debate falls outside the scope of this contribution, it is here relevant to briefly mention that the European jurisprudence, as early as 2006, excluded in line of principle any potential overlapping. Accordingly, the Court held that, whereas Reg. 261 covers a kind of damage which is identical for all passengers, Montreal Convention is thought to provide protection in case of individual damage, inherent to the reason for travelling<sup>9</sup>.

**The notion of ‘extraordinary circumstances’**

Despite the clear consumer-oriented spirit, the Regulation provides a defence for carriers in the event in which a flight is classified as cancelled<sup>10</sup>. As already observed, the wording of Art. 5 (3) raises very interesting legal issues. In addition, the reader should bear in mind the non-exhaustive list of circumstances, which may be deemed as extraordinary, provided in the Recital 14 of the Regulation<sup>11</sup>. This list seems to be in a sense relevant in the light of the fact that it includes the expression ‘strikes that can affect the operation of an operating air carrier’.

However, attention must be addressed to the remarkable activity carried out by the CJEU, which, has “the final say on the interpretation of European law<sup>12</sup>”. Although most of the decisions pronounced so far by the Court deal with the interpretation of technical problems as extraordinary circumstances,

## AVIATION

a common line of argumentation could be easily drawn to highlight a number of features that have to be identified in order for a circumstance to be considered as extraordinary. Accordingly, the Court in *Wallentin-Hermann v. Alitalia*<sup>13</sup> stated that a circumstance is extraordinary if it stems from an event, which “is not inherent to the normal activity of an air carrier concerned and is beyond the actual control of that carrier on account of its nature and origin<sup>14</sup>”. From an academic perspective, this reasoning seems to be consistent with the consideration that extraordinary circumstances as a defence form part of the broader concept of ‘*force majeure*’, which is characterized by three main elements, namely: unpredictability; unavailability; and exteriority<sup>15</sup>. The relevance of such ruling might be further stressed by the fact that the proposal for revising Regulation 261, published in 2013, acknowledges the *formula* formally embodied in *Wallentin-Hermann* and tries to bring clarity around the definition of extraordinary circumstances<sup>16</sup>.

Furthermore, on the one hand, adopting a literal *criterion*, the Court pointed out that the terms ‘extraordinary’ and ‘circumstance’ must be understood according to their usual meaning in everyday language, and therefore ‘extraordinary’ is to be intended as opposed to ‘normal’ or ‘ordinary<sup>17</sup>’. On the other hand, the adoption of a teleological approach implicitly confers an important role to the above-referred Recital 14, insofar as the preamble of the Regulation might explain its content<sup>18</sup>.

The next paragraphs provide some general remarks on the right to strike, from an international, regional and national perspective, prior to addressing to what extent a strike might be considered as an ‘extraordinary circumstance’ and, therefore, fall under the exception ex Art. 5 of Reg. 261.

### The right to strike

- International law

“Today the right to strike is essential to a democratic society<sup>19</sup>”. Adopting a narrower view, the right to strike is increasingly playing an important role in international, highly dynamic and multifaceted industries, such as aviation. This is confirmed, for instance, by the exponential increase of strikes involving air carriers, airports or, more in general, undertakings operating within the aviation supply chain.

The international legal status of the right to strike is a peculiar one. Although no international instrument concretely defines such a right, it is *de iure* acknowledged by several conventions and recommendations elaborated by the International Labour Organization (hereinafter “ILO”)<sup>20</sup>. Accordingly, reference must be made to two basic instruments providing international recognition to the right to strike: (i) Convention No. 87 Concerning Freedom of Association and Protection of the Right to Organise 1948; and (ii) Convention No. 98 Concerning the Application of the Principles of the Right to Organise and to Bargain Collectively 1949<sup>21</sup>.

However, even though, surprisingly, international law seems to confer limited reference to the right to strike, it is to be noted that such a right is *de facto* designated as forming part of the ILO’s ‘fundamental’ or ‘basic’ human rights. Moreover, it is indicative that the above-mentioned Conventions, having received among the highest levels of ratification, are also considered by the doctrine as the ‘constitutional’ ILO Conventions<sup>22</sup>.

*AVIATION*

Considering human rights law, the right to strike results undefined and considered as part of the broader freedom of association. This is remarkably exemplified by the text of the UN Universal Declaration of Human Rights, which foresees the absolute freedom of association<sup>23</sup>.

- **European Law**

Drawing attention to the European regime dedicated to govern the right to strike, the situation does not change much. Neither under international law nor under European law, is there a comprehensive definition of the right to strike. However, the lack of definition does not necessarily coincide with a lack of protection. Several European legal instruments, indeed, encompass and recognise, either directly or indirectly, the sacredness of the right to strike. The European Convention on Human Rights, for instance, protects the right to freedom of assembly and association, including the right to form trade unions<sup>24</sup>. Moreover, the European Social Charter (ESC) of the European Council, which was adopted in 1961 and revised in 1996, explicitly guarantees the right to strike among a number of social and work-related fundamental rights<sup>25</sup>. However, academic discussions on the binding force of such Charter may risk undermining its actual effectiveness<sup>26</sup>.

On a different level, it is relevant to mention that, from a regulatory standpoint, the Treaty on the Functioning of the European Union (TFEU)<sup>27</sup> expressly excludes the right to strike from the subjects on which the Union has competence to legislate<sup>28</sup>. The reason for that could be identified in the rather strong and conservative member States' will of maintaining exclusive regulatory powers with respect to the right to strike, considered crucial both from a social and political perspective.

- **National law. A comparative approach**

No Constitution formally defines the right to strike, at least in Europe. Accordingly, the duty of delineating the extent of such a notion is left to ordinary or statutory law and to the judicial interpretation by the highest Courts<sup>29</sup>. However, although the definition of such a right apparently still raises questions, its safeguard is undisputedly guaranteed in all EU Member States on a constitutional level. As shown by the tables below, the protection of the right to strike may generally be granted in two ways. On the one hand, the constitutions of many States, including France, Italy and Germany, directly encompass the right to strike among their primary and fundamental rights (table 1). On the other, with regard to States, which do not foresee *ad hoc* provisions in their constitutions, the right to strike is deemed to held *stricto sensu* a primary status in light of the fact that the Constitutional Courts have recognised such a right as essential part of the broader right to freedom of association (table 2)<sup>30</sup>.

## AVIATION

(Table 1)

France	Preamble No. 7 (Const. '46)
Spain	§ 28 (2)
Hungary	Art. XVII (2)
Italy	Art. 40
Poland	Art. 59.2
Latvia	Art. 108
Cyprus	Art. 21
Estonia	§ 29
Sweden	§ 14
Slovenia	Art. 77
Portugal	Art. 57
Romania	Art. 43
Germany	Art. 9 (3)
Luxembourg	Art. 11 (4)
Greece	Art. 23
Czech Republic	§ 27 (4)
Lithuania	Art. 51
Turkey *	Art. 54

\*Turkey is not yet a member of the European Union.

(Table 2)

The Netherlands	Artt. 8 and 9
Malta	Art. 42
Belgium	Art. 27
Bulgaria	Art. 12
Croatia	Art. 43
Slovakia	Art. 29
Ireland	Art. 40.6.1.
Finland	Art. 13.2
Austria	Art. 12
United Kingdom	Union and Trade Relations Act 1992

## AVIATION

It could be argued that, while many countries explicitly confer the right to strike a constitutional status, others only provide implicit references in their constitutions<sup>31</sup>. In addition, copious discussions have arisen on whether the right to strike is directed to individuals or to unions as well as on the identification of its actual content. Without further going into the details of such a theoretical debate, it is relevant to mention that, by and large, many scholars agree with the fact that the right to strike *de facto* encompasses a 'positive' right and a 'mere' freedom and that it shows a twofold nature as individuals' and unions' right<sup>32</sup>.

- European law vs. constitutional law

The necessary digression on the nature of the right to strike under international, European and domestic law has underlined that this right occupies a primary position among the fundamental rights conferred to individuals. Having said that, it should be borne in mind that Regulation 261 is a clear expression of consumer protection policy as enshrined by article 169 (1) TFEU<sup>33</sup>. On the one hand, the safeguard of consumers' interests is given legal recognition on a primary level within the framework of the TFEU, whereas on the other hand, the right to strike is guaranteed on a constitutional level in individual States. Such consideration raises legal questions, which prompt much academic debate. Which right should be given priority? The right to strike, which represents a niche of the broader category of fundamental social rights? Or should this right be 'sacrificed' for the sake of consumers' protection?

Adopting a broader and more general approach, such reflections seem to suggest analysing the relationship between European public law and constitutional law. The discussion on the supremacy of European law over national laws, which has been debated for very long, leads to two divergent conclusions<sup>34</sup>. On the one hand, according to the so-called 'supremacy theory', elaborated by the doctrine as a consequence of the ruling of the European Court of Justice in the *Costa v. Enel* case<sup>35</sup>, European law holds a higher status than domestic laws and, therefore, cannot be derogated by internal legislation<sup>36</sup>. On the other, a second theory, although formally recognising a 'relative' supremacy of European law over domestic provisions, identifies a binding limit in the fundamental rights and basic freedoms envisaged in the national constitutions<sup>37</sup>.

Apart from these theoretical observations, with regards to a discussion on whether strikes can be deemed as extraordinary circumstances, a number of cases will be considered to outline the degree of actual control that the carrier could exercise on the event.

- Strikes that affect the operation of an operating air carrier

According to the recital 14 of Reg. 261, "strikes that affect the operation of an operating air carrier" may constitute an extraordinary circumstance. This vague terminology seems to implicitly include a number of potential strikes that may be put in place by different actors involved in the aviation sector. Attention therefore must not only be placed on the typical event in which the airline's employees exercise their right to strike, but also on events in which, for instance, strikes are put in place by airport's staff, air traffic controllers or ground handling operators.

## AVIATION

- Strike of the employees of the air carrier

The most common category of strike is that of a strike by the airline's employees. Ground staff, cabin crew or pilots of an airline can undertake a strike action. It naturally follows that the air carrier, at least in theory, could be capable of exercise some sort of actual control on such an event. When the event is in a sense 'internal' to the carrier, the strike could possibly be avoided by means of negotiations or private agreements.

Both EU and domestic jurisprudence have been placing the main focus on the notion of 'actual control of the carrier'. In *Wallentin Hermann/Alitalia* the CJEU held that the resolution of a technical problem caused by failure to maintain an aircraft must therefore be regarded as inherent in the normal exercise of an air carrier's activity. Again with regard to technical problems, the CJEU's approach has been lately confirmed in the landmark decision given in the case of *Huzar v. Jet2.com*<sup>38</sup>, in which the English Supreme Court recognised that once a technical problem is identified, it becomes inherent to the normal air carrier's activity. The Court also confirmed what previously stated by the Court of Appeal, as "*the delay caused by the resolution of an unexpected, unforeseen and unforeseeable technical problem cannot be said an extraordinary circumstance given the Wallentin-Hermann test. [...] air carriers have indeed to encounter and deal with such circumstances as part of running of an airline just as the owner of a car has to encounter and deal with unexpected and unforeseen breakdown of his car*".

Despite the fact that the above-examined decisions specifically deal with technical problems, it may seem reasonable to affirm that, as per analogia juris, such a path may well be entered where assessing the 'extraordinary nature' of airlines' employees' strikes. One could argue, indeed, that the carrier exercises control over its employees. Moreover, following the cited jurisprudence, airline staff's strikes would seem to form integral part of the 'running of an airline', and the airline itself could possibly adopt several measures to avoid the strike to take place.

Although no case involving strikes of the airline's staff has so far been submitted to the CJEU, there is a widespread *consensus* on affirming that such a category is unlikely to constitute an extraordinary circumstance in accordance with the wording of Reg. 261. This kind of strike cannot be considered as external or unforeseeable and, therefore, the carrier cannot base his defence on the provision ex Art. 5 (3)<sup>39</sup>. It should be noted that, in a recent case, the German Federal Court took a different view by affirming that passengers are not entitled to compensation for cancelled flights if the cancellation is due to a pilot's strike organised by the pilot's union, as the decision to strike is taken by employees and is not "in the airline's ordinary course of business"<sup>40</sup>.

However, the Court clearly acknowledged that the airline is in a position to take all reasonable measures in order to minimise the effect of the strike, for instance by reorganising its schedule management and its internal business in a way that its operations shall be continued.

The Court also stressed out that the airline maintains the obligation of meeting the trade union in question (i.e. the pilot's union) in order to avoid the strike to occur. These remarks are far from being theoretical and redundant, as they implicitly highlight that in different situations, such a strikes by third parties, the airline



## AVIATION

cannot be held liable, as it does not have any direct control over the third party's employees.

- Strike of the airport staff

The degree of actual control that a carrier can exercise on airports' staff is evidently lower. There can be little doubt that strikes put in place by the employees of an airport are *de facto* outside the sphere of the carrier's influence. In light of this, the assessment on whether such strikes can constitute extraordinary circumstance has to be carried out on a case-by-case basis.

In *Finnair v. Lassooy* for instance, the CJEU held that the passengers, after having been denied boarding, following a strike of Barcelona airport staff, were entitled to compensation and that the carrier could not rely on the defence ex Art. 5(3) of Reg. 261. The Court noted that "extraordinary circumstances may relate only to a particular aircraft on a particular day, which cannot apply, therefore, to a passenger denied boarding because of the rescheduling of flights as a result of a strike affecting earlier flights. [...] if a carrier is obliged to cancel a scheduled flight on the day of a strike by airport staff, and then takes the decision to reschedule its later flights, such carrier cannot in any way be considered to be constrained by that strike to deny boarding to a passenger who has duly presented himself for boarding two days after the flight's cancellation". However, it is interesting to observe that the Court formally acknowledged the possibility for the carrier to "seek compensation from any third person who has caused the denied boarding"<sup>41</sup>.

On the other hand, focussing on flight cancellations due to strikes of the airport operators, the assessment must necessarily consider the link between the carrier and the airport itself. Accordingly, if the carrier can prove that a cancellation could not have been avoided even though all reasonable measures were taken - because there was no airport in the vicinity to which the flight could have been diverted, for instance - the carrier will be able to rely on the Art. 5(3) defence<sup>42</sup>.

- Strikes of third parties

The legal assessment becomes undoubtedly more complicated if one looks at strikes by third parties. It could be argued, that the carrier does not maintain any sort of 'control' over subjects, such as air traffic controllers (ATC). Nor could the carrier exercise any influence on decisions of these operators. This line of reasoning has been recently confirmed, for instance, by a Spanish Administrative Court in a case involving the Spanish flag carrier Iberia, which found that an ATC strike was to be considered as unforeseeable and, subsequently, the carrier could not have adopted measures capable of avoiding the flight cancellation. However, despite formally recognising the 'extraordinary character' of the ATC strike, the Court held that passengers were entitled to 'moderate compensation' under Regulation 261<sup>43</sup>. On the other hand, an Italian court, in the 2012 case *Bozzi v. Ryanair*, considered a strike of ground handling providers as constituting an extraordinary circumstance under the Regulation. In such a case, the strike, having not been notified in advance, did not entitle the passenger to compensation<sup>44</sup>.

## AVIATION

It should therefore be noted that when strikes of third parties, such as ATC are considered as extraordinary circumstances, the carrier would be, at least in theory, entitled to seek compensation from the promoters of the strike or from the organisation they belong to. This is not without implications. Without entering into further analysis, it is relevant to mention that, to date, it would seem to be quite difficult, if not impossible for a carrier to obtain monetary compensation for disruption of air services by ATC or ground handling providers.

## Conclusions

The paper has highlighted the fact that events, such as strikes, can significantly affect the aviation sector both from an academic and practical perspective. The analysis has underlined the need for a multidimensional approach. The examination of the recent, and scarce, case law has pointed out a discrete lack of uniformity.

In particular, the paper has taken into account the need for an accurate balance between consumer protection, which is one of the cardinal principles of European law, and the constitutional essence of the right to strike, as provided by individual EU Member States. From a broader standpoint, the debate on the relationship between domestic and *supranational* regimes still raises a number of compelling legal issues.

Moreover, the scrutiny of the main provisions of the Regulation has laid emphasis on the fact that the Regulation itself is in need of a profound revision. In this context, the above mentioned Proposal of 2013 could, in a sense, represent an efficient tool in order to update the Regulation. It should be borne in mind that, to date, the combined reading of Art. 5(3) and Recital 14 of the Regulation does not establish a clear and precise framework for the courts to identify whether an event, such as a strike, may constitute an extraordinary circumstance with regards to compensation claimed by passengers, facing a misfeasance of the contract of carriage by air. It is up to domestic courts, and the CJEU, to delineate the precise extent of the debate. However, the case law has underlined the existence of a trend, according to which national courts are likely to assess the issue, following the *Wallentin-Hermann dictum*, and placing the main emphasis on the notion of 'actual control of the carrier'. It follows that in the event of strikes, what matters most is actually the status of the active subject of the strike, that is to say, who puts in place the manifestation. Domestic and *supranational* Courts must therefore scrupulously assess whether the airline has any sort of *de facto* control over these subjects, and whether it has effectively adopted all reasonable measures in order to avoid the strike to occur.

---

<sup>1</sup>Regulation (EC) No. 261/2004 of the European Parliament and the Council of 11 February 2004 establishing common rules on compensation and assistance to passengers in the event of denied boarding and of cancellation and or long delays, OJEU 2004 L46.

<sup>2</sup>Council Regulation (EEC) 295/91 establishing common rules for a denied boarding compensation system in scheduled air transport, OJEC L36.

<sup>3</sup>International Air Transport Association and European Low Fares Airline Association v. Department for Transport, Case C-344/04, 10 Jan. 2004.

## AVIATION

<sup>4</sup>Art. 9 of the Regulation states that: “When reference is made to this article, passengers shall be offered free of charge: (a) meals and refreshment in a reasonable relation to the waiting time; (b) hotel accommodation in cases: (i) where a stay of one or more nights becomes necessary; or (ii) where a stay additional to that intended by the passenger becomes necessary; (c) transport between the airport and the place of accommodation (hotel or other). In addition, passengers shall be offered free of charge two telephone calls, telex or fax messages, or e-mails. In applying this article, the operating carrier shall pay particular attention to the needs of persons with reduced mobility and any persons accompanying them, as well as to the needs of unaccompanied children”.

<sup>5</sup>Art. 8 of the Regulation

<sup>6</sup>P.P.C.HAANAPPEL, *The EU Denied Boarding Compensation Regulation of 2004*, in *Zeitschrift für Luft- und Weltraumrecht* 22 (2005), at 54. It must be noted that the former Regulation applied only to flights from and to airports located in Europe

<sup>7</sup>*Sturgeon v. Condor and Bock/Lepuschitz v. Air France*, ECJ, *Joined Cases C-402/07 and C-432/07 of 19 Nov. 2009*. See P.P.C.HAANAPPEL, *Compensation for Denied Boarding, Flight Delays and Cancellations Revisited*, in *Zeitschrift für Luft- und Weltraumrecht* 62 (2013), 38-54. See also A.HARRINGTON, *EC 261/2004 and European Commission Reform: A Long and Winding Road to Clarification*, in *Zeitschrift für Luft- und Weltraumrecht* 62 (2013), 45-48

<sup>8</sup>See *inter alia* K.ARNOLD, P.MENDES DE LEON, *Regulation (EC) 261/2004 in the Light of the Recent Decisions of the European Court of Justice: Time for a Change?*, in *Air & Space Law XXXV/2* (2010), 95-100. See also J.BALFOUR, *Airline Liability for Delays: The Court of Justice of the EU Rewrites EC Regulation 261/2004*, in *Air & Space Law XXXV/1* (2010), 71-75.

<sup>9</sup>The Court, in particular, distinguished between two types of damage. “Any delay in the carriage of passengers by air, and in particular a long delay, may, generally speaking, cause two types of damage. First, excessive delay will cause damage that is almost identical for every passenger, redress for which may take the form of standardized and immediate assistance or care for everybody concerned, through the provision, for example, of refreshments, meals and accommodation and of the opportunity to make telephone calls. Second, passengers are liable to suffer individual damage, inherent in the reason for travelling, redress for which requires a case-by-case assessment of the extent of the damage caused and can consequently only be the subject of compensation granted subsequently on an individual basis”. *International Air Transport Association v. European Low Fares Airlines Association*, case C-344/04. Furthermore, the Court held that the measures prescribed by Regulation 261/04 provide for standardized and immediate compensation and assistance and intervene at an earlier stage than the provisions of the Convention, which permit passengers to bring actions for damages on an individual basis. It is questionable whether such a decision sets out an appropriate legal principle. See for instance J.J.WEGTER, *The ECJ Decision of 10 January 2006 on the Validity of Regulation 261/2004: Ignoring the Exclusivity of the Montreal Convention*, in *Air & Space Law XXXI* (2006), 133-146

<sup>10</sup>As noted above, in the joined cases *Sturgeon v. Condor and Bock, Lepuschütz v. Air France*, the European Court held that passengers who arrived at their airport of arrival at least three hours after the scheduled arrival time were in a comparable position with passengers subject to a flight compensation. In doing so, the Court de facto extended the application of the Article 5, par. 3 defense also to cases of long delays. See *inter alia*: S.HOBE, N. VON RUCKTESHELL, D. HEFFERMAN, *Cologne Compendium on Air Law in Europe*, Carl Heymann’s Verlag, Cologne, 2013, 1058-1060. S. HOBE, W.MULLER-ROSTIN, A. RECKER, *Fragwürdiges aus Luxemburg zur Verordnung 261/2004 EC*, in *Zeitschrift für Luft- und Weltraumrecht* 59 (2010), at 149

<sup>11</sup>Recital 14 of the Regulation reads as follows: “As under the Montreal Convention, obligations on operating air carriers should be limited or excluded in cases where an event has been caused by extraordinary circumstances which could not have been avoided even if all reasonable measures had been taken. Such circumstances may, in particular, occur in cases of political instability, meteorological conditions incompatible with the operation of the flight concerned, security risks, unexpected flight safety shortcomings and strikes that affect the operation of an operating air carrier”

<sup>12</sup>J.BALFOUR, *The ‘Extraordinary Circumstances’ Defense in the EC Regulation 261/2004 after Wallentin-Hermann/Alitalia*, in *Zeitschrift für Luft- und Weltraumrecht* 58 (2009), at 225

<sup>13</sup>*Wallentin-Hermann v. Alitalia*, Case C-549/07

<sup>14</sup>*Id.*

<sup>15</sup>P.P.C. HAANAPPEL, *Compensation for Denied Boarding, Flight Delays and Cancellations revisited*, at 47. The author interestingly points out that the doctrine of the ‘condition d’exteriorité is a difficult one. In particular, “the fortuitous event must be exterior to the person of the defendant (the carrier in our case), but must it also be exterior to the thing (the aircraft in our case) that the defendant has under its care? Opinions are divided, but for some lawyers a technical defect in an aircraft, for instance, comes within the internal ‘sphere’ of the responsibility of the carrier and he is responsible for it without being able to invoke fortuitous event or extraordinary circumstances”. Moreover, the principle embodied in *Wallentin-Hermann/Alitalia* has been confirmed by the CJEU in more than one occasion and, very recently, in late 2015, in the case *Van Der Lans v. KLM*. See also for a brilliant analysis of *Wallentin-Hermann/Alitalia*, A.MILNER, *Regulation EC 261/2004 and ‘Extraordinary Circumstances’*, in *Air & Space Law XXXIV/3* (2009), 215-220.

## AVIATION

<sup>16</sup>Proposal for a Regulation of the European Parliament and of the Council amending Regulation 261/2004. COM (2013) 130 Final. 2013/0072 (COD). Brussels 13.03.2013. Link available at: [http://www.europarl.europa.eu/RegData/docs\\_autres\\_institutions/commission\\_europeenne/com/2013/0130/COM\\_COM\(2013\)0130\\_EN.pdf](http://www.europarl.europa.eu/RegData/docs_autres_institutions/commission_europeenne/com/2013/0130/COM_COM(2013)0130_EN.pdf) (last access on 08.05.2016)

<sup>17</sup>Wallentin-Hermann v. Alitalia. Case C-549/07

<sup>18</sup>*Id.*

<sup>19</sup>B. GERNIGON, A. ODERO, H. GUIDO, *ILO Principles Concerning the Right to Strike*, International Labor Review 137 (1998), at 479

<sup>20</sup>International Labour Organization as established by the Declaration of Philadelphia signed in 1944. International Labour Conference, 26th, Philadelphia, 1944. (1944). *The Declaration of Philadelphia. It must be underlined that such instruments only tangentially refers to the right to strike. As noted by xxxxx, "no ILO Convention or Recommendation systematically deals with the right to strike, expressly requiring, hence, States to take active steps to protect industrial action".* T. NOVITZ, *International and European Protection of the Right to Strike: a Comparative Study of Standards set by the International Labor Organization, the Council of Europe and the European Union*, Oxford University Press, 2003, 95-96

<sup>21</sup>The official text of both Conventions can be found online at: [http://www.ilo.org/wcmsp5/groups/public/@ed\\_norm/@declaration/documents/publication/wcms\\_095895.pdf](http://www.ilo.org/wcmsp5/groups/public/@ed_norm/@declaration/documents/publication/wcms_095895.pdf) pp. 9-18 (last access on 10.05.2016)

<sup>22</sup>See for ratification of all ILO Conventions: [www.ilo.org/](http://www.ilo.org/). At the time of writing, ILO Convention No. 87 has received 140 ratifications and Convention No. 98 has received 151 ratifications. As a matter of comparison, it may be interesting here to report that ILO Convention on Forced Labour, which has the highest number of ratifications, has been ratified by 160 States while the ILO Convention No. 138 on the Minimum Age of Admission to Employment, which has the lowest number of ratifications amongst the 'fundamental' conventions, has been ratified by 117 States. See inter alia D.K. EWING, *The Right to Strike*, Oxford University Press, 1991, 76-82. See also G. BELLACE, R.JANICE, *The ILO and The Right to Strike*, in *International Labour Review* 153(1), (2014), 35-38

<sup>23</sup>UN General Assembly, *Universal Declaration of Human Rights*, 10 Dec. 1948, 217 A (III). According to article 20 of the Declaration: "Everyone has the right to freedom of peaceful assembly and association"

<sup>24</sup>Council of Europe, *European Convention for the Protection of Human Rights and Fundamental Freedoms*, as amended by Protocols 11 and 14, signed on Nov. 4 1950 and entered into force on Sept. 3 1953. Art. 11 of the ECHR reads as follows: "Everyone has the right to freedom of peaceful assembly and to freedom of association with others, including the right to form and join trade unions for the protection of his interests. No restrictions shall be placed on the respect of these rights other than such as are prescribed by law and are necessary in a democratic society in the interests of national security or public safety, for the prevention of disorder or crime, for the protection of health or morals or for the protection of the rights and freedoms of others. This article shall not prevent the imposition of lawful restrictions on the exercise of these rights by the member of the armed forces, of the police or of the administration of the State"

<sup>25</sup>European Social Charter (Revised) of the European Council, signed on May 3 1996 and entered into force on Jul. 1 1999. "The right of workers and employers to collective action in cases of conflicts of interest, including the right to strike, subject to obligations that might arise out of collective agreements previously entered into". Art. 6 (4) of the European Social Charter of the European Council. As a matter of comparison, it may be interesting to observe that also far from Europe, the right to strike is in a sense guaranteed from a legal and social perspective. A remarkable instance of this is represented by the Inter-American Charter of Social Guarantees, adopted in 1948, which, in Art. 27 (1), provides that "workers will have the right to strike". See T. NOVITZ, *International and European Protection of the Right to Strike*, at 93

<sup>26</sup>For further study on the topic, see B.WAAS, *The Right to Strike: A Comparative View*, Kluwer Law International, 2014, at 11. The author points out that while "most members of the European Council consider themselves bound by the ESC, some countries made reservation with regard to the right to strike action. In both Germany and the Netherlands, civil servants are barred from striking by national law. Austria, Poland and Turkey excluded Art. 6 (4) from ratification, while Portugal formally declared that the obligations entered into Art. 6 (4) shall in no way invalidate the prohibition of lockouts as enshrined in the Portuguese Constitution"

<sup>27</sup>Consolidated version of the Treaty on the Functioning of the European Union, 2008, O.J. C 115/47

<sup>28</sup>Art. 153 (5) of the TFEU

<sup>29</sup>It may be interesting to provide a few examples in order to give a picture of the global reality. In South Africa, for instance, it is the statutory law to define the right to strike as "the partial or complete concerted refusal to work, or the retardation or obstruction of work". Colombian law requires that for a strike in order to be legal the suspension of work must not only be temporary, but also

## AVIATION

peaceful. In the U.S. the right to strike is defined in the National Labor Relations Act as the right “to engage in concerted activities for the purpose of collective bargaining or the mutual aid or protection”. Interestingly, in Israel, the legal definition of such a right has been solved throughout the intervention of the jurisprudence. The Israeli National Labour Court has indeed ruled that the term strike means “a coordinated oppressive action, taken by a group of workers in the framework of a professional struggle of the workers against an employer aiming at achieving demands in respect of work conditions or other demands from the employer”. See B.WAAS, *The Right to Strike: A Comparative View*, at 12-13

<sup>30</sup>The tables are the expression of a comparison carried out by the author. The analysis has mainly focused on the identification of the constitutional status of the right to strike among the EU member States’ legal systems. The aim of such a comparison is essentially that of showing that the right to strike, albeit generally not defined on a constitutional level, does receive constitutional protection in all States. In particular, with respect to the purpose of such paper, it is of utmost importance to underline that, being the right to strike and the consumer protection ‘constitutional-oriented’, an accurate balance between primary rights has to take place

<sup>31</sup>B.WAAS, *The Right to Strike: A Comparative View*, at 13

<sup>32</sup>*Id*

<sup>33</sup>Art. 169 TFEU, paragraph 1 (ex Art. 153 TEC) reads as follows: “In order to promote the interests of consumers and to ensure a high level of protection, the Union shall contribute to protecting the health, safety and economic interest of consumers, as well as to promoting their right to information, education and to organise themselves in order to safeguard their interests”

<sup>34</sup>R.SCHUTZ, *European Union Law*, Cambridge University Press, 2015, 125-129

<sup>35</sup>*Costa v. Enel*, C-6/64 ECR 585 (1964). “...the term and the spirit of the Treaty make it impossible for the States, as a corollary, to accord precedence to a unilateral and subsequent measure over a legal system accepted by them on a basis of reciprocity. Such a measure cannot be inconsistent with that legal system. [...] It follows that all these observations that the law stemming from the Treaty, an independent source of law, could not, because of its special and original nature, be overridden by domestic legal provisions, however framed, without being deprived of its character as [European] law and without the legal basis of the [Union] itself being called into question”. *Id.* At 593-594. (emphasis added)

<sup>36</sup>R.SCHUTZ, *European Union Law*, at 121. According to such a theory, hence, European law would reign supreme over national law, since its ‘executive force’ must not vary from one State to another

<sup>37</sup>This line of reasoning has been adopted in a number of decisions rendered by national Courts. See for instance Case 11/70 *Internationale Handelsgesellschaft mbH v. Einfuhr- und Vorratsstelle für Getreide und Futtermittel* [1970] ECR 1125

<sup>38</sup>*Huzar v. Jet2.com* [2014] BUS LR 1324, [2014] EWCA Civ. 791

<sup>39</sup>See for instance Case No. 29 C 370/07, Court (Amtsgericht) of Frankfurt, 6 January 2007 [2008]

<sup>40</sup>Decision of 21 August 2012, Case No. X ZR 146/11, reported in *IATA Liability Reporter* 46 (2013)

<sup>41</sup>*Finnair v. Timy Lassooy*, [2012] C-22/11. In this case the Court clarifies that Regulation 261 not only refers to denied boarding relating to economic reasons (‘overbooking’), but also to events in which boarding is denied on other ground, such as operational reasons (‘strike’). See, in particular, par. 37 of the decision

<sup>42</sup>S.HOBE, N. VON RUCKTESHELL, D. HEFFERMAN, *Cologne Compendium on Air Law in Europe*, 1062-1063

<sup>43</sup>Central Contentious Administrative Court No. 7 of Madrid, No’s 871/2011, 693/2011, 863/2011, decisions of 12 July 2012. The Spanish Administrative Court, in such a case, found that although the ATC strike was unforeseeable and unpredictable, it did not amount to ‘force majeure’. The passengers, therefore, did not have a legal duty to bear the damage in light of the fact that under Spanish Constitution all persons are entitled to compensation as a result of injuries suffered in their rights and assets. See *Private Air Law Reader*, Adv. LL.M. in Air & Space Law, Leiden University, at note 590. See also on the point *Rechtbank Noord Holland, Sectie Kanton locatie Haarlem*, 2693734/CV EXPL 14-526 of 11 Nov. 2014

<sup>44</sup>Italian Civil Court, Naples, 1185/2012 (2012)

### The Indian Space Applications Program

Bhupendra Singh Bhatia\*

#### Introduction

*Professor Jacques Blamont in his write up on the starting of the Space Program in India says: “for the first flight from Thumba in India a Nike Apache Sounding Rocket was brought from the US and a payload of Sodium Ejector was provided by him (Prof. Blamont). This was successfully launched on November 16, 1962 to mark the beginnings of the Indian Space program. A young Indian scientist had worked the previous night to fit the French payload to the American rocket. This young scientist was none other than A.P.J. Abdul Kalam who went on to become the President of the republic of India”.*

Prof. Blamont developed a friendship with Dr Vikram Sarabhai (founder of the Indian Space program) and further says that in 1967 Dr Sarabhai took him to a village about 50 Km from Delhi where about 200 country-men were gathered around a TV set watching an instructional program on agriculture. Coming back with Vikram in his car they were not certain that the system had shown any efficiency, but it had great potential, as the later programmes SITE, INSAT and EDUSAT will prove. Vikram had already conceived an original doctrine which he explained with convincing enthusiasm. For him the only method by which India could catch up with developed countries was to bypass the usual stages by exploiting the most modern technology, a process which he called leapfrogging. The project under which Television sets had been installed in villages around Delhi was called Krishi Darshan, a precursor to the Satellite Instructional Television Experiment (SITE) conducted using the American ATS-6 satellite.

Thus, in the sixties the Indian Space Program was initiated both on the technology development and on the applications fronts. In this write up the emphasis is on examining how India has utilized its space program to support national development.

\*Program Director (Space Education ) at the Vikram A Sarabhai Community Science Centre. Former Project Director Gandhi Heritage Portal, Gandhi Ashram Ahmedabad with support from Ministry of Culture, Govt. of India.

*SPACE***Satellite Broadcasting and Educational Networks**

The first experiment in the use of space technology was in the field of satellite broadcasting. India signed an agreement with the USA for the use of its ATS-6 satellite for one year. The satellite was capable of delivering a high power signal to be received on comparatively small dishes. India developed and deployed the total ground segment for the experiment including earth-stations, studios, direct receive terminals and also created the necessary system for production, transmission, reception and evaluation of the TV programs.

Television reception sets were installed in 2400 remote villages spread over different geographic and linguistic regions. For a period of one-year television programs were transmitted every morning for school children and evening for the village audiences. The experiment was thoroughly evaluated and it turned out to be a great success. All equipment worked with greater than ninety per cent availability. The reception systems in the villages worked with more than eighty per cent availability. The average audience size in the evenings over a period of one year was of the order of eighty persons with fifty per cent children, and the rest men and women. The impact evaluation indicated significant gains of knowledge amongst viewers in most areas. The vocabulary of the students increased substantially and poor women were the highest gainers of information.

The successful demonstration through SITE led to the rapid adaption of satellite broadcasting for both education and general broadcasting. The political decision makers immediately realized the potential of satellite broadcasting to reach out the population in the rural areas. The national broadcasting system (Doordarshan) was expanded very rapidly and by adopting the re-broadcasting of the satellite signal a national network was established covering the whole country. This was quickly followed by private satellite channels, cable-networks and then DTH. Today all television homes in India receive more than hundred channels directly or indirectly distributed via satellites.

The educational institutes extensively adopted satellite broadcasting. The infrastructure created during SITE for primary education was further strengthened and expanded. The Higher education sector and the Open and Distance learning sectors came forward to utilize satellite broadcasting. The University Grants Commission established program production facilities in several universities and set up a consortium for educational communication to operationalize the transmission of television programs for graduate students all over the country. Similarly the Indira Gandhi National Open University established a network of all its study centres and started operating a satellite based TV broadcast channel for its teachers and students.

The educational networks were upgraded by adding phone-in facility. This enabled the students/participants to ask questions and seek clarifications. Fax and Internet were integrated into these networks to further enhance interactivity and make it possible to exchange notes and written material. Such networks were established by state governments for training all field staff like school teachers, agriculture extension workers, health service workers, mid-wives, Forest workers etc. All of the above led India to establish one of the largest networks in the world for satellite based broadcasting for education and training.

## SPACE

### Tele-Medicine

In most developing countries availability of speciality doctors in rural areas is a major concern. Patients have to travel to cities to get medical assistance. ISRO (India Space Research Organisation) promoted the application of Satellite based telemedicine in a big way. This was done in collaboration with the private software providers, private hospitals and Government hospitals.

ISRO went further to use satellite networks to provide telemedicine facilities to remote hospitals. To begin, experiments started with a very well known heart hospital: the Narayana Hridayalaya at Bangalore. This was connected to a tribal hospital of Karuna trust an NGO in Karnataka. Connectivity was also provided between ICUs of Bangalore and Kolkatta of Nararyana Hridayalaya. The feedback from the doctors and patients was most encouraging and the network was further expanded.

Attempt was made by ISRO to provide connectivity to rural government hospitals and urban hospitals. Very remote locations like Andaman Nicobar islands, Leh in Ladakh were selected to connect to major hospitals like AIIMS Delhi, PGI Chandigarh. Terminals were also provided to several NGO hospitals like Maa Amritamayi hospital in Cochin, and specialty hospitals like Shanker Netralaya in Chennai. The remote hospitals found the facility most useful to consult the specialty doctors from urban hospitals. Further mobile vans were provided to travel to rural areas and carry out eye camps and provide other telemedicine facilities. The network expanded with about sixty urban super-specialty hospitals connected to more than 350 rural hospitals.

The Telemedicine Society of India was involved in setting up CME (Continuous Medical Education) networks to conduct educational programs for students and doctors in remote areas. This became a regular feature for some medical colleges of Orissa. Similarly the FOGSI (Federation of Gynaecologists Society of India) set up a network of receive terminals to conduct regular CME programs.

The application of telemedicine got a great boost because of the support of ISRO, which provided the connectivity and facilities for utilizing the networks. The urban and rural hospitals, private hospitals adapted the concept and continue to use it on a wide scale.

### Earth Observations and Remote sensing applications

Dr M.S. Swaminathan, a leading Indian agriculture scientist, was present at a meeting in which Dr Vikram Sarabhai and his colleagues made a presentation of the potential of remote sensing applications to Mrs Indira Gandhi, later Indian Prime Minister. Swaminathan was concerned about the possible spread of a coconut wilt disease in Kerala. He approached Dr Sarabhai to see if remote sensing could help. Necessary equipment had to be arranged from USA and the aerial survey was conducted. Both the agriculture and the space scientist were very impressed with the results and decided to pursue the application of remote sensing for agriculture. A study of paddy crop prediction in some parts of the country followed. The results clearly indicated that the crop yield was much more than that reported by the farmers to avoid taxes. The credibility and acceptance of remote sensing was quickly established.



## SPACE

It was well realised that Earth Observations would have applications in areas much beyond just agriculture and disaster early warning. Several joint experiments were undertaken to prove and demonstrate the applicability of earth observation images. However Prof. Satish Dhawan, who took over as chairman of ISRO after Dr Sarabhai, planned to establish a formal national structure to make remote sensing an integral part of the functioning of user departments, both in the Centre and State governments. He approached the Planning Commission of India for establishing a National Natural Resources Management System (NNRMS). This system had committees for each application area like agriculture, bio-resources, geology and mineral resources, ocean resources and meteorology and cartography. These committees were headed by the respective department secretary who promoted and funded projects in the use of remote sensing techniques. Each State government set up State remote sensing centres and the space department set up regional centres to support the States. The National Remote Sensing Centre was the focal agency for providing satellite imagery and overall support.

The application of remote sensing imagery received a great boost and not only a large number of experimental projects were initiated in all parts of the country, but several applications were operationalized and regular services provided to the users. Some services that have become operational are the following:

### **Crop forecasting**

Crop Forecasting, which started as a joint experiment for study of Paddy cultivation, was expanded to cover several crops like sugar cane potato, cotton, jute and others. This led to the establishment of the Mahalonobis National Crop Forecast Centre at the Indian Agriculture Research Institute.

### **Fishing**

India has a long coast line of about 7500 Km and a large population depends on fishing for livelihood. ISRO jointly with ESSO (Earth Systems Science Organization) developed the techniques for identifying potential fishing zones using ocean colour, sea surface temperature and surface wind vectors, surface currents and GIS along with several other variables. These are indications of food availability and favourable environmental factors for congregation of fish in a particular habitat. Advisories were issued to fishermen indicating potential zones for fishing. The fishermen went for fishing according to these advisories. Evaluation of this exercise indicated that in eighty per cent of the cases the catch per unit effort increases four times. The search time was reduced by 30 to 70 per cent. Studies established significant increase in productivity, catch size and reduction in fuel consumption. This is one of the best examples of space generated information directly benefiting the livelihood of common fishermen.

Now INCOIS (Indian National Centre for Ocean Information Services) of ESSO issues three-days forecasts regularly, except on cloudy days. These advisories are sent to all major fishing harbours of INCOIS, displayed on electronic boards and disseminated on radio, television and newspapers in the local languages. It is also made available on the websites and about 25000 fishermen subscribe to receive this information directly.

## SPACE

### Disaster Monitoring and support Systems

The space involvement in this activity started very early with cyclone tracking and warning systems. Satellite images were analysed to track the cyclone genesis and its movement to predict the land fall point. Satellite reception systems were installed in coastal villages to give early warning about the impending cyclone. This was a joint activity with the India Meteorological Department (IMD). The advance warning resulted in saving of life and organizing better mitigation methods.

Extensive studies were further carried out on cyclone genesis, its track and land fall point and intensity estimation. The ground systems for weather forecasting were intensified by adding more AWS (Automatic Weather Stations) developed by ISRO along with more Agromet Towers and Doppler radars. This resulted in the installation of a meteorological data processing system installed at IMD and SAC Ahmedabad. This has significantly contributed to improvement of weather forecasting and of oceanic and atmospheric studies.

The Decision Support Centre established at National Remote Sensing Centre (NRSC) of ISRO is engaged in monitoring natural disasters such as flood, cyclone, agricultural drought, landslides, earthquakes and forest fires at operational level. The information generated from aero-space systems are disseminated to the concerned area in near real time for aiding in decision making. The value added products generated using satellite imagery help in addressing the information needs covering all the phases of disaster management such as, preparedness, early warning, response, relief, rehabilitation, recovery and mitigation.

### Concluding Remarks

In India the Space organization had to go much beyond its conventional role of providing space based systems. It had to join hands with the users to undertake end-to-end experiments to ensure successful demonstrations of space technology. If the space organization had not done this the acceptance and establishment of space based systems in India would have been much slower.

The efforts made by the space organization established the relevance and credibility of a space program for a developing country. It proved the statement of its founder that “If we are to play a meaningful role nationally and in the community of nations we must be second to none in the applications of advanced technologies to the real problems of human beings and society.”

There are some who consider the Indian space program to be very utilitarian from a western perspective. Given the circumstances it had to be so. By demonstrating the relevance of the program to tackle development issues of the nation, ISRO gained the confidence and support of the decision makers. It was therefore able to develop significant capabilities to launch its own and foreign satellites and also undertake missions to Moon and Mars. It has demonstrated that it can accomplish the most complicated technological projects as and when required. It is working on manned space flight as well as space shuttle like reusable vehicles. It has implemented several projects jointly with various international agencies like NASA, ESA, CNES, and several other countries and universities. By having joint projects with leading global space powers it has demonstrated its technical excellence and can continue to do so.

## *SPACE*

However, the Indian space program will have to continue to be utilitarian and applications oriented for some time. There is a lot more to be done to utilize the growing capabilities of space systems for the betterment of the society. The more space demonstrates its utilitarian value the more support it will get for its technology and scientific missions.

## Space Activities. Soft Law - Necessity or Danger?

Anja Nakarada Pecujlic\*

### Abstract

The dynamic development of space activities is creating an increasing number of legal loopholes, as the outer space treaties from the 70s have become to a great extent outdated. Due to current geopolitical situation, it is highly unlikely that States will in the near future reach an agreement and adopt new binding norms in the space domain. This is a serious problem, as hard law is above all necessary to curtail the real danger of weaponization of space. With the growing tensions, increased violent incidents and re-emergence of world wars scenarios the lack of hard law is an acute challenge. However, since this path has been confronting a stalemate for considerable time, other normative possibilities have to be examined, particularly the potential of soft law. In the past few decades States have been more inclined to adopt soft law measures, as they provide for certain flexibility, while offering at the same time a degree of authoritativeness. Hence, soft law can be perceived as a complement to hard laws, or as a way to begin regulating space activities beyond the existing Treaties. Notwithstanding this positive potential, one should not turn a blind eye to all the risks that soft law entails. The focus should be on the long-term perspective, on the benefits that outweigh the limitations of soft law.

### Introduction

The defining moment in the history of space law is the successful launch of the Sputnik satellite in 1957, followed by the initiation of the space race. The first treaty was created in 1967, the Outer Space Treaty, and it has been one of the most significant achievements in the progressive development of international law attained so far within the framework of the United Nations. Following the Outer Space Treaty, four more space treaties have been negotiated and adopted<sup>1</sup>.

These five treaties were created in the state-centric era marked by the first space race and they focused on governmental activities and scientific missions. Today, fifty years later, thanks to unprecedented technological development, lowering of costs and to the “availability of small, energy efficient computers, innovative manufacturing processes, and new business models for launching rockets”, the outer space playground has opened up for new actors - for developing countries, as well as for start-ups<sup>2</sup>. In other words, the combination of technological and economic factors has made this “process of democratization” possible.

\*PhD candidate at Cologne University, Faculty of Law

## *SPACE*

We are currently in the midst of the so-called Second Space Race, where the primary role of the States has been taken over by the private sector. The private sector has become the driving engine of technological development. At the same time, the legal framework (the five treaties<sup>3</sup>) governing all space activities, created forty years ago, has become to a large degree out-dated/insufficient<sup>4</sup>.

This is causing a number of problems. On the one hand, the five old treaties do not provide answers to question raised by new types of missions that were at the time of their creation technologically unforeseeable. On the other hand, they do not define clear limits, responsibilities nor provide secure benefits for the involvement of private actors. In addition, safety and sustainability of future space activities is diminished. The fact that crucial areas - the problem of space debris and weaponization of space - are not regulated by binding norms may well be potentially the biggest problem caused by the lagging of law behind technological development. At this point in time, it is clear that the nature of the main challenges in the domain of space activities are not primarily technical but, above all, legal. Therefore, the decisive question now is: can this phase be regulated in such a way to ensure that potential anarchy and destructive political rivalries are prevented and space's environment is not endangered?

### **Political Tension and Legal Status Quo**

Space domain, as exotic and independent as it may sound, is actually fundamentally dependent on the geopolitical situation and relationships between superpowers. Hence, the current worsening of relations between Russia and USA, the crisis of the European Union, the increasing number of conflicts and terrorist attacks, the devastating migrant crisis and the global rise of the far right, all influence the future of space activities and the cooperation of space actors. Based on the spate of conflicts around the globe and their gravity, voices have appeared stating that we are already in midst of World War Three (e.g. Pope Francis has said that “a piecemeal World War Three may have already begun”<sup>5</sup>). Although, this may be an overly pessimistic reading of the current situation, it is undoubtedly clear that technological development is now again in the centre of attention of key global actors, as it provides them with a powerful leverage, driving fear in the eyes of opponents when it comes to its potential (mis)use. Therefore, space sector cannot be but very much affected by all of these “earthly” politics.

### **Geopolitical Effects on the Space Domain**

The Conference on Disarmament (CD) is the world's only permanent multilateral disarmament negotiating body and the one in charge of preventing an arms race in outer space<sup>6</sup>. Even though it is an independent body, it is part of the UN, meaning that the CD conducts its work and adopts decisions by consensus<sup>7</sup>. However, since 1996, when the Comprehensive Nuclear Test Ban Treaty (CTBT)<sup>8</sup> was opened for signature, the CD encountered an impasse. It has neither been able to reach consensus on its working agenda, nor engage in any substantive deliberations<sup>9</sup>. Thus the main items under deliberation remain the same every year: the treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices (FMCT), nuclear disarmament, prevention of an arms race in outer space (PAROS), and negative security assurances.

## SPACE

The reasons behind the failure of a traditional multilateral *fora* such as the CD to adopt any binding space law norms in the past three decades lies largely in the fact that international discussions tend to apply the consensus rule and insist on the idea that all governments need to be fully on-board before agreements can be made. However, this is in discord with the present situation consisting of many actors with completely different political views who disagree even on which issues should have priority on the agenda. Furthermore, space is a global common and it is therefore a concern also for civil society and international organizations. However, their voices cannot be heard in the CD forum. This is regrettable, as civil society could play a vital role in helping that the issue of weaponization of space gets the necessary attention. It needs to be emphasized, that despite explicit wording that outer space should only be used for peaceful purposes and even though satellites are by and large used for peaceful purposes, each and every satellite poses a potential risk, threat. Whether it becomes a real threat depends on the sole interest of the State using them. This is due to the fact, “that not all members of the growing club of military space powers are willing to play by the same rules—and they don’t have to, because the rules remain as yet unwritten”<sup>10</sup>. On the other hand, international organisations like ITU, WMO, WHO, and many others use space to achieve their missions and even though they are vital in preserving peace, they are excluded from the “negotiating table”. Therefore, by including these peace prone actors in debates in a CD-like forum, a more comprehensive view could be gained on how the current dangers of transferring/extending earth conflicts to outer space can be avoided. In short, it is necessary to deal with space security as a part of the global security environment and transcend the legal stalemate.

**Emerging Soft Law in Space Affairs**

Notwithstanding, the above mentioned, “legal stalemate” may not be the most accurate description. It is true that after the first phase of drafting legally binding space related norms, which lasted until 1979, no new hard law norms have been adopted. However, other types of norms have been developed since. Non-binding forms have taken over the primacy through all the ensuing non-binding UNGA resolutions dedicated to specific areas, and the non-binding guidelines and codes of conduct e.g. like the Space Debris Mitigation Guidelines<sup>11</sup>. Furthermore, in 2013 at the UN COPUOS level, that is, the fifty-sixth session of the Legal Subcommittee, a proposal was made by Japan<sup>12</sup> to introduce a new agenda item concerning the “General exchange of information on practices in relation to non-legally binding instruments for outer space activities”<sup>13</sup>. Even though the proposal has not (yet) been adopted, it can nevertheless be interpreted as an additional sign that at the UN level soft law instruments and their domestic relevance is drawing considerable attention<sup>14</sup>. In fact, one can say that the current phase in space law normative development is marked by the dominance of soft law.

There is a great debate among scholars on how exactly to define soft law. Two opposing views have developed, one denying the very existence of such law as law, and the other that considers it as a new quasi source of international law. However, this controversy is beyond the scope of this article. With this caveat, the role, significance and possible future development of soft law as the “normative provisions contained in non-binding texts” will be examined<sup>15</sup>.

### Role of Soft Law

It is generally asserted by international law scholars that Art 38 of the Statute of the International Court of Justice defines the sources of international law<sup>16</sup>. According to this article the primary sources are international conventions, customary international law and general principles of law, while subsidiary sources are judicial decisions and the teachings of the most highly qualified publicists<sup>17</sup>. There is no mention of soft law as a source and therefore the question rises: what normative value does an untraditional instrument from a public international law perspective have?

Setting the question aside for the moment, we can note that with the further lack of development of legally binding norms, soft law advanced and became dominant. The main reason for such an evolution is, as previously stated, that law was lagging behind the progress of space technology. This caused a lot of “grey areas”, especially in regard to the exploration and use of outer space where a number of important details remained undefined. For example, current burning questions rising from the resource utilization and extraction from celestial bodies are the following: Can a private company claim ownership of an asteroid based on sending out a probe? Can it establish priority and exclusive rights due to telepresence or otherwise? On what principles are ownership rights of the gold, platinum or other materials mined from the asteroid to be regulated? In previous decades, answers to newly emerging questions were sought through Declarations, UN General Assembly resolutions, guidelines and standards of conduct, all representing soft law. Most likely, this will be the way to deal with current loopholes as well, as these instruments often influence actions of States but they do not have legal binding force *eo ipso*.

However, soft law entails a “stronger” potential as well. According to various scholars there are multiple scenarios of what soft law actually represents and what it may become. For example specific provisions contained in soft law may ‘codify’ pre-existing customary international law or precede and help form novel rules of custom; consolidate political opinion around the need for solving a new problem; fill in the gaps in existing treaties in force; form State practice that can be used to interpret treaties; provide a model for domestic law or a substitute for legal obligations when treaties are not feasible<sup>18</sup>. Soft law gains in attractiveness because it offers an authoritative but flexible legal framework. These two features combined seem to correspond to the current needs of states and the private sector in space activities. The main benefit lays in the fact, that this type of framework has simpler procedures, is finalized faster, stimulates developments and addresses well narrow or very specific activities<sup>19</sup>. It represents a coordinating principle between public interests and commercial and private interests in relation to space activities. But can we stop here or can soft law principles be transformed into hard law rules?

### Can We Stop at Soft Law?

As mentioned above, there are several opinions on how soft law can lead to the creation of an internationally binding norm. The first question is could it create customary international law? *Opinio juris* and State practice are required to form a custom. *Opinio juris* is reflected in acts of States or in omissions as it is acting in a particular way following a belief that it is obliged by law to do so<sup>20</sup>. Soft law is a

## SPACE

way of demonstrating consensus on rules and principles and an instrument for mobilizing a consistent, general response on the part of the States. UN General Assembly resolutions are an instrument of soft law. However, a number of specific provisions contained in these soft law norms may subsequently crystallize into customary international law<sup>21</sup>. Resolutions may embody both requisite *opinion juris* and State practice necessary to constitute “hard law” and they are accorded more weight when they are unanimous<sup>22</sup>. Furthermore, custom and soft law share mutual characteristics as there is no need not to go through a domestic ratification process; they receive less attention from domestic interest groups; they cost little to generate, are flexible in content, and able to form international norms without expressed State consent<sup>23</sup>. Therefore, soft law shapes expectations in relation to future behaviour more strongly than mere political or social obligations and is a valid mechanism for creating customary law provisions. In addition, if relevant aspects of soft law are being applied by States in their national laws as license requirements for private sector operators then this would represent sufficient State practice to create customary international law. Regulated conduct of private sector under domestic law would demonstrate State practice and hence States should be encouraged to adopt national space provisions in order to get from soft to hard law. In addition, it can be argued that soft law as an authoritative interpretation of a hard law instrument, can itself become an accessory hard law norm, as it helps to provide greater precision, through the written text, of an already existing binding norm<sup>25</sup>.

## MILAMOS

At this point, a reference has to be made to a new space related project that officially kicked-off the end of May 2016 - “Manual on International Law Applicable to Military Activities in Outer Space (MILAMOS)”. This project aims to deliver in three years time a Manual on Space Warfare similar to its predecessors, San Remo Manual on Naval warfare, Harvard Manual on Air and Missile Warfare and Tallinn Manual on Cyber Warfare. It will be a joint effort of McGill and Adelaide University, with ICRC and military investment along with academic and NGO participation.

The commonality between all of these manuals is that they attempt to provide clear rules on how the existing warfare norms should be practically applied in specifically defined areas. Even though, there is no claim that these rules are authoritative, seeing the depth and breadth of scholarship involved, it is arguable that they represent “‘clarifying’, ‘articulating’, and/or providing ‘agreed versions of the law’”<sup>26</sup>. In addition, these rules inspire considerable progressive developments with them<sup>27</sup>. However, these manuals are non-binding documents as well, and they do not set forth *lex ferenda*, best practice or preferred policy, but because they are widely used in praxis, they are highly relevant. Therefore, it is of great importance that MILAMOS project is based on in depth research, analysis and drafted carefully, as the risk of earthly conflicts spreading to outer space is real and it is necessary to define precise rules on what is permitted and what is prohibited. Furthermore, seeing how unlikely it is that new binding norms will be adopted in the near future regarding weaponization and military activities in outer space, MILAMOS may be the only “safety net” for preserving outer space environment from destruction.



### Pitfalls of Soft Law

Due to divergent political views and conflicting interests, states nowadays are inclined to accept only “soft” obligations when it comes to space activities. However, this entails a number of dangers.

- Firstly, there is a real risk that soft law downgrades pre-existing hard rules to being just soft. If we look at the issue of space debris, there are hard law obligations enshrined in Article I and Art IX OST, to use space for the benefit of all and to avoid harmful contamination. Space debris hinders free access of States to polluted areas of outer space<sup>28</sup> and can be perceived as a form of contamination<sup>29</sup>. On the latter point, Article IX OST, according to which States should adopt appropriate measures to help avoid contamination, is interpreted by some as an obligation to mitigate space debris<sup>30</sup>. Additionally, Article 21 of the Stockholm Declaration and Article 2 of the Rio Declaration, which are by most seen as customary obligations, state that States have to ensure that activities within their jurisdiction and control do not damage areas beyond national jurisdiction, such as Outer Space<sup>31</sup>. Yet, states are only discussing non-binding provisions on space debris mitigation in the International Code of Conduct (ICoC) proposed by the European Union<sup>32</sup>. Therefore, States should avoid development of soft law norms, which preempt the degradation of existing binding norms to a non-binding status.
- Secondly, the influence of soft law on the development of national laws is potentially a double-edged sword. On the one hand, national laws could in time lead to the creation of new international norms. On the other hand, they can also undermine the already established legal principles and create a Wild West situation. Thus, we are currently at a cross-road with regard to space resource utilization, considering the adoption of the US Commercial Space Launch Competitiveness Act and the tension this created in relation to the Moon Agreement.
- Finally, where technical rules are needed, where commercialization and privatization are in play and national interests are not directly concerned, soft law is dominating<sup>33</sup>. However, this diminishes the safety and sustainability of future space activities, and it leaves areas critical for national security or interest without binding norms, creating dangerous legal uncertainty as a consequence. Only hard law can fully address and govern the activities of individual States that have significant conflict potential when questions such as exploitation of natural resources or new types of threatening space objects are concerned<sup>34</sup>. However, for the moment soft law instruments appear to be the only feasible tool in the development of space law. However, warnings should be consistently made concerning the dangers implied in the on-going efforts to create only soft law. More so, since there is a grave problem of enforcement when it comes to soft law regulations.

## Conclusion

There is no right or wrong answer when it comes to soft law, there is only reality. International space community should be aware that soft law on the one hand brings benefits and that on the other hand, entails dangers. Firstly, it is evident that at the moment soft law norms are necessary and that they provide some form of safety and predictability in the present legal stalemate. However, shortcomings of soft law and risks that it produces cannot be overlooked. Even more so, they should not be overlooked! There are examples from other areas, where soft law rules were the first step forward that later led to a binding legal regime. If one looks at the evolution of regulations concerning nuclear disarmament, in the 1950s there were only non-binding provisions but today we have the Non-Proliferation Treaty and we are well on our way to the entry into force of the CTBT<sup>25</sup>. Therefore, even though constructing hard law instruments are certainly more complex than soft law ones, we should not always choose the easier (softer) way out. We need to embark on a path that brings more security and ensures future development in the long run.

<sup>1</sup> *The Rescue Agreement, the Liability Convention, the Registration Convention, the Moon Agreement*

<sup>2</sup> Dave Baiocchi and William Welser IV, "The Democratization of Space", *Foreign Affairs*, May/June 2015, p.98

<sup>3</sup> *The Outer Space Treaty, the Rescue Agreement, the Liability Convention, the Registration Convention, the Moon Agreement*

<sup>4</sup> Stephan Hobe, "The Impact of New Developments on International Space Law (new actors, commercialization, privatization, increase in number of „space-faring“ nations)", 2010, p. 4ff

<sup>5</sup> [www.catholic.org/news?/](http://www.catholic.org/news?/), last accessed 25.08.2016

<sup>6</sup> <http://www.reachingcriticalwill.org/disarmament-fora/cd>, last accessed 25.08.2016

<sup>7</sup> Art VII (19), *RULES OF PROCEDURE OF THE CONFERENCE ON DISARMAMENT*

<sup>8</sup> <https://www.ctbto.org/the-treaty/status-of-signature-and-ratification/>, last accessed 25.08.2016

<sup>9</sup> <http://www.nti.org/treaties-and-regimes/conference-on-disarmament/>, last accessed 25.08.2016

<sup>10</sup> Lee Billings, *War in Space May Be Closer Than Ever*, *Scientific American*, August 10, 2015

<sup>11</sup> *Inter-Agency Space Debris Coordination Committee (IADC). IADC Space Debris Mitigation Guidelines (2002). IADC 14 May 2014* [http://www.iadc-online.org/docs\\_pub/IADC-101502.Mit.Guidelines.pdf](http://www.iadc-online.org/docs_pub/IADC-101502.Mit.Guidelines.pdf), last accessed 25.08.2016

<sup>12</sup> *Proposal was made by Japan and co-sponsored by Austria, Canada, France, Nigeria and United States. United Nations Committee on the Peaceful Uses of Outer Space. Report of the Legal Subcommittee on its Fifty-Second Session, Held in Vienna from 8 to 19 April 2013. UN Doc. A/AC.105/1045, p. 26. UNOOSA 14 May 2014* <http://www.oosa.unvienna.org/oosa/en/COPUOS/Legal/2013/index.html>, last accessed 25.08.2016

<sup>13</sup> *United Nations Committee on the Peaceful Uses of Outer Space. Report of the Legal Subcommittee on its Fifty-Second Session, Held in Vienna from 8 to 19 April 2013. UN Doc. A/AC.105/C.2/L.291. New agenda item on general exchange of information on practices in relation to non-legally binding instruments for outer space activities, Working paper submitted by Japan, and co-sponsored by Austria, Canada, France, Nigeria and the United States of America. UNOOSA 14 May 2014* <http://www.oosa.unvienna.org/oosa/en/COPUOS/Legal/2013/docs.html>, last accessed 25.08.2016

<sup>14</sup> *United Nations Committee on the Peaceful Uses of Outer Space. Report of the Legal Subcommittee on its Fifty-Second Session, Held in Vienna from 8 to 9 April 2013. UN Doc. A/AC.105/1045, p. 26, pt. A.180. UNOOSA 14 May 2014* <http://www.oosa.unvienna.org/oosa/en/COPUOS/Legal/2013/index.html>, last accessed 25.08.2016

<sup>15</sup> Shelton, Dinah, ed. *Commitment and Compliance: The Role of Non-binding Norms in the International Legal System*. Oxford: Oxford University Press, 2000, p. 292

## SPACE

<sup>16</sup>Georg Schwarzenberger, *International Law*, Vol. 1 (3<sup>rd</sup> ed. Stevens and Sons Ltd, London 1957) 21-22; Antonio Cassese, *International Law*, (2<sup>nd</sup> ed., Oxford University Press, Oxford-New York 2005) 156; *IME Shaw*, *International Law*

<sup>17</sup>Art 38, ICJ

<sup>18</sup>*Nicaragua Case*, ICJ Report 1986; Steven Freeland, *Soft Law in Outer Space*, 22; Ricky J. Lee, Steven Freeland, *The Crystallisation of General Assembly Space Declarations into Customary International Law*, *Proceedings of the 46<sup>th</sup> Colloquium on the Law of Outer Space* (2004) 122; Dinah L. Shelton, *Soft Law*, *Handbook of International Law* (Routledge Press 2008), 8

<sup>19</sup>Setsuko Aoki, *Soft Law in Outer Space*, 60

<sup>20</sup>*Nicaragua Case*; *Lotus Case*

<sup>21</sup>A. Boyle, *Reflection on the Treaty as a Law-making Instrument*, IV. *Soft Law and the further Development of Law-making Treaties*, 40 Years of the Vienna Convention on the Law of Treaties, pp. 11-13

<sup>22</sup>S. Freeland, *Soft Law in Outer Space*, 23

<sup>23</sup>L. R. Helfer & I. Wuerth, "Custom in the Age of Soft Law", p.2

<sup>24</sup>S. Freeland, *Matching Detail with Practice: The Essential Elements of National Space Legislation*, *Proceedings of International Institute of Space Law* (2010) 540

<sup>25</sup>M. Ferrazzani, "Soft Law in Space Activities - an Updated View", *Soft Law in Outer Space*, p.112; the US Court of Appeal for the Second Circuit stated in *Filartiga v. Pena Iraki* that "[These] UN declarations are significant because they specify with great precision the obligations of Member States under the Charter. Since their adoption, members can no longer contend that they do not know what human rights they promised in the Charter to promote

<sup>26</sup>Dale Stephens, "The Normative Role of International Operational Military Law Manuals", presentation at 4<sup>th</sup> Manfred Lachs Conference, Toronto, May 2016

<sup>27</sup>E.g. *Encryption & Manuals: 2<sup>nd</sup> 1949 Geneva Convention forbids encryption on hospital ships*; *San Remo (1994) - Hospital ships 'should' be able to use encrypted communications and preserve protection*; *Harvard AMW Manual (2013) Medical Aircraft can use encrypted communications without losing protection, provided such comms are used solely for humanitarian purpose*

<sup>28</sup>Art I, *Outer Space Treaty*; Lyall and Larsen, *Space Law - A Treatise*, p. 307 (2009)

<sup>29</sup>Gerhard, *National Space Legislation*, p. 85 (2005)

<sup>30</sup>Art IX, *Outer Space Treaty*; UNCOPUOS, *Technical Report on Space Debris*, p. B.III.12 (2005) *Journal of Space Law*, Volume 26, p. 209 (1998)

<sup>31</sup>*Declaration of the UN Conference on the Human Environment*; *Rio Declaration*

<sup>32</sup>[http://www.esa.int/Our\\_Activities/Operations/Space\\_Debris/Mitigating\\_space\\_debris\\_generation](http://www.esa.int/Our_Activities/Operations/Space_Debris/Mitigating_space_debris_generation)

<sup>33</sup>Setsuko Aoki, *Soft Law in Outer Space*, 84-85

<sup>34</sup>Setsuko Aoki, *Soft Law in Outer Space*, 60

<sup>35</sup><http://www.un.org/en/events/againstnucleartestsday/history.shtml>; <http://www.ctbto.org/nuclear-testing/history-of-nuclear-testing/nuclear-testing-1945-today/>, last accessed 25.08.2016

## Outcome of the 39th ICAO Assembly

Alfredo Roma\*

The 39th Session of the ICAO Assembly has taken place in Montreal from 27 September to 7 October 2016. As a first decision the 191 ICAO Member States have backed up the ICAO Council Resolution on the adoption of a global market-based measure (GMBM, which is part of a basket of measures aiming to reach Carbon Neutral Growth as from 2020) to mitigate international aviation CO<sub>2</sub> emissions. The main problem with a view to the adoption of this text was to find a fair balance between preserving the goal of carbon-neutral growth for the 2020 time frame and the request of the emerging countries to see the notion of “common but differentiated responsibilities” being transcribed into an ICAO context in which differentiated treatment of the various States is not the norm. The draft resolution presented by the Council called the system CORSIA (Carbon Offsetting and Reduction Scheme for International Aviation). The CORSIA system covers CO<sub>2</sub> emissions produced on air routes between two signatory States. The emissions level reached in 2020 will act as the reference baseline for the mechanism. Using this scale, airlines will be able to offset their surplus CO<sub>2</sub> emissions by buying emission reduction credits produced by other activity sectors under programmes such as those set up by the United Nations Framework Convention on Climate Change (UNFCCC). The types of credits that could be used within the framework of CORSIA will need to meet environmental quality criteria, which are to be defined and implemented in the form of international standards established by ICAO.

Another matter discussed by the 39<sup>th</sup> Session of ICAO Assembly was “Flights above conflict zones”. The downing of Malaysian flight MH17 on 17 July 2014 in Eastern Ukraine was a shock for everyone. ICAO reacted immediately. An ICAO Council resolution of July 2014 highlighted the importance of the accident investigation process. An ICAO Task Force on Risks to Civil Aviation arising from Conflict Zones was established. In the second half of 2014, this Task Force formulated a work programme listing some actions. The ICAO High-level Safety Conference in February 2015 recognised the necessity of providing accurate and timely information to States and airlines regarding risks to civil aviation arising from conflict zones as a matter of urgency. A European working paper on conflict zones, adopted by ECAC/EU Member States and the European Commission in July 2016, has been presented to the 39<sup>th</sup> ICAO Assembly. The Assembly supported the actions proposed in the working paper and agreed the ICAO Council should give priority to the actions formulated in the paper in light of the 2017-2019 budget, including the allocation of extra-budgetary resources. Furthermore, the Assembly highlighted the importance

\*Member of the Advisory Council of The European Space Policy Institute, Vienna - Former President of the Italian Civil Aviation Authority and of the European Civil Aviation Conference.



of information sharing and the need for Member States to engage in these efforts.

The 39<sup>th</sup> Session of ICAO Assembly discussed the fragmented regulations on Unmanned Air System while their market is rapidly developing. A harmonised set of rules should be designed for their integration in the conventional air traffic management. The Assembly mandated the development of global regulations to harmonise UAS regulation in accordance with an innovative and flexible approach that would take into account developments at national, regional and international levels and involve JARUS. ICAO also intends to publish an online guide that will include guidance to assist States in developing and implementing national regulations for UAS. It will include best practices and examples from States that already have such regulations. ICAO will also develop guidance material on safe UAS operation, with awareness-raising and educational campaigns for users, and will promote the exchange of information among States with respect to their UAS regulations.

At the 39th Session of the ICAO Assembly, a series of working papers was presented with a view to addressing the issue of cyber security in civil aviation. ECAC, the European Union, EUROCONTROL and the United States presented a joint paper that sought to explore ways to increase global awareness of cyber threats and to further develop the cyber resilience of the aviation system. The paper concludes with a series of recommendations to the Assembly, which was invited to request that ICAO:

- address cyber resilience in civil aviation in a comprehensive manner;
- and its Contracting States promote awareness on cyber threats and vulnerabilities in civil aviation;
- facilitate, in a secure manner, information sharing between States and relevant stakeholders on cyber threats, vulnerabilities and mitigating measures;
- consider necessary steps for the development of guidelines for managing current and future cyber threats and vulnerabilities, from identification to mitigation taking into account relevant existing States' measures and industry standards;
- instruct existing panels and expert groups to take into account, where relevant, those guidelines, while performing their work.

Finally, the ICAO Council presented two working papers to the 39th ICAO Assembly proposing to amend the Chicago Convention with an increase in the membership of the ICAO Council and the Air Navigation Commission. ECAC States took the floor to express their support of this proposal. In the resolutions adopted by the 39th ICAO Assembly on the extension of seats on the Council and the ANC, ICAO Member States underlined that it would be “highly desirable that the aforesaid amendment should come into force as soon as possible”, and therefore recommended that all Contracting States urgently ratify the amendment to Articles 50(a) and 56 of the Chicago Convention to achieve this aim. Indeed, the full ratification procedure to bring into force amendments to an international convention can be a lengthy process, taking an average of ten years as seen on previous occasions. However, in order to meet today’s civil aviation evolutions and requirements, it is important that the Council and ANC membership be enlarged urgently to allow them to con-

## *MISCELLANEOUS MATERIAL OF INTEREST*

tribute even more efficiently and effectively to ICAO.

The Assembly then elected its new Council, the governing body of the organization, allocating 8 out of the 36 Council seats to Europe for a three-year term. Elected ECAC Member States are: France, Germany, Ireland (representing the ABIS rotation group), Italy, Spain, Sweden (representing the NORDICAO rotation group), Turkey (representing the BSCG rotation group) and the United Kingdom. In the Council election Italy has received the highest number of votes (166) with the exception of Brazil (167).



## TAP Portugal and Brussels Airlines under Investigation for Potential Breach of EU Antitrust Rules

Zsófia Török\*

In February 2011, the European Commission (EC) started a parallel investigation of two cases regarding a code-sharing cooperation, between Deutsche Lufthansa (Germany) and Turkish Airlines (Turkey), and between TAP Portugal (Portugal) and Brussels (Belgium).

On 27 October 2016, the European Commission announced that a Statement of Objections had been sent to TAP Portugal and Brussels regarding their code-sharing agreement. According to the EC the two air carriers may have pursued anticompetitive strategy because their code-sharing agreement on passenger services restricted the competition between them. The Statement of Objections concerns the first three years of the agreement (2009-2012).

At this stage the investigation focuses on the following issues:

- the capacity reduction (number of seats) together with the alignment of their pricing policies;
- the granting each other an unlimited rights to sell seats on flights of both airlines on the same route;
- the implementation of the two agreements listed above by reducing capacity, completely aligning their fare structure and ticket prices.

The EC considers that the two air carriers' combination of practices may breach Article 101 of the Treaty on the Functioning of the EU (TFUE), according to which all agreements, decisions and concerted practices are prohibited when they may affect free trade and competition between Member States.

It is important to highlight the fact that code-sharing can be beneficial for passengers if used by partners which are not present on the same route. In this case the air carriers can expand their services and upgrade connections for their customers. Such code-share agreements are very common and they do not raise competition concerns.

However, in this particular case, the two airlines granted each other unlimited rights to sell seats on each other's flights on the same route, namely on the Brussels-Lisbon route. The two airlines may have used their code-share to reduce competition which has the effect of lower quality of service and higher prices, which can harm the customers' interests.

\*Law Student at Nicolae Titulescu University, Bucharest

## *MISCELLANEOUS MATERIAL OF INTEREST*

The Statement of Objections is a formal procedure taken by the EC before adopting a decision that can negatively affect the parties' rights. It is a preliminary view that does not prejudice the outcome of the investigation. The addressees can reply in writing and also request an oral hearing to respond to the EC's allegations before the formal decision is made.

At the same time the EC announced that it closed its investigations of the similar case between Lufthansa and Turkish Airlines. It found that both air carriers did not grant full marketing rights for each other's available seats and applied different pricing strategies. In the end the code-share accounted for only a marginal part of the airlines' sales on the routes concerned.



### FORTHCOMING EVENTS

Welcome to the IX WALA Annual Conference

Bologna Italy, on January 18-20, 2017  
hosted by Bologna Airport

This year's edition will be focused on *MANAGING AIRPORTS: Then - Now - Next*

Welcome WALA 2017

The Worldwide Airport Lawyers Association (WALA) was conceived in Prague, Czech Republic, on September 2007, where destiny gathered airport lawyers from across the world. The attendees agreed that aviation and aeronautical law in each of their respective countries was outdated, leaving them unprepared to face the new and rapidly changing reality of airport ownership and operations, which required specialized legal concepts and knowledge. Consequently, they agreed on the need to create and promote a worldwide forum; a meeting place where aviation lawyers and all other interested parties could develop, share and debate relevant issues in the field of airport law.

Seven months later, WALA became a reality with its first conference taking place in Spain. Since then, subsequent annual meetings have taken place in Madrid, Lisbon, Dallas, Amsterdam, Montreal, Buenos Aires and Athens. WALA's IX conference will take place in Bologna, Italy on January 18-19, 2017.

WALA is a not-for-profit corporation, founded to promote and assist in cooperation among legal advisers and other public and private sectors of the worldwide airport, aviation and aeronautical industries.

For more information about WALA please visit [www.wala.aero](http://www.wala.aero)