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Regional aviation safety organisations: enhancing air transport safety through regional cooperation

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Chapter 2

Towards a Global Aviation Safety Oversight Network: Regional Cooperation on Aviation Safety in the Context of the Chicago Convention

‘Greater regional cooperation can improve the efficiency of air transport operations and simultaneously generate economic growth for States and Regions alike.’¹

Roberto Kobeh González,
President of the ICAO Council (2006-2013)

2.1 INTRODUCTION

Regional cooperation on aviation safety has visibly intensified since the beginning of the twentieth first century, as evidenced in particular by the new ICAO policy on regional cooperation, which is presented in Section 2.4 of this Chapter, and the establishment of a significant number of new RASOs.²

This intensification of regional cooperation has been to a large extent stimulated by the conviction of the international aviation community that, by focusing efforts at regional levels, States will be better able to meet their obligations stemming from the Chicago Convention and to overcome certain of its alleged weaknesses, such as lack of a legally binding nature of ICAO Annexes or weak enforcement competences of ICAO. For some regions, such as Africa, regional cooperation has emerged as an indispensable element of ICAO strategy for addressing aviation safety problems that they face.³

Before presenting and analysing selected cases of regional cooperation on civil aviation safety in different parts of the world, it is therefore necessary to put regional cooperation in the broader context of the Chicago Convention and global jurisdiction of ICAO.

¹ ICAO, 'Agreements on Regional Cooperation to Promote Efficiency and Sustainability of Air Transport', Press Release No. 09/10, (2010).

² See Chapters 3 and 5 for detailed statistics.

³ ICAO, 'Assembly Resolution A38-7: Comprehensive Regional Implementation Plan for Aviation Safety in Africa', (38th ICAO Assembly, 2013). See also: ICAO, 'Comprehensive Regional Implementation Plan for Aviation Safety in Africa, 12th meeting of the steering committee: report', AFI SC/2013/12, (2013), <<http://www.icao.int/safety/afiplan/Documents/AFI-SC12-Report%202013.pdf>> [accessed 15 March 2014], at Paragraph 2.1.

This chapter will firstly summarise the main principles of the Chicago Convention and its impact on safety regulation at national level. The strengths and weaknesses of the ICAO regime will be reviewed and explanations offered on how they influence the effectiveness of the global aviation safety system (Section 2.2). This will include a demonstration of how States have traditionally dealt with inefficiencies stemming from the system of the Chicago Convention, including in particular through Bilateral Aviation Safety Agreements (BASAs).

Following on from that, the oversight and enforcement mechanisms used by ICAO will be concisely compared with the mechanisms used in the international maritime sector, in which States and the International Maritime Organization (IMO) faced similar problems with effective implementation and enforcement of maritime safety requirements and ultimately reached a conclusion that regional cooperation can be a good way of addressing some of these problems (Section 2.3).

This chapter will also present the regional aviation policy of ICAO. Against this backdrop it will be argued that regional cooperation should be seen not only as a tool for helping States in raising their level of compliance with ICAO SARPs and increasing the effectiveness of their safety oversight systems, but also as a way to change the architecture of the current – predominantly national based and arguably largely inefficient – system (Section 2.4).

Finally, this chapter will propose the concept of a ‘Global Aviation Safety Oversight Network’ or GASON, and will demonstrate that by working more closely with and relying on robust and appropriately empowered RASOs, ICAO could not only help individual States to increase their compliance with international requirements, but also to ensure more uniformity in their implementation and to better harmonise actual safety levels in regions across the world (Section 2.5).

2.2 STRENGTHS AND WEAKNESSES OF THE CHICAGO CONVENTION FROM AN AVIATION SAFETY PERSPECTIVE

The Chicago Convention is a very successful treaty if looked at from the perspective of its global acceptance. In 2014, 191 States were parties to this instrument.⁴

Yet views on the effectiveness of the Chicago Convention in addressing contemporary problems of international civil aviation are divided. Leaving aside the economic aspects of aviation regulation, which are not the subject matter of this study, the arguments used by practitioners and academic writers usually point out that while ICAO has been quite successful in developing SARPs concerning civil aviation safety and security, it has somewhat failed in ensuring global uniformity in their implementation and especially enforcement.⁵

It is further pointed out in the literature that the alleged deficiencies of ICAO and the Chicago Convention in ensuring effective implementation of international requirements, particularly in the domain of aviation safety, led to the development of unilateral oversight and enforcement schemes⁶ such as the US Inter-

⁴ ICAO, 'Member States' <<http://www.icao.int/about-icao/Pages/member-States.aspx>> [accessed 5 August 2014].

⁵ Olivier Onidi, 'A critical perspective on ICAO', ASL, 33 (2008), pp. 38-45. Gilbert Guillaume, 'ICAO at the beginning of the 21st century', ASL, 33 (2008), pp. 313-317.

⁶ Milde, *supra* note 48 in Ch.1, at pp. 177-178.

national Aviation Safety Assessment (IASA) programme,⁷ or the EU's regulation on the list of air carriers subject to an operating ban.⁸

While not wanting to repeat the discussion on the above issues, the alleged weaknesses of the system of the Chicago Convention do appear paradoxically to have also contributed to its success in terms of global acceptance and endurance. This is because the authors of the Chicago Convention have managed to strike a relatively good balance between, on the one hand, the desire to secure 'the highest practicable degree of uniformity in regulations, standards, procedures, and organization in relation to aircraft, personnel, airways and auxiliary services',⁹ which is necessary for aviation as a global industry, and on the other hand, the principle that 'each State has complete and exclusive sovereignty over the airspace above its territory',¹⁰ which at the time of the adoption of the Chicago Convention was of fundamental importance to States in the aftermath of the second world war.

The predecessor of the Chicago Convention, the 1919 Convention Relating to the Regulation of Aerial Navigation (hereinafter the 'Paris Convention'),¹¹ was much more ambitious, if looked at from the objective of achieving harmonisation of aviation standards, yet it failed to achieve universal acceptance.¹² The novel elements of the Paris Convention, such as the legally binding nature of its technical annexes,¹³ qualified majority voting used for their adoption,¹⁴ and inequality of States in the International Commission for Air Navigation (ICAN) in terms of their voting power,¹⁵ combined with the post first world war politics, led to a situation where a number of important States, including the Soviet Union and the US, declined to become parties to it, while other States started to explore alternative

⁷ For an overview of IASA see: Anthony J. Broderick and James Loos, 'Government Aviation Safety Oversight: trust but verify', *JALC*, 67 (2002), pp. 1039-1044, 1053-1055. Paul S. Dempsey, 'Compliance and enforcement in international law: achieving global uniformity in aviation safety', *North Carolina Journal of International Law and Commercial Regulation*, 30 (2004), pp. 27-33. FAA, 'IASA website' <www.faa.gov/about/initiatives/iasa/> [accessed 5 August 2014].

⁸ EU, 'Regulation (EC) No 2111/2005 of the European Parliament and of the Council of 14 December 2005 on the establishment of a Community list of air carriers subject to an operating ban within the Community and on informing air transport passengers of the identity of the operating air carrier, and repealing Article 9 of Directive 2004/36/EC', (OJ L 344, 27.12.2005). EC, 'List of airlines banned within the EU' <http://ec.europa.eu/transport/modes/air/safety/air-ban/index_en.htm> [accessed 5 August 2014]. See also: Alan D. Reitzfeld and Cheryl S. Mpande, 'EU Regulation on Banning of Airlines for Safety Concerns', *ASL*, 33 (2008), pp. 132-154. Paul S. Dempsey, 'Blacklisting: Banning the unfit from the heavens', *AASL*, XXXII (2007), pp. 29-63.

⁹ 'Chicago Convention', Article 37.

¹⁰ *Ibid.* Article 1.

¹¹ 'Convention Relating to International Air Navigation Agreed to by the Allied and Associated Parties', Paris, 13 October 1919, LNTS (1922) No. 297.

¹² Duane W. Freer, 'Regionalism is asserted: ICAN's global prospects fade (1926 to 1943)', *ICAO Bulletin*, Special Series 4 (1986), pp. 66-68.

¹³ 'Paris Convention', Article 39: 'The provisions of the present Convention are completed by the Annexes A to H, which, subject to Article 34 (c), shall have the same effect and shall come into force at the same time as the Convention itself.'

¹⁴ *Ibid.* Article 34: 'Any modification of the provisions of any one of the Annexes may be made by the International Commission for Air Navigation when such modification shall have been approved by three-fourths of the total possible votes which could be cast if all the States were represented and shall become effective from the time when it shall have been notified by the International Commission for Air Navigation to all the contracting States.'

¹⁵ *Ibid.* Article 35.

courses.¹⁶ This in practice put a halt, until 1944, to all serious attempts to develop a global legal regime for civil aviation.

The subsequent parts of this section will therefore critically analyse selected elements of the system of the Chicago Convention in order to verify if, at the beginning of the twenty-first century, it is still fit for purpose, as far as aviation safety is concerned. The elements selected for this analysis include:

- (1) The principle of State sovereignty under the Chicago Convention (Section 2.2.1);
- (2) Implementation of SARPs and notification of differences (Section 2.2.2);
- (3) Recognition of certificates and licences, including of those not envisaged under the Chicago Convention (Section 2.2.3);
- (4) Role of ICAO in global safety oversight (Section 2.2.4);
- (5) ICAO enforcement efforts and competences (Section 2.2.5).

2.2.1 THE PRINCIPLE OF STATE SOVEREIGNTY UNDER THE CHICAGO CONVENTION

The Chicago Convention is based on the principle of complete and exclusive sovereignty of a State over the airspace above its territory,¹⁷ and where this territory is defined as 'land areas and territorial waters adjacent thereto under the sovereignty, suzerainty, protection or mandate of such State.'¹⁸

Although the meaning and scope of the concept of State sovereignty is highly contested in modern studies of international law,¹⁹ for the purpose of this study a simple meaning of this notion, as proposed by Steinberger, has been adopted:

Sovereignty in the sense of contemporary international law denotes the basic international legal status of a State that is not subject, within its territorial jurisdiction, to the governmental, executive, legislative, or judicial jurisdiction of a foreign State or to foreign law other than public international law.²⁰

From a general perspective it is important to distinguish between State sovereignty as a principle of international law, and the exercise of this sovereignty. This distinction has been present in legal discourse from the beginning of constitutional theory. For example, Hobbes in *De Cive* observes:

We must then distinguish between the Right, and the exercise of supreme authority, for they can be divided; as for example, when he who hath the Right, either cannot, or will not be present in judging trespasses, or deliberating of affaires: For Kings sometimes by reason of their age cannot order their affaires, sometimes also though they can doe it

¹⁶ Such as the development of the competing Ibero-American Aviation Convention and the Pan-American Convention on Commercial Aviation; see: Freer, 'Regionalism is asserted: ICAN's global prospects fade (1926 to 1943)', *supra* note 12, at p. 67.

¹⁷ 'Chicago Convention', Article 1.

¹⁸ *Ibid.* Article 2.

¹⁹ Dan Sarooshi, *International organizations and their exercise of sovereign powers*, (2005), pp. 3-14.

²⁰ Helmut Steinberger, 'Sovereignty', in *Encyclopedia of Public International Law*, ed. by Rudolf Bernhardt (2000), p. 501.

themselves, yet they judge it fitter, being satisfied in the choyce of their Officers and Counsellors, to exercise their power by them.²¹

The practical significance of the above distinction is that, although it is generally recognised that, from the perspective of international law, State sovereignty as such cannot be transferred, the exercise of sovereign powers by States can be subject to limitations, conditions or delegations.²² As observed by Wassenbergh, State sovereignty as the principle of customary international law recalled by Article 1 of the Chicago Convention ‘applies only in so far as it is not expressly restricted by other provisions of the Convention or by engagements entered into elsewhere.’²³

From the perspective of this study, the above means that although under the Chicago Convention a State has the overall responsibility for regulating civil aviation safety, the actual exercise of this responsibility, in whole or in part, can be delegated to other entities, including to RASOs, as will be demonstrated in Chapters 3-6.

2.2.2 IMPLEMENTATION OF SARPS AND NOTIFICATION OF DIFFERENCES

One of the key objectives of the Chicago Convention is to secure ‘the highest practicable degree of uniformity in regulations, standards, procedures, and organization in relation to aircraft, personnel, airways and auxiliary services in all matters in which such uniformity will facilitate and improve air navigation.’²⁴ Such uniformity is essential given the global nature of international aviation.

The provisions of the Chicago Convention have a mandatory character, which, as demonstrated by Milde, stems from its very text, as well as State practice.²⁵ This ensures uniformity in relation to basic aviation safety requirements contained in the Convention such as an obligation to issue or validate airworthiness certificates and pilot licences,²⁶ or to investigate aviation accidents.²⁷

On the other hand, States have been given flexibility, under Article 38 of the Chicago Convention, to file *differences* with *Standards* adopted by the ICAO Council and designated *for convenience* as Annexes to the Convention.²⁸ Whilst it could be argued that this flexibility opened the gates to the erosion of the system in terms of its uniform implementation, it also undoubtedly contributed, as the example of the earlier Paris Convention shows, to worldwide acceptance of the Chicago Convention, and success of ICAO in developing a comprehensive set of SARPs contained all together in nineteen Annexes.

The reality is that ICAO is not a supranational organisation like the EU, empowered to adopt by qualified majority legally binding and directly applicable

²¹ Thomas Hobbes, 'De Cive', (1651).

²² Sarooshi, *supra* note 19, at p. 18.

²³ Henri A. Wassenbergh, Post-War International Civil Aviation Policy and the Law of the Air, (1962), p. 100.

²⁴ 'Chicago Convention', Article 37.

²⁵ Milde, *supra* note 48 in Ch.1, at p. 18.

²⁶ 'Chicago Convention', Articles 31-32.

²⁷ *Ibid.* Article 26.

²⁸ For a detailed overview of Article 38 of the Chicago Convention see: Huang, *supra* note 29 in Ch.1, at pp. 58-65.

legislation for its Member States and it is not likely that it will ever be given such supranational competences. It is an intergovernmental organisation largely subordinate to the will of its Member States. With only 19% of the contracting States to the Chicago Convention represented at the ICAO Council and 10% of them represented at the Air Navigation Commission (ANC) which prepares the proposals for SARPs,²⁹ the right to file a difference, is intended to safeguard the interests of those States which may not wish, for whatever reasons, the minority to impose its views on them.

In addition to the right of filing differences under Article 38, there is also a provision for any Annex to the Chicago Convention or amendment thereto to be rejected by a majority of ICAO Member States during the adoption process.³⁰ Yet in practice, at least by the end of 2013, there has not been a single case of the majority of States blocking adoption of new SARPs in the ICAO Council.³¹ This proves that the process of adopting ICAO SARPs is overall well balanced and that its preparatory steps ensure that major controversies are eliminated before a proposal reaches the level of the ICAO Council.

As far as the legal status of SARPs is concerned, one important aspect has to be underlined. Upon their entry into force, *Standards*³² are binding upon ICAO Member States, unless a difference has been filed. ICAO underlines this principle in its 'State Letters' which announce adoption of new SARPs by repeatedly stating that 'international Standards in Annexes have a conditional binding force, to the extent that the State or States concerned have not notified any difference thereto under Article 38 of the Convention.'³³

Following on from the above, if a notification under Article 38 has not been made, other ICAO Member States are entitled to presume that full compliance with a Standard has been achieved. As pointed out by Van Antwerpen, 'failure by the State to comply with the notification obligation should be considered as a breach of treaty obligations.'³⁴ Therefore, if as a result of non-notification, a safety incident occurs this could arguably lead to State responsibility under international law, although this study did not identify any case law in this respect.³⁵

Another important aspect related to notification of differences is the fact that although by filing a difference a State releases itself from the obligation of compliance with an ICAO Standard, this does not mean that other States are obliged to respect that non-compliance. For example, if a State has filed differences related to airworthiness standards of aircraft on its register, then other ICAO Member States would have a right to consider such aircraft as not complying with minimum requirements set for the purpose of recognition of airworthiness certificates under Article 33 of the Chicago Convention.

²⁹ Ibid. p. 58.

³⁰ 'Chicago Convention', Article 90.

³¹ Based on a review of voting results in the ICAO Council (2009- 2013). For an overview of the situation prior to 2009 see: Huang, *supra* note 29 in Ch.1, at p. 55.

³² Only 'Standards' have a mandatory character, unless a difference is filed under Article 38 of the Chicago Convention. For a definition of 'Standards' and 'Recommended Practices' see 'Forward' to any of the ICAO Annexes.

³³ See for example: ICAO, 'State letter concerning the adoption of Amendment 16 to Annex 6, Part III, Attachment D: Note on the notification of differences', AN 11/32.3.8-11/46, (2011).

³⁴ Van Antwerpen, *supra* note 52 in Ch.1, at p. 31.

³⁵ See Chapter 6 for further discussion about State responsibility for breaches of obligations stemming from international law, including the Chicago Convention.

The practical consequence of the above could be a denial of over-flight or landing rights for the aircraft of the notifying State in accordance with the applicable provisions of bilateral Air Services Agreements' (ASA) clauses dealing with the issuance of operating authorisations and technical permissions.³⁶ Such situations have for example occurred in the past in Europe following adoption by ICAO of SARPs concerning the maximum age of pilots, and where France, which was strictly adhering to the ICAO set limit of sixty years, on certain occasions did not allow British operators to fly in French airspace if one of the pilots was older than sixty years.³⁷ This particular aspect of the SARPs' status has led commentators to argue that in practice at least some of the ICAO Standards have a value of law or 'law of gravity' with which compliance is simply unavoidable in practice,³⁸ or that some of the Standards 'are of such fundamental importance that the departure from them may not be tolerated.'³⁹

The main objective of notification of differences however is transparency, especially towards operational personnel, such as pilots, who need to be aware if national rules and practices in a given State differ in any respect from those prescribed by ICAO. This function of SARPs can be illustrated by the following example: if State 'A' does not follow the ICAO standards concerning markings of runways and taxiways of international airports, it should notify other States accordingly, as otherwise aircrews from other parts of the world may be confused when using airports located in State 'A'. Because of that inherent safety link, ICAO, in addition to differences notified by States under Article 38, also gathers information on differences under the USOAP.⁴⁰

Looking at practical aspects related to application of Article 38 of the Chicago Convention, the main deficiencies in this respect have so far been largely associated with the lack of mechanisms in the ICAO Member States for systematic identification of differences as new SARPs and national legislation are promulgated. By the end of 2013 over 70% of the ICAO Member States had not established or implemented a mechanism for the identification and notification of differences to ICAO.⁴¹

In addition, ICAO methods used so far for the management of the differences have not been very efficient. Originally, the process of reporting differences was handled entirely by correspondence between States and ICAO. This was a 'laborious and time-consuming activity' which required substantial resources from both ICAO and its Member States.⁴² In addition the dissemination of differences,

³⁶See Article 3 of a Template Bilateral Air Services Agreement in: ICAO, 'Policy and Guidance Material on the Economic Regulation of International Air Transport', ICAO Doc. 9587, (2008).

³⁷ Former President of the ICAO Air Navigation Commission, 'Interview No 1', (2013).

³⁸ Milde, *supra* note 48 in Ch.1, at p. 164.

³⁹ Huang, *supra* note 29 in Ch.1, at p. 61.

⁴⁰ Under the individual Memoranda of Understanding (MoU) signed between ICAO and its Member States for the conduct of the USOAP-CMA activities, States undertake to supply information on their compliance with SARPs in the form of the 'Safety Oversight Compliance Checklists'. Copy of a generic MoU is attached as Appendix B to: ICAO Doc. 9735, *supra* note 13 in Ch.1.

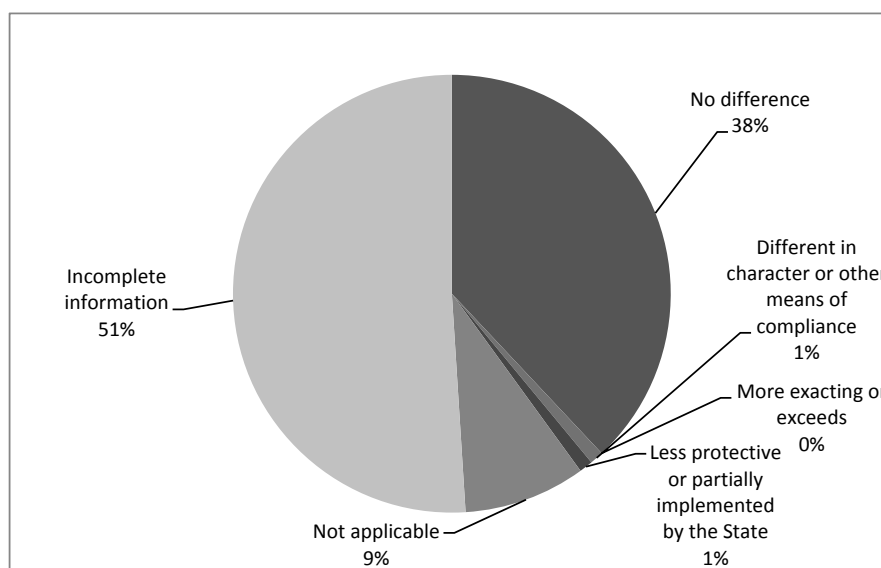
⁴¹ Official of the European Aviation Safety Agency, 'Interview No 4', (2014). This situation remains largely unchanged since 2011, see: ICAO Secretariat, 'Known Issues and Difficulties', 1st Meeting of Filing of Differences Task Force (Montreal, Canada, 2011), slide 3.

⁴² ICAO, 'Notification and publication of differences: Report to Council by the President of the Air Navigation Commission', C-WP/12412, (177th session of the ICAO Council, 2006), at Paragraph 2.3.

which is an obligation of ICAO under Article 38, was fulfilled by appending them as Supplements to the latest edition of each Annex. This procedure created delays and could not always ensure that the situation described in a given Annex corresponded to reality in the ICAO Member States.⁴³ In 2013 ICAO admitted that this is still largely the case today.⁴⁴

Similar problems with identification of differences were revealed under the USOAP. In the course of audits conducted by ICAO between April 2005 and August 2010, only 49% of the USOAP compliance checklists had been duly completed by the 165 States audited. The remaining 51% were either left blank or not appropriately completed, as Figure IV demonstrates.

Figure IV: Differences identified through USOAP Compliance Checklists (April 2005 to August 2010)



Source of data: ICAO, 'USOAP-CSA: Reporting of audit results - April 2005 to August 2010', (2010)⁴⁵

Even more importantly, the differences are largely invisible to operational personnel as the Aeronautical Information Publications (AIPs) of ICAO Member States do not include material relating to all Annexes and approximately 76% of States did not publish significant differences in their AIPs, as required under Annex 15.⁴⁶

⁴³ Ibid.

⁴⁴ ICAO, 'Formulation and implementation of Standards and Recommended Practices (SARPS) and Procedures for Air Navigation Services (PANS) and notification of differences', A38-WP/48, (38th ICAO Assembly, 2013), at Paragraph 2.8.

⁴⁵ This data is the copyrighted property of ICAO and is reproduced here with its expressed knowledge and permission. It may not be cited by or reproduced in any other publication without subsequent approval being granted by ICAO.

⁴⁶ 'Known Issues and Difficulties', *supra* note 41.

Overall, ICAO admitted in 2013 that the ‘status of the notification and publication of differences is far from satisfactory.’⁴⁷

In order to remedy the above deficiencies, in 2011 ICAO embarked on a reform program. At its core lies a new system for Electronic Filing of Differences (EFOD).⁴⁸ The objective of EFOD is to create a single process through which States could satisfy the obligation of filing differences under Article 38 of the Chicago Convention, as well as to provide information on the level of implementation of SARPs for the purpose of USOAP.⁴⁹ ICAO expects all States to complete EFOD as an essential part of the new USOAP Continuous Monitoring Approach (CMA), which commenced in January 2013.⁵⁰

Although implementation of EFOD is a big step forward, States will still need to have internal processes and necessary technical expertise for the identification of differences and to dedicate resources to this activity. In addition, ICAO Member States are not obliged to use EFOD as a means for formal notification of differences under Article 38 of the Chicago Convention. By the end of 2013, only 38 ICAO Member States declared that they will be using EFOD for formal notification of differences under Article 38 of the Chicago Convention.⁵¹ The effectiveness of EFOD in remedying the current problems remains therefore to be assessed as experience with its use is gained.

More importantly however, beyond new technical tools for the reporting and dissemination of information on differences, ICAO should provide States with a clearer policy, including guidelines, on the application of Article 38 in order to ensure that standardised information is available in EFOD. At the time of writing this study ICAO has been in the course of reviewing its guidance material on the notification of differences.⁵²

Some consideration also needs to be given as to the exact need for collecting significant amount of information from 191 States about all their differences with SARPs, which today, in safety and environment related Annexes alone, amount to over ten thousand.⁵³ Although under Article 38 of the Chicago Convention States are only required to notify the differences with Standards, in practice the ICAO Assembly has been urging States to also notify differences with Recommended Practices.⁵⁴ Recommended Practices are also covered by the USOAP compliance checklists.⁵⁵

Finally ICAO requires States to notify a difference not only when a national standard is less demanding but also when it is more demanding or even

⁴⁷ICAO, 'Progress Report on Comprehensive Study on Known Issues in Respect of the Notification and Publication of Differences', C-WP/13954, (198th session of the ICAO Council, 2013), Paragraph 3.

⁴⁸ICAO, 'State Letter', Ref. AN 1/1 - 11/28, (2011).

⁴⁹ICAO, 'Progress report on the implementation of the electronic filing of differences (EFOD) system', C-WP/13803, (195th session of the ICAO Council, 2012).

⁵⁰ICAO, 'Policy and Principles on the Use of the Electronic Filing of Differences (EFOD) System', C-WP/13803, (195th session of the ICAO Council, 2012), Appendix C.

⁵¹Source: 'Interview No 4', (2014), *supra* note 41.

⁵²A38-WP/48, *supra* note 44, at Paragraph 2.2.

⁵³C-DEC 177/14, *supra* note 12 in Ch.1.

⁵⁴ICAO, 'Assembly Resolution A38-11: Formulation and implementation of Standards and Recommended Practices (SARPs) and Procedures for Air Navigation Services (PANS) and notification of differences', (38th ICAO Assembly, 2013), Associated Practice n. 7.

⁵⁵ICAO Doc. 9735, *supra* note 13 in Ch.1, at Paragraph 1.3.

when it is simply achieving the same objective by other means than required by ICAO.⁵⁶ In practice therefore the scope of obligation to notify differences under Article 38 has been significantly extended by ICAO.

Similar to regulations adopted at national level, the safety relevance of each SARP is not the same, and some of them establish administrative requirements only.⁵⁷ It can be argued that focusing on differences with those SARPs which contain requirements most relevant from the safety perspective of international air navigation would be more efficient and in line with a risk based approach to safety management.⁵⁸ This would also be more manageable for States with limited resources.

Whether narrowing the scope of the obligation to notify differences would be feasible *de lege lata*, is however not clear. The language of Article 38 does not seem to leave much space for such interpretations. It speaks about the need to comply 'in all respects', and to bring domestic regulations and practices 'into full accord' with ICAO requirements, and to notify a difference if such domestic regulations and practices were to differ 'in any particular respect', from those set by ICAO. This broad formulation can be a source of various interpretations by ICAO Member States.⁵⁹

This straight jacket is made even more restrictive by the fact that ICAO is encouraging its Member States to use in their own national regulations, as far as practicable, the precise language of Standards that are of a regulatory character.⁶⁰ As ICAO is moving towards *performance based standards* – where only *what* is defined by the requirements, while the *how* is left to States, assisted by appropriate guidance material - this inflexible approach to Article 38 of the Chicago Convention may prove difficult to be maintained in the future.⁶¹

The ICAO Assembly recognised in its resolutions a need for a more focused approach to notification of differences and mandated the ICAO Council to encourage 'the elimination of those differences that are important for the safety and regularity of international air navigation or are inconsistent with the objectives of the international Standards.'⁶² It is not certain whether such resolutions could be a way to narrow the scope of application of Article 38, in particular by constituting a 'subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions', as envisaged under Article

⁵⁶ C-WP/12412, *supra* note 42, at Appendix A (as approved by ICAO Council by C-DEC 177/14).

⁵⁷ For example the layout of certificates, see: ICAO, 'Annex 6 to the Chicago Convention: Operation of Aircraft, Part I - International Commercial Air Transport with Aeroplanes', (2010), Appendix 6.

⁵⁸ ICAO Doc. 9859, *supra* note 28 in Ch.1.

⁵⁹ 'Interview No 1', (2013), *supra* note 37. In this interview an example was given of Spain, France and United Kingdom, three EU Member States, which have assessed the same provision of 'EU OPS' – a regulation of the European Commission dealing with safety of air operations - which was different from an ICAO Standard contained in Annex 6 to the Chicago Convention, and each of them came to a different conclusion (i.e. that the EU requirement is more demanding, less demanding and finally different in character from the ICAO Standard).

⁶⁰ ICAO, 'Assembly Resolution A29-3: Global Rule Harmonization', (29th ICAO Assembly, 1992). Similar encouragement is included in all the Annexes to the Chicago Convention.

⁶¹ A38-WP/48, *supra* note 44, at Paragraph 2.6.

⁶² Assembly Resolution A38-11, *supra* note 54, at Paragraph 13.

31(3)(a) of the Vienna Convention on the Law of the Treaties⁶³ – the practice of ICAO so far seems to indicate that this is not the case.

In view of the above, beyond an amendment of the Chicago Convention with a view to updating Article 38, which is currently not on the table and unlikely in the foreseeable future, ICAO, when adopting Standards, could explicitly indicate which of them are of particular importance for the ‘safety and regularity of international air navigation’. Although this would not change the obligation to notify the differences, it would give more visibility to those requirements which are safety critical.

The second issue on which additional work is needed, is clarity as to what exactly constitutes a difference and especially a ‘significant difference’ which States are obliged to publish in their AIPs under Paragraph 4.1.2 (c) of Annex 15 to the Chicago Convention. ICAO has been trying to address this issue through provision of guidance material, which however is still quite generic and does not address the ‘significant difference’ issue.⁶⁴

To summarise, and as pointed out by a former president of the ICAO ANC,⁶⁵ Article 38 is at the same time both a strength and a weakness of the Chicago Convention. Although this study does not question the need to have a mechanism for filing of differences, it nevertheless argues that States and ICAO need to change the way this provision is used in practice.

Beyond the migration from paper-based notifications to EFOD, which in itself is a big step forward, ICAO should in the first place *do less but better* when it comes to implementation of Article 38. Today ICAO finds it difficult even to find the resources necessary to translate the differences received into all ICAO working languages.⁶⁶ It would be unrealistic then to expect that ICAO will be able to dedicate the necessary time and resources to analyse the details of the language used and possible ways of implementation of over ten thousand SARPs in 191 States. ICAO should, instead of expanding, be in practical terms narrowing the scope of the obligation to notify the differences and focusing especially on differences with those SARPs which are of particular relevance for the safety and regularity of air navigation.

ICAO should also, rather than expecting States to use the precise language of Standards that are of a regulatory character, be primarily focusing on whether the objective of a Standard is met while leaving to States flexibility as to the means to achieve compliance – this would be more in line with the shift towards performance based regulation. ICAO should also be providing more standardisation as to what constitutes a difference, and especially a *significant* one. Such standardisation should be promoted not only through provision of guidance material to States but also at a practical level through the USOAP and provision of technical training to State specialists dealing with identification and notification of differences.

Finally RASOs have great potential to help ICAO and States in achieving more harmonisation and efficiencies in the way Article 38 is applied in practice. This will be demonstrated in detail using the example of EASA in Chapter 4.

⁶³ ‘Vienna Convention on the Law of the Treaties’, Vienna, 23 May 1969, 1155 UNTS 33.

⁶⁴ C-WP/12412, *supra* note 42, at Appendix A (as approved by ICAO Council by C-DEC 177/14).

⁶⁵ ‘Interview No 1’, (2013), *supra* note 37.

⁶⁶ A38-WP/48, *supra* note 44, at Paragraph 2.10.

2.2.3 RECOGNITION OF CERTIFICATES AND LICENCES

2.2.3.1 CERTIFICATES AND LICENCES ENVISAGED UNDER THE CHICAGO CONVENTION

The drafters of the Chicago Convention were aiming at maximum possible facilitation of international air navigation from a technical point of view. This was supposed, *inter alia*, to be achieved through Article 33 of the Convention which provides that:

Certificates of airworthiness and certificates of competency and licenses issued or rendered valid by the contracting State in which the aircraft is registered, shall be recognized as valid by the other contracting States, provided that the requirements under which such certificates or licenses were issued or rendered valid are equal to or above the minimum standards which may be established from time to time pursuant to this Convention.

The above provision is the only exception in the Chicago Convention from the principle that:

[T]he laws and regulations of a Contracting State relating to the admission to or departure from its territory of aircraft engaged in international air navigation, or to the operation and navigation of such aircraft while within its territory, shall be applied to the aircraft of all Contracting States without distinction as to nationality, and shall be complied with by such aircraft upon entering or departing from or while within the territory of that State.⁶⁷

Obviously as aircraft cross multiple jurisdictions in international operations, it would be impracticable to expect that with each crossing of the border aircraft and crew would have to comply with the different rules of the overflow or served countries.

The multilateral recognition regime of Article 33 has two dimensions. Firstly it gives a right to the 'State of Registry' to demand recognition of its certificates if they have been issued in accordance with the minimum standards established by ICAO.⁶⁸ Secondly, with this right comes an obligation of other ICAO Member States to grant the recognition if the conditions envisaged in this article are met by the 'State of Registry'.

ICAO has clarified in Annex 8⁶⁹ and Annex 1⁷⁰ to the Chicago Convention that, as far as the certificates of airworthiness and pilot licences are concerned, the minimum standards to which Article 33 makes reference will be the ones contained in those Annexes. In addition Articles 39 and 40 of the Chicago Convention

⁶⁷ 'Chicago Convention', Article 11.

⁶⁸ Where a 'State of Registry' has transferred some of its responsibilities under Article 83bis of the Chicago Convention, these rights apply also to the 'State of Operator'.

⁶⁹ ICAO, 'Annex 8 to the Chicago Convention: Airworthiness of Aircraft', (2010). Paragraph 3.2.2 states: 'A Contracting State shall not issue or render valid a Certificate of Airworthiness for which it intends to claim recognition pursuant to Article 33 of the Convention on International Civil Aviation unless it has satisfactory evidence that the aircraft complies with the applicable Standards of this Annex through compliance with appropriate airworthiness requirements'.

⁷⁰ ICAO, 'Annex 1 to the Chicago Convention: Personnel Licensing', (2011). See 'Forward', which states: 'Annex 1 contains Standards and Recommended Practices adopted by the International Civil Aviation Organization as the minimum standards for personnel licensing'.

stipulate that an aircraft or a pilot which has failed to meet in any respect these international standards should have this clearly indicated on the certificate or license and that in such case other contracting States are entitled to restrict the operations of such aircraft or personnel in their territories. This, similar to the procedure of filing of differences, underlines the importance of the principle of transparency which, although not directly articulated in the Chicago Convention, is nevertheless present in a number of its provisions, as well as numerous Assembly resolutions.⁷¹

2.2.3.2 RECOGNITION OF AN AIR OPERATOR'S CERTIFICATE

What can be quickly noticed is that Article 33 does not address the Air Operator's Certificate (AOC), which, in addition to the certificate of airworthiness and licenses of the aircrew, is an essential prerequisite for international air navigation in commercial air transport according to Annex 6 to the Chicago Convention.⁷² This is because amongst the first twelve annexes that were developed during the Chicago Conference in 1944, there was no separate Annex concerning safety of aircraft operations.⁷³

ICAO has clarified the link between Article 33 and AOC through interpretative Assembly Resolutions,⁷⁴ and provisions in Annex 6, which require:

Contracting States to recognize as valid an air operator certificate issued by another Contracting State, provided that the requirements under which the certificate was issued are at least equal to the applicable Standards specified in Annex 6.⁷⁵

However, given the fact that this requirement is set out in an Annex and not in the Chicago Convention, its legal value is not as strong as that of Article 33, and notification of differences is, at least theoretically, possible.

In order to safeguard the recognition of certificates in the context of commercial air transport operations, States also incorporate appropriate provisions dealing with this issue in bilateral ASA. Such provisions usually reproduce in the ASA the text of Article 33 of the Chicago Convention, and make the issuance of operating authorisations and technical permissions, which are necessary to utilise the traffic rights, conditional upon the maintenance of minimum safety standards, established under the Chicago Convention, by the State designating the airline. ASA clauses also allow the State which has issued the operating authorisations and technical permissions to withhold, revoke or limit them if the other party does not have or does not maintain safety oversight programmes in compliance with

⁷¹ ICAO, 'Assembly Resolution A37-5: The Universal Safety Oversight Audit Programme (USOAP) continuous monitoring approach', (37th ICAO Assembly, 2010); ICAO, 'Assembly Resolution A37-1: Principles for a code of conduct on the sharing and use of safety information', (37th ICAO Assembly, 2010); Assembly Resolution A32-11, *supra* note 30 in Ch.1.

⁷² Annex 6, Part I to the Chicago Convention, at Paragraph 4.2.1.1 which states: 'An operator shall not engage in commercial air transport operations unless in possession of a valid air operator certificate issued by the State of the Operator'.

⁷³ The notion of AOC was introduced only in 1990; see: Annex 6 to the Chicago Convention, at 'Forward'.

⁷⁴ ICAO, 'Assembly Resolution A36-6: State Recognition of the Air Operator Certificate of Foreign Operators and Surveillance of their Operations', (36th ICAO Assembly, 2007).

⁷⁵ Annex 6, Part I to the Chicago Convention, *supra* note 108, at Paragraph 4.2.2.1.

ICAO standards or if the designated airline is no longer compliant with the minimum ICAO safety requirements.⁷⁶

The question of recognition of AOCs is a somewhat controversial subject, as States such as the US, Australia, Canada, China and the Member States of the EU, require under their legislation that foreign operators obtain a prior safety authorisation in order to be able to fly to and from their territories.⁷⁷ Such schemes have been developed largely because the results of the USOAP have shown in the past that States 'cannot reasonably assume without verification that the condition for recognition Stated in Article 33 is actually being met by another State.'⁷⁸ Because of this reason, ICAO encouraged States to put in place mechanisms to verify that the conditions for such recognition are met, before recognising AOCs as valid.⁷⁹ Requirements and guidance material concerning surveillance of foreign aircraft operations have also been adopted by ICAO.⁸⁰

Although the existence of AOC authorisation schemes can be justified from the perspective of ICAO requirements, they should be seen as a tool to be used by States exclusively for assessing if the rules under which AOC was issued were at least equal to the applicable Standards specified in Annex 6 to the Chicago Convention. Following on from that, it should not be the purpose of authorisation schemes to dilute the responsibilities of the 'State of the Operator', who should remain the primary authority responsible for the AOC, or to impose on operators additional requirements which go beyond the minimum standards provided for in Annex 6.

In the EU for example, the regulation establishing EASA stipulates that third country operators flying to the EU may have to comply with EU requirements to the extent that there are no applicable ICAO standards.⁸¹ Although initially EASA proposed including requirements over and above ICAO SARPs in implementing rules on third country operator authorisations,⁸² it finally decided not to do so, as it faced criticism from operators for not respecting the Chicago Convention.⁸³ It is important that ICAO remains vigilant to such initiatives which risk eroding the consistency of the international framework for aircraft operations. If there are deficiencies which would justify development of additional minimum

⁷⁶ For standard clauses concerning designation, authorisation, safety and recognition of certificates see ICAO Template Bilateral Air Services Agreement in: ICAO Doc. 9587, *supra* note 36, at Appendix 5.

⁷⁷ These are sometimes referred to as Foreign Aircraft Air Operator's Certificates.

⁷⁸ ICAO, 'Mutual Recognition', DGCA/06-WP/8, Directors General of Civil Aviation Conference on Global Strategy for Aviation Safety (Montréal, Canada, 2006), at Paragraph 1.2.

⁷⁹ *Ibid.* at Paragraph 3.

⁸⁰ Annex 6, Part I to the Chicago Convention, at Paragraphs 2.2.2.2 and 4.2.2.2 which require States to establish programmes with procedures for the surveillance of operations in their territory by a foreign operator and for taking appropriate action when necessary to preserve safety. Guidance on the surveillance of foreign operators can be found in: ICAO, 'Manual of Procedures for Operations Inspection, Certification and Continued Surveillance', Doc. 8335, (2010). See also: Assembly Resolution A36-6, *supra* note 74.

⁸¹ EU, 'Regulation (EU) No 216/2008 of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC', (OJ L 79, 19.3.2008), Article 9(1).

⁸² EASA, 'Notice of Proposed Amendment relating to rules on third country operators for commercial air transport', (NPA No 2011-05), at Paragraph 21.

⁸³ EASA, 'Comment Response Document to NPA No 2011-05', at Paragraph 15.

requirements for international aircraft operations, this should be done through the ICAO rulemaking machinery.

The above does not mean that any requirement imposed unilaterally on aircraft operators would be in contradiction with the Chicago Convention and its Annexes. Certain requirements, especially airspace related, may have to be imposed on a country or region specific basis. For example, if a State has introduced reduced separation minima in order to increase airspace capacity, all aircraft may have to be required, in order to use that airspace, to carry equipment which is not necessarily envisaged under minimum ICAO requirements. This would be fully in line with Article 11 of the Chicago Convention, however in such a case a difference should be notified with ICAO indicating a requirement which is more demanding than the minimum ICAO SARPs.⁸⁴

2.2.3.3 OTHER CERTIFICATES NOT ENVISAGED UNDER THE CHICAGO CONVENTION

Limiting the analysis related to recognition of certificates to AOCs, pilot licences and certificates of airworthiness only - however important these three categories of certificates are – would however not be sufficient. Today the concept of ‘State of Registry’ or even ‘State of the Operator’ introduced through Article 83*bis* of the Chicago Convention, is no longer at the centre of the aviation regulatory world.

In addition to certificates of airworthiness, licenses of the aircrews, and even the AOC, aviation has seen a real proliferation of certificates and approvals. Certificates are issued for the design of aircraft and its components, organisations responsible for aircraft manufacture, aircraft maintenance, training of aircrew, international aerodromes, and other activities and organisations.⁸⁵ Some of those certificates, such as the design organisation approval,⁸⁶ are not even envisaged in ICAO Annexes. Such certifications are considered as ‘safety barriers’ erected by States to maintain safety levels which are expected from aviation activities by the general public.⁸⁷

The problem is that international standards governing the conditions for issuance of some of those other certificates are not always precise or comprehensive. This is for example the case for production organisation approvals which are subject to only three general standards set out in Annex 8 to the Chicago Conven-

⁸⁴ For example the EU mandated the carriage of Aircraft Collision Avoidance System (ACAS) II version 7.1 within the EU airspace earlier than the dates stipulated by ICAO in Annex 10 to the Chicago Convention; see: EU, 'Commission Regulation (EU) No 1332/2011 of 16 December 2011 laying down common airspace usage requirements and operating procedures for airborne collision avoidance', (OJ L 336, 20.12.2011).

⁸⁵ Annex 1 to the Chicago Convention, at Paragraph 1.2.8.2 for Approved Training Organisations; Annex 6, Part I to the Chicago Convention, at Paragraph 8.7.1.1 for Approved Maintenance Organisations; Annex 8 to the Chicago Convention, at Paragraph 2.4.1 for Approved Production Organisations; ICAO, 'Annex 14 to the Chicago Convention: Aerodromes, Volume I - Aerodrome Design and Operations', (2013), Paragraph 1.4.1 for certified aerodromes.

⁸⁶ The concept of a design organisation approval (DOA) is, for example, envisaged under the EU regulatory framework, see: EU, 'Commission Regulation (EU) No 748/2012 of 3 August 2012 laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations', (OJ L 224, 21.8.2012).

⁸⁷ ICAO Doc. 9859, *supra* note 28 in Ch.1, at Paragraph 2.3.4.

tion.⁸⁸ Similarly guidance for the issuance of an approval to maintenance or training organisations is not as detailed as that available for an AOC for example.⁸⁹ This leaves States with little option but to develop the detailed requirements on their own. In addition, as the Chicago Convention is limited to recognition of airworthiness certificates and pilot licences, and through Annex 6 also the recognition of AOCs, there are no internationally agreed conditions under which such other certificates should be recognised between States. This results in differences between jurisdictions and duplication of oversight and approval schemes for industry and regulators.

The paradox of this situation is the fact that proliferation of certificates and associated audits and inspections, although having as its objective the safeguarding of civil aviation safety, at the same time goes directly in opposition to the main objective of the Chicago Convention, namely promotion of uniformity and efficiency in international air navigation. It also disperses the precious resources of the aviation community which could be used in a more efficient manner.

A very striking example of this situation can be observed in the domain of aircraft maintenance organisations (AMOs). Many States, including for example Singapore, Canada, Japan, Brazil, US or the EU Member States, require foreign AMOs working on aircraft registered in their registries to hold an approval issued by these States in addition to an approval from a local authority.⁹⁰ This means that an AMO which has clients from different parts of the world, may have to hold several approvals for performing exactly the same business only because the aircraft it maintains are registered in different countries. It is not rare that an AMO holds up to twenty approvals from different States.⁹¹

The consequence of the above is that AMOs may be subject to repetitive audits from many different States, in addition to internal quality audits and audits by customers, and may have to comply with different sets of requirements. This is not only costly, but also means that AMO personnel is required to use different procedures depending upon the 'State of Registry' of the aircraft, which adds an element of safety risk.⁹² The justification for such schemes is that each 'State of Registry' wants to be sure that the same standard is being achieved as if the aircraft was maintained by an AMO which is under its domestic jurisdiction.

Another example of inefficiencies comes from the domain of product certification. Article 33 of the Chicago Convention covers recognition of certificates of airworthiness for the purpose of day-to-day operations only, that is when an aircraft registered in one State temporarily enters the airspace of another State.⁹³

⁸⁸ Annex 8 to the Chicago Convention, at Chapter 2.

⁸⁹ ICAO, 'Recognition and validation of approvals and certificates issued by other States', HLSC 2010-WP/9, ICAO High Level Safety Conference (Montréal, 2010), Paragraph 2.4.2.

⁹⁰ For examples of AMO certificates issued by various authorities see certificates held by the Airbus company at: Airbus, 'Airbus policy and certificates' <<http://www.airbus.com/tools/policy/>> [accessed 15 March 2014].

⁹¹ Singapore, 'Recognition and validation of foreign AMO approvals', HLSC 2010-WP/73, ICAO High Level Safety Conference (Montréal, 2010), Paragraph 1.1.

⁹² ICAO, Recognition and validation of approvals and certificates issued by other States, *supra* note 89, at Paragraph 1.1.

⁹³ Annex 8 to the Chicago Convention, at 'Forward' which states that: 'The requirements governing the issuance of Type Certificates in accordance with applicable provisions of Annex 8 are not part of the minimum standards which govern the issuance or validation of Certificates of Airworthiness, and lead to the recognition of their validity pursuant to Article 33 of the Convention'.

However, when an aircraft changes registry, it is up to the new ‘State of Registry’ to determine its airworthiness and issue appropriate certificate.⁹⁴ In such cases ICAO, through Annex 8 to the Chicago Convention, promotes acceptance of a previous certificate of airworthiness as satisfactory evidence that the aircraft complies with applicable ICAO standards.⁹⁵ This is however theory.

In practice, because Annex 8 sets only broad airworthiness performance objectives for different categories of aircraft, States still have to adopt detailed codes of airworthiness at the national level. This means that the conditions to be met before a certificate of airworthiness is issued vary between States. States with important manufacturing industries, such as the US, Russia through the Interstate Aviation Committee (IAC), or the EU Member States through EASA, adopt detailed airworthiness codes which, despite harmonisation efforts, may contain dissimilar requirements. For example the US Federal Aviation Administration (FAA) has identified forty significant and twenty-three non-significant standards differences between the US and EU certification requirements for transport category aeroplanes.⁹⁶

Multiple sets of similar but differing certification requirements may lead to repetitive certifications of the same product, resulting in additional administrative burden and cost for authorities and industry in import and export. Large manufacturing States, including the US, Brazil, Canada or the EU Member States acting through EASA, would use a specific method of certification called *validation*, to determine compliance with their airworthiness requirements. Validations are supposed to limit the involvement of the importing State to checking compliance with their unique import requirements only, while in other respects to rely on the determinations already made by the primary certifying authority.⁹⁷ Other States, for example Australia, would not perform validation of a foreign type certificate but simply accept it following familiarisation with the product, if they have confidence in the foreign authority which issued the original certificate.⁹⁸

Although validation contributes to the reduction of unnecessary repetitive checks and determinations in export and import of aeronautical products, it has not been able to eliminate the duplication of work and dissimilar regulatory requirements which represent a burden and cost for the authorities and the manufacturers. Major manufacturing States like the US recognise that ‘multiple sets of similar yet differing certification requirements among Civil Aviation Authorities

⁹⁴ Ibid. at Paragraph 3.2.1 which states that: ‘A Certificate of Airworthiness shall be issued by a Contracting State on the basis of satisfactory evidence that the aircraft complies with the design aspects of the appropriate airworthiness requirements.’

⁹⁵ Ibid. at Paragraph 3.2.4 which states that: ‘The new State of Registry, when issuing its Certificate of Airworthiness may consider the previous Certificate of Airworthiness as satisfactory evidence, in whole or in part, that the aircraft complies with the applicable Standards of this Annex through compliance with the appropriate airworthiness requirements’.

⁹⁶ FAA, ‘List of FAA Significant and Non-Significant Standards Differences’ <http://www.faa.gov/aircraft/air_cert/design_approvals/transport/transport_intl/sd_list/ssd_nonssd_list> [accessed 5 August 2014].

⁹⁷ See for example: Type Validation Principles under the Technical Implementation Procedures (TIP) to ‘Agreement between the United States of America and the European Community on cooperation in the regulation of civil aviation safety’, 30 June 2008, (OJ L 291, 9.11.2011). At: EASA, ‘Bilateral Agreements’ <<http://easa.europa.eu/document-library/bilateral-agreements>> [accessed 5 August 2014].

⁹⁸ CASA, ‘Civil Aviation Safety Regulations (as amended)’, (Statutory Rules No. 237), Part 21.029A.

can lead to a significant burden when certifying and validating aeronautical products and parts for import and export.⁹⁹ A study conducted by the Aviation Working Group in 2011 estimates that dissimilar technical requirements affecting transfers of aircraft between various jurisdictions cost the aviation industry up to 369 million USD per annum, and that the projected cost over the next twenty years of such dissimilar requirements may be as much as 7.286 billion USD.¹⁰⁰

In the past, efforts were undertaken by the US, European countries, and other major 'States of Design' to harmonise their airworthiness codes.¹⁰¹ ICAO has also tried to take up this work at the global level, but today an old and in practice never implemented Assembly resolution on a 'globally harmonized design code' is the only remainder of that ambitious initiative.¹⁰²

The duplication of certifications and associated audits and inspections necessary for their recognition is currently one of the greatest inefficiencies in the ICAO system and the source of a significant waste of resources of the international aviation community. This 'death by audit' situation, as it was referred to at the 2013 FAA/EASA International Aviation Safety Conference, needs to be addressed, as in the longer term it is simply unsustainable.¹⁰³

RASOs have a great potential for reducing redundant audits and certifications by allowing large scale, multilateral programmes for acceptance of certification findings or even the certificates themselves, as will be demonstrated in detail on the example of EASA in Chapter 4.

2.2.3.4 INTERNATIONAL AVIATION SAFETY AGREEMENTS

The discussion about recognition of aviation safety certificates under international law would not be complete without also addressing the international aviation safety agreements. These agreements, which are usually of a bilateral nature, constitute a traditional tool through which States address limitations of the Chicago Convention in terms of acceptance of certificates. International aviation safety agreements were used as early as the 1930s to approve aeronautical products in

⁹⁹ United States of America, 'Improving international cooperation in certification and validation of products and parts', HLSC 2010-WP/33, ICAO High Level Safety Conference (Montréal, 2010), Summary.

¹⁰⁰ Aviation Working Group, 'Economic impact assessment and select recommendations: dissimilar technical regulatory requirements impacting cross border transfer of aircraft', (2011), <www.awg.aero/assets/docs/Report%20v%201.02.pdf> [accessed 5 August 2014], p. 2.

¹⁰¹ For many years the US FAA and the European Joint Aviation Authorities (JAA) have been implementing a Harmonization Work Program which was launched as a result of the commitment made by the FAA and the JAA at the 9th FAA/JAA Harmonization Meeting (1992). The harmonisation programme has been stopped following the dissolution of the JAA in 2009, and recently taken up again by EASA and FAA in the framework of the EU – US Agreement on Cooperation in the Regulation of Civil Aviation Safety.

¹⁰² ICAO, 'Assembly Resolution A33-11: A global design code for aircraft', (33rd ICAO Assembly, 2001).

¹⁰³ Author's notes from the 2013 EASA/FAA International Aviation Safety Conference; In addition see: '2013 EASA/FAA International Aviation Safety Conference', <<http://easa.europa.eu/newsroom-and-events/events/easa-faa-international-aviation-safety-conference-2013>> [accessed 5 August 2014].

export and import.¹⁰⁴ In Europe a rare example of a multilateral aviation safety agreement was signed in 1960, but is no longer applicable.¹⁰⁵

Bilateral aviation safety agreements or BASAs aim at reducing redundant certifications and oversight. Such agreements require a high degree of mutual confidence, as their provisions usually do not relieve parties from finding compliance with their own requirements, but allow reliance on the equivalency of the other party's regulatory system in order to find such compliance.¹⁰⁶

Compliance with at least the minimum ICAO requirements, in addition to more specific confidence building exercises and regulatory special conditions, will therefore be a necessary pre-requisite for concluding a BASA.¹⁰⁷

Aviation safety agreements can cover various domains of aviation safety, such as initial and continuing airworthiness, pilot licensing, or qualification of flight simulation training devices.¹⁰⁸ In the area of initial aircraft certification, for example, they allow for more efficient aircraft design approval processes, sometimes even relieving the parties altogether from an obligation to issue an additional approval. In areas such as production, maintenance, pilot licensing or qualification of flight simulation training devices, they allow reliance on each other's monitoring of facilities and devices, and thereby limit the technical work to those regulatory areas which are significantly different.

The benefits of BASA agreements can be very well illustrated with the example of the maintenance annex to the EU–US BASA.¹⁰⁹ In 2014, there were over

¹⁰⁴ Mary Cheston, 'U.S. Perspective on Bilateral Safety Agreements: where we've been and where we're going', Europe/U.S. International Aviation Safety Conference <http://www.easa.europa.eu/conferences/conference2005/presentations/day1/Bilaterals/us_bilaterals_cheston.pdf> [accessed 5 August 2014].

¹⁰⁵ 'Multilateral Agreement Relating to Certificates of Airworthiness for Imported Aircraft', 22 April 1960, ICAO Doc. 8056.

¹⁰⁶ See for example the FAA's policy on the bilateral air safety agreements at: FAA, 'Bilateral agreements: purpose' <http://www.faa.gov/aircraft/air_cert/international/bilateral_agreements/purpose/> [accessed 5 August 2014]. See also: 'Preamble' to EU – Canada BASA which states that: 'Reciprocal acceptance needs to offer an assurance of conformity with applicable technical regulations or standards equivalent to the assurance offered by a Party's own procedures', 'Agreement on civil aviation safety between the European Community and Canada', 6 May 2009, (OJ L 153, 17.06.2009). Similarly 'Preamble' to EU – Brazil BASA states that: 'Each Party has determined that the standards and systems of the other Party for the airworthiness and environmental certification or acceptance of Civil Aeronautical Products are sufficiently equivalent to its own to make an agreement practicable', 'Agreement between the European Union and the Government of the Federative Republic of Brazil on civil aviation safety', 14 July 2010, (OJ L 273, 19.10.2011).

¹⁰⁷ See the US process and requirements for concluding a bilateral air safety agreement at: FAA, 'Generic Steps for Obtaining a Bilateral Aviation Safety Agreement' <http://www.faa.gov/aircraft/air_cert/international/bilateral_agreements/media/BASAProcess.pdf> [accessed 5 August 2014]. The policy of the US FAA is also to require that a potential BASA partner country has been positively assessed under the FAA IASA program.

¹⁰⁸ For examples of BASA agreements concluded by the EU and US see: EASA, 'Bilateral Agreements' <<http://easa.europa.eu/document-library/bilateral-agreements>> [accessed 5 August 2014]; FAA, 'List of BASA agreements' <http://www.faa.gov/aircraft/air_cert/international/bilateral_agreements/baa_basa_listing/> [accessed 5 August 2014].

¹⁰⁹ 'EU-US BASA', *supra* note 97.

1400 EASA approved AMOs located in the US,¹¹⁰ which is a significant number of organisations. It would be impossible for EASA to ensure oversight of all of them with the resources available without relying on the help of the FAA. Under the 'Maintenance Annex' to the EU-US BASA, the bilateral partners have agreed that EASA's involvement will be limited only to those aspects of AMO monitoring which are significantly different in the US compared with the EU. In addition, even for areas identified as significantly different, the EU has delegated compliance verification to the US, where the FAA makes recommendations to EASA for the issuance and continuation of AMO approvals. Therefore instead of inspecting every single AMO, EASA monitors only the overall quality of the inspection work done by the FAA through a system of sampling inspections.¹¹¹ The result is a significant leveraging of EASA's resources and less cost for the industry. The same procedure is applied to AMOs located in the EU and seeking FAA certification.

As indicated above, BASAs are concluded on the premise of equivalency of regulatory systems of the bilateral partners. This means that although the requirements do not have to be exactly the same, they have to produce equivalent results.¹¹² Therefore although full harmonisation of requirements between the BASA partners is not absolutely necessary, the benefits of a BASA will be larger where differences are smaller. Under a BASA, once the significant differences are identified, they are addressed through, so called 'special conditions'.¹¹³ The ICAO objective of achieving 'the highest practicable degree of uniformity in regulations, standards, procedures'¹¹⁴ is therefore also very relevant for such agreements.

BASAs however also have limitations. Traditionally they address acceptance of technical findings only, with limited possibility of certificate acceptance. Even under the EU-US BASA, which is based on many years of regulatory harmonisation between Europe and US, the scope of certificate acceptance is very limited. In 2014 only certain design (minor changes, repairs, design organisations) and production (production organisations) approvals were being accepted by the parties without re-issuance of a separate approval. Beyond technical differences, there are also legal reasons for such limitations. The EU-US BASA is considered by the US government as an 'executive agreement' concluded without the 'advice and consent' of the US Senate.¹¹⁵ This means that it cannot derogate from domestic US law. From the EU perspective, an international agreement that has

¹¹⁰ EASA, 'Maintenance organisations located in the USA: Part-145 US Approvals (MOA)' <http://easa.europa.eu/system/files/dfu/USA_EASA_145.pdf> [accessed 5 August 2014].

¹¹¹ EASA-FAA Maintenance Annex Guidance (MAG Change 4 - 29 January, 2014), <<http://easa.europa.eu/document-library/bilateral-agreements>> [accessed 5 August 2014].

¹¹² EASA, 'Aviation Safety Agreement between the United States and the European Community' (2011) <www.faa.gov/aircraft/repair/media/EASA_US_roadshows.pdf> [accessed 5 August 2014].

¹¹³ In the EU-US BASA, *supra* note 97, special conditions are defined as: 'those requirements in the EU and US regulations that have been found, based on a regulatory comparison, not to be common to both systems and which are significant enough that they must be addressed.'

¹¹⁴ 'Chicago Convention', Article 37.

¹¹⁵ Under US law, a treaty is an agreement negotiated and signed by the executive branch that enters into force if it is approved by a two-thirds majority of the Senate and is subsequently ratified by the President. However, the great majority of international agreements that the US enters into are not treaties but executive agreements, meaning agreements entered into by the executive branch, that are not submitted to the Senate for its advice and consent. Congress generally requires only notification upon the entry into force of an executive agreement. For further information see: Congressional Research Service, 'International Law and Agreements: Their Effect Upon U.S. Law', RL32528, (2010).

been ratified by the European Parliament and the Council has status above EU regulations.¹¹⁶ A practical consequence of that difference is that although the EU could directly accept FAA issued certificates, this is not possible for the US.¹¹⁷

Development of BASAs also takes time and resources, as they involve detailed regulatory comparisons and confidence building exercises. For example, it took seven years for the EU and US to develop and conclude their BASA.¹¹⁸ The effort involved will therefore only make their conclusion worthwhile between States exchanging high volumes of aeronautical products, personnel and services. Finally, because they are bilateral in nature, BASA do not necessarily contribute to unification of the international regime, and sometimes may even contribute to its further fragmentation. This is because the requirements for acceptance of products, services or personnel may be different in each bilateral case.

Beyond the BASAs, other methods used by States to reduce redundant regulatory oversight and accepting certifications made by other authorities is through multilateral harmonisation and cooperation initiatives, including at regional levels. Such cooperation can take various forms, such as joint inspection schemes, development of common regulatory requirements, or establishing a RA-SO type body.

2.2.4 ROLE OF ICAO IN GLOBAL SAFETY OVERSIGHT

The role of ICAO in overseeing implementation of international civil aviation safety standards has already been subject to analyses by many authors.¹¹⁹ Today consensus seems to exist that the most successful instrument that ICAO has at its disposal in this respect is its USOAP, and the associated transparency mechanisms, which have even been referred to as ICAO's 'quasi-enforcement' tool.¹²⁰

The main strength of the USOAP comes from the fact that it is a mandatory programme with a standardised methodology applicable to all ICAO Member

¹¹⁶ Herwig C.H. Hofmann, Gerard C. Rowe, and Alexander H. Türk, *Administrative Law and Policy of the European Union*, (2011), pp. 78-79. For an overview of the legal status of international agreements in the internal EU legal order see also: 'Case C-366/10, Air Transport Association of America v. Secretary of State for Energy and Climate Change', in: [2011] ECR I-13755, (CJEU,2011), (paragraph 50).

¹¹⁷ Michael Jennison, 'The Future of Aviation Safety Regulation: New US-EU Agreement Harmonizes and Consolidates the Transatlantic Regime, but What is the Potential for Genuine Regulatory Reform', *ASL*, 38 (2013), p. 344.

¹¹⁸ The negotiating mandate was granted to the European Commission on 9 March 2004, the Agreement entered into force on 1 May 2011; see: EASA, 'Information Note: Agreement between the United States of America and the European Union on cooperation in the regulation of civil aviation safety' <<http://easa.europa.eu/document-library/bilateral-agreements/eu-usa>> [accessed 5 August 2014].

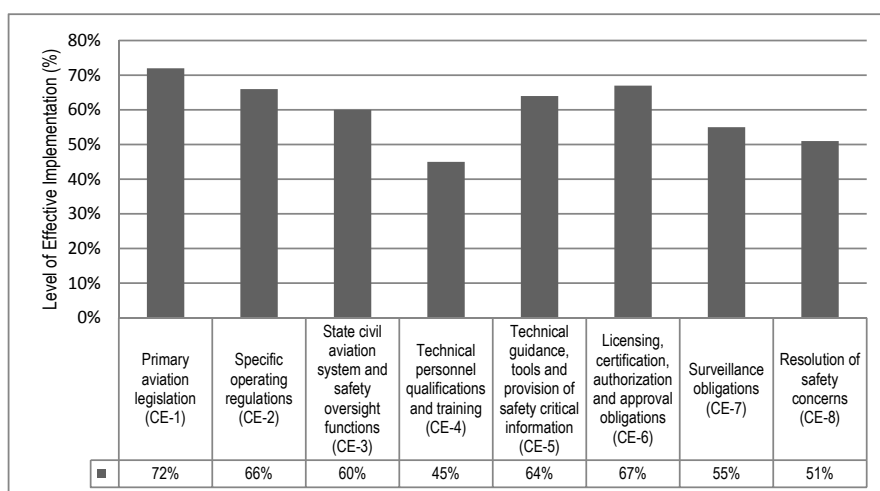
¹¹⁹ Blumenkron, *supra* note 49 in Ch.1, at pp. 12-24; Huang, *supra* note 29 in Ch.1, at pp. 68-81; Weber, *supra* note 48 in Ch.1, at pp. 90-92; Meglena Boteva, 'A new century and a new attitude towards safety oversight in air transportation', in Master Thesis, (McGill University: Institute of Air and Space Law, 2000), pp. 64-85; Zachary D. Detra, 'The legitimacy of the International Civil Aviation Organization's Universal Safety Oversight Audit Programme', in Master Thesis, (McGill University: Institute of Air and Space Law, 2006); Broderick and Loos, 'Government Aviation Safety Oversight: trust but verify', *supra* note 7 in Ch.2, at pp. 1047-1054; Michael Milde, 'Aviation Safety Oversight: Audits and the Law', *AASL*, XXVI (2001), pp. 173-176.

¹²⁰ The most comprehensive overview of transparency as ICAO's enforcement tool has been given Blumenkron, *supra* note 49 in Ch.1, at p. 87; see also Milde, *supra* note 48 in Ch.1, at p. 180.

States. It is used by ICAO for assessing the level of implementation of ICAO SARPs, and more generally States' overall capability for ensuring effective safety oversight. In practice USOAP has proved to be a powerful diagnosis tool for global aviation safety.

The worldwide level of effective implementation of USOAP protocols can justifiably be criticised as still too low, as Figure V demonstrates. However, USOAP reports show that generally ICAO Member States make consistent progress in the level of effective implementation of SARPs and in increasing their overall safety oversight capabilities.

Figure V: Level of Effective Implementation of the eight ICAO CEs of State safety oversight (ICAO Member States, August 2014)



Source of data: ICAO, Regional Performance Dashboards (2014)¹²¹

In order to verify the progress that States make in improving their level of effective implementation of the eight CEs, the ICAO USOAP information related to a sample of 35 States was analysed (see Table II). The States in the analysed sample were audited by ICAO in the years 2005-2010, and their corrective action plans were subsequently verified by ICAO during the ICAO Coordinated Validation Missions (ICVM) in the years 2011-2013.¹²² This analysis has shown that all States in the sample have improved the level of effective implementation of USOAP protocols. On average the improvement has been almost 15%. The highest improvements were observed for CEs 1-5 (between 16.3% and 17.5%), followed by CEs 6-7 (12.8% - 10.4%), and finally CE 8 (9.8%).

¹²¹ ICAO, 'Regional Performance Dashboards' <<http://www.icao.int/safety/Pages/Regional-Targets.aspx>> [accessed 4 August 2014]. This data is the copyrighted property of the ICAO and is reproduced here with its expressed knowledge and permission. It may not be cited by or reproduced in any other publication without subsequent approval being granted by ICAO.

¹²² The purpose of the ICAO ICVM is to ascertain whether previously identified safety deficiencies have been satisfactorily resolved by assessing the status of corrective actions or mitigating measures taken by ICAO Member States to address findings and recommendations, including Significant Safety Concerns (SSC); see ICAO Doc. 9735, *supra* note 13 in Ch.1, at Paragraph 3.5.6.

The above analysis shows that States, at least those in the sample, were able to achieve the highest improvement for those CEs which are related to development of legislation and procedures, while it has been most difficult for them to achieve improvements in CEs related to safety oversight and enforcement obligations. In other words, the greatest improvement has been achieved for CEs which are related to the *establishment of a State's safety oversight system*, while the lowest improvement is for CEs related to its *implementation*, including with respect to enforcement obligations.

Table II: Improvement in the level of effective implementation of the eight ICAO CEs of State safety oversight (sample of 35 ICAO Member States)

Critical Elements of Safety Oversight System (correlation with actual safety performance)	Lack of effective implementation during the USOAP CSA cycle (2005-2010)	Lack of effective implementation during the USOAP ICVM cycle (2011-2013)	Improvement in the level of effective implementation
CE-1 (medium)	39.4 %	22.6 %	16.8 %
CE-2 (medium)	48.9 %	32.3 %	16.6 %
CE-3 (strong)	61.1 %	44.8 %	16.3 %
CE-4 (strong)	80.4 %	63.0 %	17.4 %
CE-5 (medium)	54.5 %	37.0 %	17.5 %
CE-6 (very strong)	45.3 %	32.5 %	12.8 %
CE-7 (very strong)	56.1 %	45.7 %	10.4 %
CE-8 (strong)	65.8 %	56.0 %	9.8 %

Source of data: ICAO, Regional Performance Dashboards and USOAP reports¹²³

The conclusions of the above analysis are important in view of the existing correlation between effective implementation of USOAP protocols and actual accident rates, which is the highest for CEs 6 and 7 (very strong correlation) and CEs 3,4,8 (strong correlation).

In addition, as has already been demonstrated in Chapter 1 (Figure II), review of the USOAP data shows that levels of implementation of CEs differ across the ICAO regions, as well as within the regions, which means that the Chicago Convention's objective of 'the highest practicable degree of uniformity in regulations, standards, procedures, and organization in relation to aircraft, personnel, airways and auxiliary services' is still far from being met.¹²⁴

Finally, it is clear that the implementation of USOAP has not yet resulted in elimination or significant decrease in the practice of additional safety assessment schemes. The US continues with its IASA programme, while the EU maintains its list of unsafe operators. There are also reciprocal inspections conducted

¹²³ ICAO, 'Regional Performance Dashboards' <<http://www.icao.int/safety/Pages/Regional-Targets.aspx>> [accessed 4 August 2014]. This data is the copyrighted property of the ICAO and is reproduced here with its expressed knowledge and permission. It may not be cited by or reproduced in any other publication without subsequent approval being granted by ICAO.

¹²⁴ 'Chicago Convention', Article 37.

within the framework of BASAs,¹²⁵ special purpose assessments conducted on the basis of national or regional requirements,¹²⁶ or technical cooperation and assistance programmes assessments.¹²⁷

Although each of such audits or assessments has its own distinct objective and merits, there are overlaps between them which result in duplication of auditing effort and inefficiencies in the use of resources. The objective of some of them, such as the US IASA, or the EU ‘safety list’ is the same as of USOAP – namely to verify compliance of States with ICAO requirements.

One of the major steps towards improving and optimising the auditing effort at the global level is the ICAO transition towards the CMA. Endorsed by the ICAO Assembly in 2010,¹²⁸ the CMA is the most recent step in the development of USOAP and, as of January 2013, is being used to monitor safety oversight capabilities and safety performance of ICAO Member States on a continuous basis, using a risk based approach.¹²⁹

The main reason behind the transition to CMA has been the fact that performance of full scale USOAP audits for all 191 ICAO Member States has become a very expensive and burdensome exercise. At the same time it provided only a ‘snap-shot’ reflecting the situation at the moment of the audit. Given that under the traditional approach each State was audited only every five or six years, USOAP was not able to provide up-to-date information regarding global safety oversight performance.¹³⁰ Under USOAP CMA, ICAO should be able to provide more reliable, *real time* information about safety oversight performance of States. This in turn should offer more possibilities for using this information for the purpose of defining corrective actions, taking enforcement actions and certificates acceptance.

In addition to gathering information through remote means, on-site audits will continue to be used under the CMA approach as they provide the possibility to verify, on the ground, information provided by States. They will however be deployed on a more selective basis, essentially in those cases where information provided by States or obtained from other sources by ICAO would indicate a deteriorating safety situation.¹³¹

From the perspective of this study, the transition to CMA, and the flexibility that it offers in terms of the use of different sources of information to verify compliance with ICAO requirements is of major importance. Of particular relevance, is the fact that when authorising the transition to the CMA, the ICAO Assembly directed the Council to:

¹²⁵ Such as the Sampling Inspection Scheme (SIS) under Annex 2 of the ‘Agreement between the United States of America and the European Community on cooperation in the regulation of civil aviation safety’ (*supra* note 97).

¹²⁶ For example when EASA in the EU validates a type certificate issued by a third country, it will normally conduct an assessment of its regulatory system concerning aircraft design and continuing airworthiness.

¹²⁷ It is standard practice to commence a technical assessment project by conducting a gap analysis, which takes ICAO or regional standards as a point of reference.

¹²⁸ Assembly Resolution A37-5, *supra* note 71.

¹²⁹ For an overview of the USOAP-CMA see: ICAO Doc. 9735, *supra* note 13 in Ch.1.

¹³⁰ ICAO, ‘Evolution of the ICAO Universal Safety Oversight Audit Programme (USOAP) beyond 2010’, C-WP/13356, (187th session of the ICAO Council), Paragraph 5.2.

¹³¹ ICAO Doc. 9735, *supra* note 13 in Ch.1, at Paragraphs 3.4 - 3.5.

[F]oster coordination and cooperation between USOAP and audit programmes of other organizations related to aviation safety...in order to reduce the burden on States caused by repetitive audits or inspections and to decrease the duplication of monitoring activities.¹³²

Chapter 4 will demonstrate, using the EU and EASA as examples, how elimination of monitoring activities can be achieved in practice by relying on a regional aviation safety system. Increasing reliance on RASOs by ICAO for monitoring States' compliance with the Chicago Convention and its Annexes is one of the key elements of the GASON concept as proposed in Section 2.5 of this chapter.

2.2.5 ICAO ENFORCEMENT EFFORTS AND COMPETENCES

In addition to being a monitoring tool, USOAP has also become ICAO's main enforcement instrument. Although the evolution towards full transparency of USOAP results has been slow,¹³³ overall the progress made by ICAO in this respect over the years is encouraging. Today, not only are the USOAP audits shared between all the ICAO Member States, but even the levels of implementation of USOAP protocols per domain of aviation safety are available to the general public.¹³⁴

In addition, at the end of 2012, ICAO Council took a decision to share with the general public, as of January 2014, so called 'Significant Safety Concerns' (SSC).¹³⁵ This decision in practice means the establishment of a global list of States which allow their certificate holders to exercise the privileges attached to the certificate 'although the minimum requirements established by the State and by the Standards set forth in the ICAO Annexes are not met, resulting in an immediate safety risk to international civil aviation.'¹³⁶

The decision of ICAO to publish SSCs has important practical and legal consequences. So far the SSCs had been available to States only through a secure ICAO website. This meant that SSCs constituted confidential information which States normally should not disclose to the general public. In practice States did take this information into account when deciding whether to authorise operators from States with SSCs to perform operations to and from their territories, and even disclosed such information to the general public.¹³⁷

With the SSCs made officially public, it is now possible for States to make direct references to them without any risk of violating ICAO confidentiality arrangements, and even automatically ban affected operators, by refusing to recog-

¹³² Assembly Resolution A37-5, *supra* note 71.

¹³³ Blumenkron, *supra* note 49 in Ch.1, at pp. 26-49.

¹³⁴ ICAO, 'Safety Audit Information' <<http://www.icao.int/safety/Pages/USOAP-Results.aspx>> [accessed 14 March 2014].

¹³⁵ ICAO, 'Significant Safety Concerns (SSCs) – A mechanism for the sharing of SSCs with the public: Summary of decisions', C-DEC 197/4, (197th session of the ICAO Council, 2012).

¹³⁶ Definition of 'SSC' can be found in: ICAO Doc. 9735, *supra* note 13 in Ch.1, at Paragraph 1.3.

¹³⁷ This is for example the case with the EU, which makes reference to the SSCs in decisions banning operators from operating in the airspace of EU Member States, see: EU, 'Commission implementing Regulation (EU) No 659/2013 of 10 July 2013 amending Regulation (EC) No 474/2006 establishing the Community list of air carriers which are subject to an operating ban within the Community', (OJ L 190, 11.7.2013), at Paragraph 16.

nise their certificates on the basis of Article 33 and Annex 6. Such automatic bans would be an efficiency gain, as resources would not have to be spent on investigating cases where clear evidence of non-compliance exists and had been made public by ICAO. Passengers and charterers are now also able to directly consult the SSC list when taking travel or business decisions.

In practical terms, although a number of SSCs have been successfully resolved over the past years,¹³⁸ overall the number of SSCs and States affected by them has remained stable since 2010. At the end of 2013 there were seventeen SSCs attributed by ICAO to thirteen States, as Table III demonstrates, half of them from Africa.¹³⁹ This shows that there seems to be a group of between eleven and thirteen States which find it very difficult to maintain compliance with even the minimum safety standards of the Chicago Convention. In 2012 the airlines of these States carried in total 1.4 billion of revenue tonne kilometres (RTK) in international scheduled air navigation, which represents only around 0.3% of world-wide traffic registered by ICAO.¹⁴⁰ This can be considered as a marginal risk to global aviation safety.

Table III: ICAO Member States with Significant Safety Concerns (SSC)

End of the year	Number of SSC and ICAO Member States with SSC
2013	17 unresolved SSCs attributed to 13 States
2012	16 unresolved SSCs attributed to 11 States
2011	16 unresolved SSCs attributed to 12 States
2010	19 unresolved SSCs attributed to 13 States

Source of data: ICAO, *Electronic Bulletins (2010-2013)*¹⁴¹

In addition to using transparency, ICAO has tried to secure operational enforcement competences, but so far with mixed success. During the 2010 HLSC the ICAO Secretariat proposed that the attribution of three letter designator codes used for radiotelephony purposes could be denied by ICAO to aircraft operators registered in States with SSC.¹⁴² Such competence would effectively allow ICAO to freeze the number of AOC holders in affected States. The 2010 HLSC rejected this proposal on the grounds that granting such competences to ICAO could constitute an undesirable precedent for the future in terms of enforcement powers.¹⁴³ The ICAO Secretariat has only been able to convince the ICAO Council to agree

¹³⁸ ICAO, 'Universal Safety Oversight Audit Programme – Continuous Monitoring Approach (USOAP CMA)', A38-WP/50, (38th ICAO Assembly, 2013), Paragraph 3.3.

¹³⁹ ICAO, 'Safety Audit Information' <<http://www.icao.int/safety/Pages/USOAP-Results.aspx>> [accessed 14 March 2014].

¹⁴⁰ ICAO, 'Civil Aviation: 2012 International RTK by State of Air Operator Certificate (AOC)' 2013) <<http://www.icao.int/Meetings/a38/Pages/documentation-reference-documents.aspx>> [accessed 14 March 2014].

¹⁴¹ This data is the copyrighted property of the ICAO and is reproduced here with its expressed knowledge and permission. It may not be cited by or reproduced in any other publication without subsequent approval being granted by ICAO.

¹⁴² ICAO, 'Improving ICAO Transparency Policy: Sharing and Using Information in a Transparent, Consistent and Fair Manner', HLSC 2010-WP/12, ICAO High Level Safety Conference (Montréal, 2010), Paragraph 4.4.

¹⁴³ 'Personal notes of the author', (ICAO High Level Safety Conference, 2010). Author participated in the conference as the European Commission's coordinator for the EU delegation.

to a recommendation that ‘States with OPS-related SSCs postpone any request for a new three-letter designator for use in international operations as long as the SSCs remain unresolved.’¹⁴⁴ This demonstrates that possibilities for stronger enforcement measures exist, but in the first place depend on political will rather than legal limitations.

There are also other potential enforcement instruments available, such as the competence of the ICAO Council under Articles 86-87 of the Chicago Convention to determine if an ‘international airline is operating in conformity with the provisions of this Convention.’ In practice the banning by ICAO of an international airline under these provisions seems to be a theoretical possibility only, and has so far never been used.¹⁴⁵ This procedure is part of the dispute settlement mechanism and involves the ICAO Council. Past experiences show that ICAO Council is generally reluctant to take formal decisions in the case of disputes between Member States and prefers consultations and negotiations as a tool for resolution of differences.¹⁴⁶ This is scarcely acceptable in cases involving aviation safety, which should be kept as a strictly technical matter and acted upon rapidly.

Past criticism concerning ICAO’s lack of enforcement competences in the domain of aviation safety is not entirely justified, especially given ICAO’s inter-governmental status. As pointed out by Milde, currently none of the UN specialised organisations actually have the competence to take real enforcement measures.¹⁴⁷ Discussions in other UN specialised agencies show that even very serious incidents do not change the general principle of supremacy of State sovereignty in traditional inter-governmental organisations.¹⁴⁸ In terms of achieving improvements ICAO stands out in a relatively positive way.

ICAO will never become a true global enforcer of aviation safety requirements, but also does not have to be. It is in the first place the responsibility of States, individually or jointly, where individually they are too weak, to ensure effective safety oversight and act decisively to address identified deficiencies. ICAO’s role should be to monitor States’ compliance and to step in with determination if they fail to discharge their responsibilities. In this respect transparency is likely to remain the main enforcement tool of ICAO at the global level, and States should demonstrate the political will to continue providing it with a clear mandate to further develop and enhance this tool.

The main problem today when it comes to safety oversight and enforcement is the fact that with 191 Member States ICAO does not have the resources and capacity to devote equal attention to all of them. The transition to the CMA is supposed to address this issue by allowing ICAO to focus on those States which

¹⁴⁴ ICAO, ‘Encouraging the improvement of safety oversight in States with significant safety concerns (SSCs): Summary of decisions’, C-DEC 195/6, (195th session of the ICAO Council, 2012).

¹⁴⁵ Huang, *supra* note 29 in Ch.1, at p. 203.

¹⁴⁶ Weber, *supra* note 48 in Ch.1, at pp. 41-44.

¹⁴⁷ Milde, *supra* note 48 in Ch.1, at p. 180.

¹⁴⁸ See in particular the largely non-conclusive discussions on the extension of inspection and enforcement competences of the International Atomic Energy Agency (IAEA) in the aftermath of the nuclear incidents in the Fukushima nuclear plant in Japan in 2011, at: The Associated Press, ‘IAEA’s nuclear-disaster measures stay voluntary’ <<http://www.cbc.ca/news/world/iaea-s-nuclear-disaster-measures-stay-voluntary-1.1078542>> [accessed 13 March 2014]. For more general discussion about IAEA enforcement competences see also: Jack I. Garvey, *Nuclear Weapons Counterproliferation: A new grand bargain*, (2013), p. 103.

present the greatest risk to the international aviation safety system. It remains to be seen, however, if all States will have sufficiently reliable information to support the CMA. One way of addressing this issue is for ICAO to rely more on regional organisations, which could *feed* USOAP-CMA with information about the safety performance of their Member States and ultimately allow ICAO to better prioritise the use of its resources. Relying more on regional organisations could also help ICAO in addressing the enforcement issue. Here a useful analogy with the international maritime sector can be made.

2.3 LESSONS LEARNED FROM THE INTERNATIONAL MARITIME SECTOR

ICAO is not the only universal organisation responsible for regulating transport matters. In the maritime sector a similar organisation was established - the IMO. Created in 1948 as a specialised agency of the UN, IMO has global membership and is responsible for the safety and security of international shipping and the prevention of marine pollution by ships.¹⁴⁹ IMO has been facing problems similar to ICAO in terms of ensuring uniform implementation and enforcement of its safety standards. The approach of the maritime sector to tackling these problems has been by setting standards at the global level and relying on regional cooperation to ensure their correct implementation and enforcement.

In contrast to ICAO, IMO regulates maritime safety by means of international conventions which are legally binding. In practice however it also experienced problems with their implementation. Maritime conventions, although ratified by the majority of the world tonnage States, still need implementation into national legal orders and proper enforcement.¹⁵⁰ Given that not all States have the same expertise, experience and resources to do this properly, the 'origination of an IMO convention does not always translate into its implementation and effective enforcement'¹⁵¹ by the 'Flag States'. These experiences suggest that even if ICAO Annexes had a legally binding nature - meaning without the possibility of filing differences - it is not likely that this would actually translate into their better implementation at national levels.

The problem with implementation of IMO safety standards became very acute in the 1950s, with the emergence of the so called 'open registries' or 'flags of convenience', which offered ship-owners much more favourable registration conditions than those in traditional national 'Flag States', including tax incentives and the ability to hire non-national, usually cheaper, crews.¹⁵² Such 'open registries', by focusing on maximising the number of registrations and associated registration fees, attracted significant criticism from both inside and outside the maritime industry for not being able to exercise sufficient oversight over the safety standards of ships carrying their flags.¹⁵³ This in turn put into question the legitimacy of the exclusivity of 'Flag State' jurisdiction - which has been a traditional

¹⁴⁹ IMO, 'IMO website' <<http://www.imo.org>> [accessed 14 March 2014].

¹⁵⁰ Oya Z. Özçayır, 'The use of port State control in maritime industry and the application of the Paris MoU', OCLJ, 14 (2009), pp. 201-204.

¹⁵¹ Ibid. See also: IMO, 'Implementation, Control and Coordination' <<http://www.imo.org/OurWork/Safety/Implementation/Pages/Default.aspx>> [accessed 14 March 2014].

¹⁵² Allianz, 'Safety and Shipping 1912-2012: From Titanic to Costa Concordia', (2012), p. 38.

¹⁵³ Ibid.

principle of IMO, similar to the 'State of Registry' jurisdiction under the Chicago Convention. The situation thus called for 'supplementary jurisdiction over ships by port and coastal States'.¹⁵⁴

A turning point in the attitude of the international community to enforcement of international maritime safety standards was when a massive oil spill occurred off the coast of Brittany, France, as a result of the grounding of the 'MV Amoco Cadiz', which flew the Liberian flag.¹⁵⁵ This incident caused 'a strong political and public outcry in Europe for far more stringent regulations with regard to the safety of shipping'.¹⁵⁶ Following these developments, a number of European countries together with the European Commission, the IMO, and the International Labour Organization agreed that 'the elimination of substandard shipping would be best achieved by coordination of port States'.¹⁵⁷ This resulted in the signing in 1982, of the first regional memorandum of understanding on Port State Control (PSC) - the 'Paris MoU'.¹⁵⁸

PSC involves the inspection of foreign ships in national ports to verify that the condition of the ship and its equipment comply with the requirements of international regulations and that the ship is manned and operated in compliance with these rules.¹⁵⁹ At the time of the signing of the Paris MoU, the concept of PSC was not new - many of the IMO conventions already contained provisions for ships to be inspected when they visit foreign ports to ensure that they met requirements prescribed by these instruments.¹⁶⁰ It was however the regional approach to port control that gave this traditional instrument a completely new, 'extremely effective' dimension.¹⁶¹ As observed by a commentator:

[T]he wide-scale adoption of port State control is an attempt to develop an exception to the competitive relationship of ports within the same region. Where the ports cooperate by agreeing to apply the same rules in a similar manner, then no single port seeks or acquires competitive advantage by offering to overlook sub-standard vessels.¹⁶²

¹⁵⁴ Henrik Ringbom, *The EU maritime safety policy and international law*, (2008), p. 167.

¹⁵⁵ 'History's 10 Most Famous Oil Spills', <<http://gcaptain.com/historys-10-most-famous-oil-spills/>> [accessed 5 August 2014].

¹⁵⁶ 'Paris Memorandum of Understanding on Port State Control', <<https://www.parismou.org/about-us/history>> [accessed 5 August 2014].

¹⁵⁷ Özçayır, 'The use of port State control in maritime industry and the application of the Paris MoU', *supra* note 150, at p. 209.

¹⁵⁸ 'Memorandum of Understanding on Port State Control', Paris, 26 January 1982.

¹⁵⁹ IMO, 'Port State Control' <<http://www.imo.org/OurWork/Safety/Implementation/Pages/PortStateControl.aspx>> [accessed 5 August 2014].

¹⁶⁰ 'International Convention for the Safety of Life at Sea (SOLAS)', London, 1 November 1974, 1184 UNTS 3; 'International Convention on Load Lines', London, 5 April 1966, 640 UNTS 133; 'International Convention on Standards of Training, Certification and Watchkeeping for Seafarers', London, 7 July 1978, 1361 UNTS 2; 'International Convention for the Prevention of Pollution from Ships (MARPOL 1973) as modified by the Protocol 1978 relating thereto (MARPOL 73/78)', London, 17 February 1978, 1340 UNTS 61.

¹⁶¹ IMO, 'Port State Control'

<<http://www.imo.org/OurWork/Safety/Implementation/Pages/PortStateControl.aspx>> [accessed 5 August 2014].

¹⁶² Ted L. McDorman, 'Regional port State control agreements: some issues of international law', *OCLJ*, 5 (2000), p. 209.

Following the Paris MoU other regions followed suit. At present nine regional MoUs on PSC are in place in different parts of the world, all based on the Paris MoU model.¹⁶³ The Paris MoU is considered the most stringent one, as in addition to the detention of sub-standard vessels - which is a feature of all PSC MoUs - it also envisages banning those ships persistently found not to be in compliance with IMO standards from the ports of the participating States.¹⁶⁴ All regional MoUs also publish *white*, *gray* and *black* lists of States, according to the safety performance of the vessels carrying their flag.¹⁶⁵

Although originally intended to be a back up to 'Flag State' implementation, PSC has become an indispensable instrument in enforcing international maritime conventions, and a reaction of the international community against the weaknesses in the enforcement of IMO rules.¹⁶⁶

However, the emergence of regional MoUs on PSC has been a *bottom-up* process.¹⁶⁷ Although IMO encouraged and promoted this system, notably through the adoption of common requirements for PSC,¹⁶⁸ it was not directly involved in coordinating such schemes or taking measures on the basis of the results of the inspections conducted by the 'Port States'. The largest 'Flag States' have in fact been sceptical about a more active role for IMO in PSC.¹⁶⁹

The PSC system is not an ideal solution. First of all, it is not a substitute for the proper exercise of 'Flag State' responsibility. As in the aviation sector, ramp inspections cannot be a substitute for proper oversight by the 'State of Registry' of an aircraft. Also, as observed by another commentator, PSC do not have uniform application in all regions and sometimes not even within the same region, which may result in varied standards of inspectors and inspections.¹⁷⁰

Despite the above, the data available as well as the opinions of the commentators indicate that PSC is overall an effective instrument. A study conducted in Sweden on the PSC data collected by the Swedish Maritime Administration in the years 1996-2001 indicates a high percentage of vessels exhibiting a reduction in the total number of reported deficiencies between earlier and subsequent in-

¹⁶³ 'The Acuerdo De Vina del Mar Agreement on Port State Control of Vessels', 5 November 1992; 'The Memorandum of Understanding on Port State Control in the Asia-Pacific Region', 2 December 1993; 'The Memorandum of Understanding on Port State Control in the Mediterranean Region', 11 July 1997; 'The Memorandum of Understanding on Port State Control for the Indian Ocean Region', 5 June 1998; 'The Memorandum of Understanding on Port State Control for the West and Central Africa Region', 22 October 1999; 'The Memorandum of Understanding on Port State Control in the Black Sea Region', 1 April 2000; 'Paris MoU', *supra* note 155; 'The Memorandum of Understanding on Port State Control in the Caribbean Region', 9 February 1996; 'The Riyadh Memorandum of Understanding on Port State Control in the Gulf Region', 30 June 2004.

¹⁶⁴ 'Paris MoU', *supra* note 158, at Section 4.

¹⁶⁵ See for example: Tokyo MoU Secretariat, 'Annual Report on Port State Control in the Asia-Pacific Region', (2012), <<http://www.tokyo-mou.org/doc/ANN12-r.pdf>> [accessed 14 March 2014].

¹⁶⁶ Former official of the European Maritime Safety Agency (EMSA), 'Interview No 5', (2014).

¹⁶⁷ Official of the European Maritime Safety Agency (EMSA), 'Interview No 2', (2012).

¹⁶⁸ IMO, 'Assembly Resolution A.1052(27): Procedures for Port State Control', (2011).

¹⁶⁹ 'Interview No 5', (2014), *supra* note 166.

¹⁷⁰ Özçayır, 'The use of port State control in maritime industry and the application of the Paris MoU', *supra* note 150, at p. 238.

spections.¹⁷¹ Similarly at the level of Paris¹⁷² and Tokyo MoUs,¹⁷³ and in the US (US Coast Guard's Port State Control)¹⁷⁴ the ratio of ship detentions in the years 2001-2010 has decreased, although the overall number of inspections in these three regions has increased during that period. It is believed that the PSC, despite some of its shortcomings, will 'remain as the most effective control systems for shipping in a progressing world.'¹⁷⁵

The PSC system, and in particular the Paris MoU, are important for this study because they inspired the EU rules concerning the banning of unsafe aircraft.¹⁷⁶ Similar to the Paris MoU region, in the EU, the ratio of findings¹⁷⁷ under the Safety Assessment of Foreign Aircraft (SAFA) programme¹⁷⁸ has been decreasing over time, suggesting that the overall safety compliance of aircraft landing at European airports has improved (Figure VI).¹⁷⁹

The SAFA data has however to be interpreted with caution, as it does not necessarily mean that all sub-standard aircraft affected by the SAFA inspections have improved their performance. The observed improvement can in part be attributed to the fact that some of the aircraft stopped operating to the EU because of operating restrictions imposed on them as a result of identified deficiencies. If however SAFA, like PSC, had global or nearly global coverage, the sub-standard aircraft would find it more difficult to relocate their operations to regions more tolerant to safety deficiencies. The EU is leading in this respect with its SAFA programme, covering by the end of 2013 not only the 28 EU Member States but also most ECAC States and a number of non-European countries including Morocco, Singapore, Canada, and United Arab Emirates (UAE).¹⁸⁰ Another example of a regional aircraft ramp inspection programme is the Safety Ramp Inspection Data Exchange Programme - IDISR operated by the Regional System on Safety Oversight in Latin America (SRVSOP), and which is very similar to the EU SAFA programme.¹⁸¹

¹⁷¹ Pierre Cariou, Maximo Q. Jr. Mejia, and Francois-Charles Wolff, 'On the effectiveness of port State control inspections', *Transportation Research Part E* (2008), pp. 491–503.

¹⁷² Paris MoU Secretariat, 'Annual Report, Statistical Annex', (2012).

¹⁷³ Annual Report on Port State Control in the Asia-Pacific Region, (2012), *supra* note 2165, at pp. 2019-2020.

¹⁷⁴ US Coast Guard, 'Port State Control in the United States: Annual Report', (2011), p. 4.

¹⁷⁵ Özçayır, 'The use of port State control in maritime industry and the application of the Paris MoU', *supra* note 150, at p. 239.

¹⁷⁶ The Head of Unit of the European Commission, who was leading the development of this legislation, had previously been responsible for maritime safety in the European Commission.

¹⁷⁷ Ratio of findings stands here for number of findings per inspection.

¹⁷⁸ For an overview of the SAFA programme see: EC, 'The EC SAFA Programme: Past, Present and Future'

<http://ec.europa.eu/transport/modes/air/safety/doc/2009_12_04_info_fiche_safa_programme.pdf> [accessed 5 August 2014].

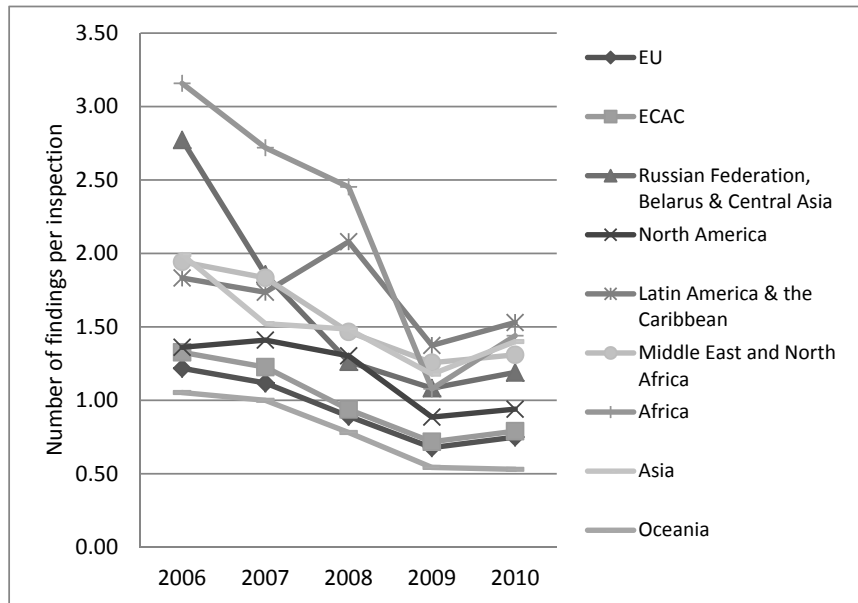
¹⁷⁹ EC, 'European Union SAFA Program', COM (2012) 91 final, p. 12.

¹⁸⁰ See: EASA, 'Safety Assessment Of Foreign Aircraft (EC SAFA Programme)'

<<http://easa.europa.eu/safety-assessment-foreign-aircraft-ec-safa-programme>> [accessed 5 August 2014]. Negotiations with other non-European States on their participation in the EU SAFA programme were ongoing at the time of writing this study.

¹⁸¹ Official of the Regional System on Safety Oversight in Latin America (SRVSOP), 'Interview No 8', (2014).

Figure VI: Evolution of the SAFA inspections ratio on a regional basis



Source: European Commission, Annual EU SAFA programme reports (2006-2010)

The legal basis for such a global ramp inspection safety network is set out in Article 16 of the Chicago Convention, which gives States the right to search, without unreasonable delay, aircraft of the other contracting States on landing or departure, and to inspect the certificates and other documents prescribed by the Chicago Convention. This provision could be used by ICAO to promote the development of regional ramp inspection schemes similar to PSC MoUs. The practical implementation of such schemes at regional levels could be coordinated by RASOs, as is the case in Europe or in Latin America.

This is just one example of how regional cooperation can contribute to better implementation and enforcement of international safety requirements and help ICAO to achieve a more uniform application in different parts of the world. The subsequent chapters of this study will demonstrate how RASOs, and regional cooperation initiatives more generally, can be used to develop and promote these and other safety initiatives, or even to exercise safety functions on behalf of States or aviation authorities. Before that, it is however necessary to briefly analyse the role of ICAO in promoting regional cooperation on aviation safety in general.

2.4 ICAO AND THE REGIONAL GOVERNANCE OF CIVIL AVIATION SAFETY

2.4.1 DEVELOPMENT OF ICAO REGIONAL POLICY

The idea of regional collaboration in international civil aviation has a long tradition. The Chicago Conference in 1944 discussed the concept of ‘Regional Councils of the International Air Authority’, which were supposed to be ‘responsible

for regional aviation matters and certification of international air operators established in States of a given region.’¹⁸²

From the perspective of the Chicago Convention, the main provision addressing the issue of regional cooperation is Article 55(a), which gives the ICAO Council the possibility of:

[E]stablishing subordinate air transport commissions on a regional or other basis and define groups of States or airlines with or through which it may deal to facilitate the carrying out of the aims of this Convention.

In practice the above article has not been used much, as ICAO prefers instead to rely on Assembly resolutions to cooperate with regional civil aviation bodies.¹⁸³ This is the traditional way which ICAO uses to develop policy and programmes in areas which are not explicitly addressed in the Chicago Convention.¹⁸⁴

In 1956 the ICAO Assembly adopted a policy framework to govern relations with ECAC – the oldest regional aviation body in existence today.¹⁸⁵ This cooperation was subsequently extended to other regional aviation organisations or bodies such as the AFCAC, LACAC and the Arab Civil Aviation Commission (ACAC).¹⁸⁶

These very first arrangements between ICAO and regional civil aviation bodies were largely of an administrative nature, and covered issues such as provision of secretarial services, coordination of meeting agendas or exchange of documentation and studies on technical subjects.¹⁸⁷ Under these arrangements, regional offices of ICAO were also used to provide assistance, especially in the initial phase of setting up a regional body.¹⁸⁸

This initial ICAO policy was consolidated in 1989 following adoption of the ICAO Assembly Resolution on general principles of cooperation with regional civil aviation bodies. The objective of this policy was to:

[S]upport the work and activities of any existing or future regional civil aviation bodies wherever such support is requested by the regional body concerned and duly approved, taking into account the resources of ICAO and the implementation of its Work Programme.¹⁸⁹

¹⁸² In particular see: ‘Canadian Revised Preliminary Draft of an International Air Convention’ (Proceedings of the International Civil Aviation Conference), *supra* note 42 in Ch.1.

¹⁸³ Weber, *supra* note 48 in Ch.1, at pp. 119-123.

¹⁸⁴ Other examples of ICAO using Assembly Resolutions to develop policies in areas not covered by the Chicago Convention include the setting up of USOAP, or dealing with environmental protection issues.

¹⁸⁵ ICAO, ‘Assembly Resolution A10-5: Relationship of ICAO with the European Civil Aviation Conference’, (10th ICAO Assembly, 1956).

¹⁸⁶ Weber, *supra* note 48 in Ch.1, at pp. 119-123.

¹⁸⁷ For an overview of the early cooperation between ICAO and regional civil aviation bodies see: ICAO, ‘Relationship of ICAO with regional civil aviation bodies’, A21-WP/35, (21st ICAO Assembly, 1974).

¹⁸⁸ *Ibid.*

¹⁸⁹ ICAO, ‘Assembly Resolution A27-17: Relationship between ICAO and Regional Civil Aviation Bodies’, (27th ICAO Assembly, 1989).

The 1989 policy helped to give more predictability and stability to the planning of financial support to regional bodies, whilst at the same time providing a generic, formal basis for cooperation in the shape of working arrangements to be concluded by the Council on behalf of ICAO.

At present much of the ICAO work is organised on a regional basis, with the Headquarters responsible for defining the overall policy, and relying on regional meetings and offices for implementation and feedback:

- (1) From the air navigation perspective ICAO divided the world into nine air navigation regions, with their boundaries corresponding more or less with the geography of major continental/sub-continental and oceanic masses.¹⁹⁰ Each of the regions has its corresponding Regional Air Navigation Meeting, responsible for planning of air navigation services and facilities which are then set out in Regional Air Navigation Plans (RANP). The monitoring of the implementation of RANPs is conducted through Planning and Implementation Regional Groups, established by the ICAO Council.¹⁹¹
- (2) Going beyond air navigation matters, the implementation of ICAO policies in the regions is the responsibility of the seven regional offices located in Bangkok, Cairo, Dakar, Lima, Mexico, Nairobi, and Paris. Regional offices are the *eyes and ears* of ICAO in the regions and the main tool through which support is provided 'on the ground' to ICAO Member States. Their activities involve, in particular:
 - (a) developing plans of actions to assist States with significant safety concerns, or facing difficulties in resolving safety-related deficiencies, as well as following them up through dedicated USOAP activities;
 - (b) organisation of regional symposia, workshops and training activities;
 - (c) support to implementation of air navigation plans and programmes such as performance based navigation;
 - (d) helping States to develop action plans for mitigating impact of aviation on environment;
 - (e) providing technical support with a view to enhancing the capacity of States to effectively implement SARPs.¹⁹²

Most recently, in the area of aviation safety a dedicated regional framework with global coverage has been also put in place – the Regional Aviation Safety Groups (RASGs), which will be addressed in more detail in Section 2.4.3 below.

¹⁹⁰ Asia (ASIA), Pacific (PAC), Middle East (MID), African Ocean (AFI), North America (NAM), Caribbean (CAR), South America (SAM), Europe (EUR) and North Atlantic (NAT); see: ICAO, 'Directives to Regional Air Navigation Meetings and Rules of Procedure for their Conduct', ICAO Doc. 8144-AN/874, (1991).

¹⁹¹ For a more detailed overview of the ICAO regional air navigation planning mechanisms see: Van Antwerpen, *supra* note 52 in Ch.1, at pp. 25-27.

¹⁹² For an overview of ICAO regional offices' activities see: ICAO, 'Annual Report to Council on Regional Offices' activities during 2012 and Work Programmes for 2013', C-WP/13919, (2013).

To conclude, although the Chicago Convention only very scarcely addresses the issue of regional cooperation, this has in practice not prevented ICAO from basing its operations largely on a regional basis, and developing active cooperation with a number of regional civil aviation bodies. This policy however has been built incrementally and largely on an ad hoc basis. With the increasing role of regional organisations such as the EU and the African Union (AU) in regulating civil aviation, ICAO felt that there was a need to review its policy and to make its cooperation with regional civil aviation organisations and bodies more operational and much deeper. This was a trigger for the development of a completely new comprehensive policy and framework for regional cooperation which is presented in the following section.

2.4.2 THE 2010 ICAO POLICY AND FRAMEWORK FOR REGIONAL COOPERATION

In 2009 ICAO started reviewing its policy on cooperation with regional aviation bodies. There were two main drivers behind that development. Firstly, the growing significance of regional cooperation in different parts of the world meant that there was a need for closer coordination between ICAO and these bodies, with a view to avoiding duplication of work or even conflicting developments. Secondly, the emergence of specialised regional aviation bodies with regulatory, oversight and even enforcement competences was being increasingly seen by ICAO and the international aviation community as a way to address some of the pressing problems especially in the area of aviation safety.

The trigger for the commencement of this review work was a Symposium on regional organisations organised in 2008 by ICAO and the European Commission.¹⁹³ The objective of the Symposium was to discuss the experiences of regional aviation bodies, their contributions to international civil aviation, and how to strengthen their relationship with ICAO.¹⁹⁴

The Symposium concluded that ‘Regional Organisations in civil aviation are already a positive reality and that a clear trend towards more regional governance can be observed.’¹⁹⁵ It also underlined that, ‘while ICAO has historically always been positively inclined to the role of regional organisations, more should be done in strengthening the cooperation and relationship of regional civil aviation bodies with ICAO.’¹⁹⁶ The Symposium made a number of recommendations, which were in particular related to:

- The need for ICAO to continue to use cooperative arrangements with regional organisations such as Memoranda of Understanding (MoU) or Memoranda of Cooperation (MoC);
- The contribution of regional safety organisations to a more effective implementation of ICAO’s SARPs; and
- The development of a regular dialogue between ICAO and regional organisations.

¹⁹³ EC-ICAO Symposium on Regional Organisations, *supra* note 43 in Ch.1.

¹⁹⁴ Ibid. at ‘Summary of Conclusions’, Paragraph 1.

¹⁹⁵ Ibid. at ‘Summary of Conclusions’, Paragraph 5.

¹⁹⁶ Ibid. at ‘Summary of Conclusions’, Paragraph 11.

The recommendations of the 2008 Symposium were further developed by a multidisciplinary group comprised of members of the ICAO Secretariat, representatives of the ICAO Council and interested representatives of international organisations.¹⁹⁷ The multidisciplinary group delivered its final report for the 188th session of the ICAO Council.¹⁹⁸

The work of the multidisciplinary group resulted in a far reaching overhaul of the ICAO policy on regional cooperation, including a recommendation that more involvement of ICAO and States at a high level was necessary to implement the policy of regional cooperation.¹⁹⁹ The multidisciplinary group developed three documents, which were subsequently endorsed by the ICAO Council,²⁰⁰ and the Assembly:²⁰¹

- ICAO's policy on regional cooperation;
- ICAO Framework of Regional Cooperation, and a Strategic Plan of Action for ICAO Headquarters and Regional Offices;
- Template Agreement for Regional Cooperation.

Analysis of the above documents, and the discussions held by the multidisciplinary group, show that the key concern of ICAO has been to avoid, or at least to minimise, the duplication between its activities, at the headquarters' and regional offices' levels, and those of the regional organisations competent in civil aviation, as well as to ensure better harmonisation in all regions of implementation of SARPs and related policies.²⁰²

In order to achieve the objectives of the new policy, and to make sure that all areas of regional cooperation are covered, the above mentioned 'ICAO Framework of Regional Cooperation' proposes 'eight strategic thrusts':

- (1) common efforts at harmonizing, between States, operational regulations requirements and procedures based on ICAO SARPs implementation;
- (2) understanding each other's roles and responsibilities;
- (3) establishment of improved mechanisms for consultation and cooperation, including electronic information sharing;
- (4) coordinated programme planning and implementation between ICAO and the regional civil aviation bodies;
- (5) periodic review of regional issues;
- (6) maximising the effective use of resources at ICAO;
- (7) benefiting from each other's competence and expertise; and
- (8) joint training and capacity building.

¹⁹⁷ ICAO, 'Proposed Terms of Reference of the Secretariat/Council Group on Regional Bodies: Summary of Decisions', C-DEC 186/2, (186th session of the ICAO Council, 2009).

¹⁹⁸ ICAO, 'Report of the Secretariat/Council Group on Regional Bodies', C-WP/13404, (188th session of the ICAO Council, 2009).

¹⁹⁹ Ibid. at Paragraph 2.2.

²⁰⁰ ICAO, 'Report of the Secretariat/Council Group on Regional Bodies: Summary of Decisions', C-Dec 188/3, (2009).

²⁰¹ Assembly Resolution A37-21, *supra* note 44 in Ch.1.

²⁰² ICAO, 'Cooperation with Regional Organizations and Regional Civil Aviation Bodies', A37-WP/28, (37th ICAO Assembly, 2010). See in particular: Appendix, Point 3 'Objectives of the Policy'.

Following its endorsement by the Assembly, the policy is being implemented by ICAO through regional operational plans, consistent with the overall ICAO Business Plan.²⁰³ As indicated above, one of the key objectives of the new policy is to better define the roles and responsibilities of ICAO and regional civil aviation bodies and organisations in the various ICAO regions with a view to avoiding overlap and optimising the use of resources. This is being achieved by formalising the cooperation through MoUs.

Although ICAO in the past used different instruments to formalise cooperation with regional bodies, the new regional policy envisages a more systematic and standardised approach. Based on a 'Template Agreement for Regional Cooperation', by the end of 2013 ICAO had signed MoUs with all the main regional civil aviation bodies and organisations, including: AU, EU, ACAC, AFCAC, ECAC and LACAC.²⁰⁴

The MoUs address issues such as improved mechanisms for consultation and cooperation, including electronic information sharing; coordinated programme planning and implementation by ICAO and the regional civil aviation bodies; and joint training and capacity building.

The MoUs provide a general framework of cooperation between ICAO and regional organisations and regional civil aviation bodies, including in respect of safety matters, where the RASOs play an increasingly important role.

2.4.3 ICAO VIEWS ON REGIONAL AVIATION SAFETY ORGANISATIONS

The global picture of regional cooperation on aviation safety matters is currently quite complex and involves a number of layers and forms of cooperation.

Following the establishment of USOAP in the 1990s, ICAO realised that SARPs are far from being applied in a uniform manner across the world, and that in addition some of the States do not have the necessary expertise or resources to establish effective safety oversight systems. In response to these problems it started setting up technical assistance programmes on a regional basis known as COSCAPs (Cooperative Development of Operational Safety and Continuing Airworthiness Programme).²⁰⁵

The main objective of COSCAPs is to assist States in the development of a harmonised regulatory framework and effective implementation of the CEs of safety oversight as identified by ICAO.²⁰⁶ Their scope was originally limited to pilot licensing, flight operations and airworthiness matters, that is Annexes 1, 6 and 8 to the Chicago Convention, but over time extended to other areas of aviation safety, including ATM, aerodromes, and accident investigation, in line with the CSA of USOAP.²⁰⁷ At the beginning of 2014 seven COSCAP projects were still in operation.²⁰⁸

²⁰³ ICAO, 'Cooperation with Regional Organizations and Regional Civil Aviation Bodies', A38-WP/9, (38th ICAO Assembly, 2013).

²⁰⁴ ICAO, Press Release No. 09/10, *supra* note 1.

²⁰⁵ The first COSCAP projects were set up at the end of the 1990s when ICAO has been transitioning to USOAP as a mandatory programme.

²⁰⁶ ICAO Doc. 9734 Part B, *supra* note 3 in Ch.1, at Paragraph 3.2.2.

²⁰⁷ ICAO, 'COSCAPs in Five Regions', World Bank/ICAO Air Transport Development Forum (Kuala Lumpur, 2008),

Finally, in 2010 ICAO decided to create another structure - the RASGs - 'to address and harmonize all flight operations safety issues on an ICAO region-wide basis.'²⁰⁹ When establishing the RASGs ICAO argued that both COSCAPs and RASOs created by States are established on a sub-regional basis only and focus mainly on oversight issues. The main objective behind ICAO creating RASGs is to have a system with world-wide coverage (see Figure VII) to monitor and coordinate the implementation of the GASP.

Figure VII: ICAO Regional Aviation Safety Groups (RASGs)



Source: ICAO, State of Global Aviation Safety (2013)²¹⁰

What we can therefore see is that, although the Chicago Convention is almost silent about regional cooperation, the concept itself is very much supported by ICAO as far as aviation safety matters are concerned. This is especially visible when it comes to RASOs – which in the ICAO jargon are referred to as Regional Safety Oversight Organisations (RSOO) or Regional Accident Investigation Organisations (RAIO) depending on the type of activity they undertake.²¹¹

RASOs are specialised bodies tasked with assisting States in regulating and overseeing civil aviation activities, or even taking over some or all of such functions from the national governments. A limited number of such bodies evolved from COSCAP projects as Chapter 3 will demonstrate. Although some of

<<http://www.icao.int/Meetings/wrdss2011/Documents/DevelopmentForum2008/Sander-Fischer.pdf>> [accessed 18 March 2014].

²⁰⁸ ICAO, 'RSOOs and COSCAPs' (2014)

<http://www.icao.int/safety/Implementation/Lists/COSCAP_RSOU/AllItems.aspx> [accessed 14 March 2014].

²⁰⁹ ICAO, 'Report of ANC — Establishment of Regional Aviation Safety Groups (RASGs): Summary of Decisions', C-Dec 190/4, (190th session of the ICAO Council 2010).

²¹⁰ This map is the copyrighted property of the ICAO and is reproduced here with its expressed knowledge and permission. It may not be cited by or reproduced in any other publication without subsequent approval being granted by ICAO.

²¹¹ Definition and typology of RASOs will be provided in Chapter 3

these organisations have history dating back as far as the 1970s, a significant number of them have only been set up in the last twelve years.

The concept of establishing RASOs was endorsed by ICAO Assembly in 2004²¹² and since then has become an official part of ICAO policy, currently reflected in a number of Assembly resolutions,²¹³ ICAO Annexes²¹⁴ and manuals, two of which are dedicated entirely to the establishment of RSOOs and RAIOS.²¹⁵ One of the Assembly resolutions even puts RSOOs almost on an equal footing with States, when it comes to the USOAP.²¹⁶

Under the current policy established by the Assembly, the ICAO Council is directed to 'promote the concept of regional cooperation for the purpose of enhancing safety and safety oversight, including the establishment of regional safety oversight organizations.'²¹⁷ Similarly, ICAO Member States are encouraged 'to participate in, or provide tangible support for, the strengthening and furtherance of sub-regional and regional aviation safety and safety oversight bodies, including regional safety oversight organizations.'²¹⁸ In general, ICAO believes that:

[E]stablishment of sub-regional and regional aviation safety and safety oversight bodies, including regional safety oversight organizations, has great potential to assist States in complying with their obligations under the Chicago Convention through economies of scale and harmonization on a larger scale.²¹⁹

In particular RASOs are believed to be an important element of ICAO's response to safety oversight problems faced by Africa, which is currently the least performing ICAO region in terms of aviation safety. As highlighted by AFCAC:

[M]any African States do not have adequate aviation activities that could generate the necessary resources. This low volume of activity is not enough to run a workable safety oversight system. To overcome this problem a Regional Safety Oversight Organization (RSOO) can provide access to the necessary expertise through the sharing and pooling of resources.²²⁰

The limited available research by aviation experts on RASO type bodies suggests that, under certain conditions, they can provide economies of scale to

²¹² Assembly Resolution A35-7, *supra* note 32 in Ch.1, at Paragraph 6.

²¹³ See in particular: Assembly Resolution A37-5, *supra* note 71; Assembly Resolution A38-7, *supra* note 3; ICAO, 'Assembly Resolution A38-2: ICAO global planning for safety and air navigation', (38th ICAO Assembly 2013); Assembly Resolution A38-5, *supra* note 32 in Ch.1.

²¹⁴ The concept of RSOO and RAIO is referred to in: ICAO, 'Annex 19 to the Chicago Convention: Safety Management', (2013), Forward; ICAO, 'Annex 13 to the Chicago Convention: Aircraft Accident and Incident Investigation', (2010), Paragraph 5.1 and Paragraph 5.1.2.

²¹⁵ ICAO Doc. 9734 Part B, *supra* note 3 in Ch.1; ICAO Doc. 9946, *supra* note 3 in Ch.1.

²¹⁶ Assembly Resolution A37-5, *supra* note 71.

²¹⁷ Assembly Resolution A38-5, *supra* note 32 in Ch.1.

²¹⁸ *Ibid.*

²¹⁹ *Ibid.*

²²⁰ AFCAC, 'Establishment of Regional Safety Oversight Organizations in Africa', A37-WP/166, (37th ICAO Assembly, 2010), Paragraph 2.2.

‘conserve precious human and fiscal resources’, and ‘promote harmonisation of safety requirements, reducing the burden...on struggling airlines.’²²¹

In addition to providing policy and guidance material on RASOs, ICAO is also involved, hands-on, in the development and management of some of these organisations, especially in the initial phase of their operations. Such support includes: drafting of RASO constituent documents, assistance in their management and technical operations, consultation services, training of personnel, provision of information and documents that a RASO may need, and even financial assistance.²²² Finally ICAO also promotes transition of COSCAP projects to RASO type bodies, but in 2014 this process was still ongoing, as Chapter 3 will demonstrate.

Overall, the picture which emerges from a review of ICAO documents and programmes is that of a well-established policy favouring regional cooperation and in particular RASO type bodies as one of the key answers to global safety oversight problems. On the other hand the implementation of this policy is not yet complete, as for example the transition of COSCAPs to RASO is still ongoing. In addition the parallel existence of RASGs, COSCAPs and RASOs creates a risk of duplication of activities and resulting waste of resources.

The biggest test case for RASOs will be in Africa. Only if RASOs manage to achieve tangible results in helping African States to resolve significant safety concerns and raise the level of implementation of their safety oversight systems to world-average levels, will the real value of these bodies be demonstrated. So far this is not yet the case. As Chapter 5 will demonstrate, the benefits of establishing RASOs cannot always be taken for granted.

Finally, from the perspective of global governance of civil aviation, the ICAO new policy on regional cooperation, and the emergence of RASOs can be seen as exemplification of the phenomenon which is referred to by Boisson de Chazournes as ‘*dualisme fonctionnel*’.²²³ This concept, characterises the regional trends which have been taking place since the middle of the twentieth century, and where the regional organisations are seen as vehicles not only to address issues of regional concern but also to tackle global problems, and thus to contribute to better implementation of international law in general.

2.5 PROPOSAL FOR A GLOBAL AVIATION SAFETY OVERSIGHT NETWORK

ICAO needs to reflect on what the ultimate role should be of the RASOs or more generally of regional aviation safety systems, in global safety governance. So far their role has mainly been seen as a way to address deficiencies in safety oversight systems of States which are unable to deal with these deficiencies on their own.

This study argues that, looking from a global perspective, in the short term the most important function of RASOs should continue to be to assist States in resolving their safety oversight deficiencies and setting up sustainable safety over-

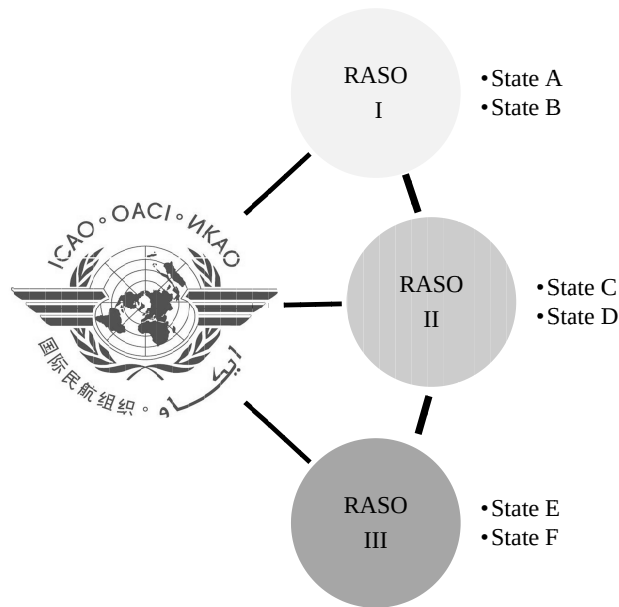
²²¹ Jennison, ‘Regional safety oversight bodies deliver economies of scale and greater uniformity’, *supra* note 54 in Ch.1, at pp. 9-12, 34-35.

²²² ICAO Doc. 9734 Part B, *supra* note 3 in Ch.1, at Paragraph 6.2.

²²³ Boisson de Chazournes, *supra* note 43 in Ch.1, at p. 145-146.

sight systems where this is not yet the case. In the mid to long term²²⁴ however they should be looked at as potential building blocks for a GASON, as presented by Figure VIII.

Figure VIII : Global Aviation Safety Oversight Network²²⁵



The proposal for a GASON in the first place stems from the fact that, even if individual States are able to ensure implementation of the eight CEs of safety oversight at a satisfactory level, this is by no means a guarantee of the ‘highest practicable degree of uniformity in regulations, standards, procedures, and organization’, as called for by the Chicago Convention. Implementation can be uneven in terms of uniformity of the legal and procedural frameworks, as well as actual safety levels. States will always retain the right to file differences with SARPs, and thus to make their national systems less or more demanding than the minimum requirements set by ICAO. Also, with the move towards performance based regulation and safety management approaches, as referred to in Chapter 1, standardisation by ICAO of regulatory frameworks between States may become more and more difficult.

From the perspective of ICAO, with its 191 Member States and its current resources, even with the introduction of the USOAP-CMA, it is going to be difficult for it to continue providing support to implementation and oversight at a level required to maintain and hopefully further improve the current safety levels, taking into account the increases in the volume of aviation traffic and in complexity of aviation businesses. Also, as already pointed out in this chapter, although ICAO

²²⁴ As defined in the ICAO Global Aviation Safety Plan (*supra* note 5 in Ch.1, at p. 4), which means a time horizon between 2022 and 2027.

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has good tools for global safety oversight, it is unlikely that it will ever become a true global enforcer of SARPs.

The architecture of the proposed GASON should be based on ICAO relying on and working closely with a number of strong RASOs, which could ensure harmonised implementation of SARPs at regional levels and organise regional enforcement mechanisms, such as ramp inspection schemes.

In a GASON, the RASOs would be an intermediary between the ICAO and States, feeding USOAP-CMA with information about the level of implementation of SARPs and eight CEs in the regions, without prejudice to the right of ICAO to reach out directly to a State if it deemed it necessary.

Such a system would not only allow ICAO to be more efficient in the use of its resources, but would also contribute to more uniform implementation of SARPs as, instead of a multitude of national regimes, the system could ultimately provide for just a few dozen regional schemes which would be much easier for ICAO to standardise. The regions could also conclude multilateral aviation safety agreements enabling large scale recognition of audit results and certifications and thus greatly contributing to the facilitation of aviation business.

As part of the GASON, the regions, through regional safety plans and programmes to be coordinated by ICAO RASGs, could also move in a more concerted manner towards harmonising their actual safety performance, thus contributing to more uniform implementation of safety targets agreed at the global level, in particular in the GASP. From the perspective of an air passenger, the aviation sector should offer not only high but also as uniform as possible level of safety regardless of the points of departure and destination.

The concept of a GASON would of course require a high level of confidence by ICAO in the robustness of the regional systems which it would be monitoring and relying on. This in turn requires the RASOs to be strong and appropriately empowered. This is not yet the case because, as will be demonstrated in subsequent chapters, the vast majority of RASOs currently have only advisory or support functions, with only a few of them having competence to take legally binding decisions or to enforce aviation standards.

Based on the above considerations, this study proposes the following definition of the GASON:

A worldwide system for the standardisation and monitoring of ICAO Member States' level of effective implementation of eight Critical Elements of State safety oversight, relying on information generated by Regional Aviation Safety Organisations; which are empowered, through international agreements or supranational law, to ensure uniform compliance of their Member States with the Chicago Convention and Standards and Recommended Practices laid down in the Annexes to this Convention.

The first enablers of the GASON are already coming into place. The Assembly Resolution introducing the USOAP-CMA²²⁶ envisages the possibility of ICAO relying on information provided by RASOs. In Europe, the EU has already concluded a special arrangement with ICAO which will allow for an interaction between the ICAO USOAP-CMA and EASA standardisation inspections with a view to ultimately relieving EU States of ICAO audits, and for ICAO to rely on standardisation inspections to verify the level of implementation of the eight CEs

²²⁶ Assembly Resolution A37-5, *supra* note 71.

and ICAO SARPs in the EU Member States.²²⁷ Other regional organisations, such as the IAC, which will be presented in the next chapter, have entered into arrangements with ICAO to share safety oversight information.²²⁸ Although, still very preliminary, these developments could be seen as small building blocks for the future GASON.

As will be demonstrated in Chapter 5, there is also a clearly visible trend for RASOs to evolve over time into more formalised structures with legal personality and stronger oversight and enforcement competences, which should allow them over time to be able to demonstrate to ICAO that they are able to effectively ensure oversight and discharge other safety functions required by the Chicago Conventions and its Annexes on behalf of States, and thus hopefully to prove effective components of the GASON.

2.6 GENERAL CONCLUSIONS

The Chicago Convention is a very successful international treaty, if looked at from the perspective of its global acceptance, and predominantly focuses on the regulation of technical aspects of international civil aviation. Yet, in the past it had been subject to some criticism with regard to the effectiveness of global implementation of aviation safety standards, and the enforcement competences of ICAO.

In reality, the very fact that the Chicago Convention achieved such a broad degree of acceptance can be largely attributed to the fact that its drafters managed to strike a good balance between, on the one hand a desire to achieve ‘the highest practicable degree of uniformity in regulations, standards, procedures, and organization in relation to aircraft, personnel, airways and auxiliary services’, which is necessary for aviation as a global industry, and on the other hand, the principle that ‘each State has complete and exclusive sovereignty over the airspace above its territory.’

The greatest paradox of the system of the Chicago Convention is that over time it has become the victim of the original compromise which allowed the system to be born in the first place. With ICAO’s membership increasing steadily to 191 participating States, and based on the principle of individual State responsibility for safety oversight, it has become virtually unavoidable that the level of implementation of SARPs and eight CEs will be variable across the world.

With the differences - sometimes significant - in safety oversight between individual national jurisdictions revealed thanks to USOAP transparency, States, especially those with a good safety record, started to increasingly ring-fence their airspaces and territories with requirements for additional certifications, authorisations, audits and checks. Unilateral inspection schemes started to emerge duplicating the USOAP efforts. Today even the recognition of very basic certificates necessary for day-to-day cross border operations of airlines, such as AOCs, and certificates of airworthiness is being increasingly made conditional upon additional authorisations and surveillance programmes.

It is really hard not to criticise a system which requires, for example, a repair station to obtain up to twenty different certificates to perform exactly the

²²⁷ See Paragraph 7 of: ‘Annex on aviation safety to the Memorandum of Cooperation between the European Union and the International Civil Aviation Organization providing a framework for enhanced cooperation’, (OJ L 232, 9 September 2011).

²²⁸ A38-WP/50, *supra* note 138, at Appendix, Paragraph 5.1.

same work, only because the aircraft it works on are registered in twenty different States and which, at least in theory, should follow the same set of minimum international requirements. This '*death by audit*' and, one could also add, '*death by re-certification*', has today become a major source of inefficiency in the global system, in addition to problems that some States experience in setting up effective safety oversight arrangements.

States are of course aware of these inefficiencies and try to address them, in particular through the BASAs, in the hope that this will bring them back to achieving the objective of 'the highest practicable degree of uniformity in regulations, standards, procedures'. However, because they are only bilateral in nature, BASAs, whilst giving benefits to a specific pair of States, from a more general perspective actually contribute to the fragmentation of the global regulatory system.

At the same time, it cannot be denied that ICAO has drawn lessons from the past and is making good progress in helping States to improve their compliance with international requirements, within the scope of its mandate and taking into account the legal and political limitations that it has as an intergovernmental organisation. Differences in safety oversight performance between and within ICAO regions persist, but the review of ICAO audit results show that States are consistently managing to improve the level of effective implementation of USAOP protocols. The overall trend is therefore positive.

At the end of 2013, States with SSCs represented overall only 0.3% of the worldwide international air traffic and ICAO is very committed to further reducing this figure. ICAO is also working on improving the implementation of Article 38 on filing of difference, and has managed to secure a competence to publish, as of 2014, a publicly available list of States with the most serious safety deficiencies. This is not a bad result compared to other intergovernmental organisations, such as the IAEA which is still struggling to convince its Member States to agree to a mandatory system of inspections, even after accidents as terrible as the one at the nuclear plant in Fukushima, Japan in 2011.

There are of course elements which can be further improved, such as more standardisation and uniformity in application of Article 38 on the filing of differences, where ICAO should, in addition to offering an EFOD system, conduct a more general review as to the scope and purpose of notifying the differences.

What is however certainly clear today, is that ICAO, with its 191 Member States, will not be able to continue working as it did in the past with the resources available. The recent shift to the USOAP-CMA methodology is a telling example of that new reality.

ICAO therefore needs to find a way which would allow it, in addition to monitoring State safety performance and helping States in addressing the detected deficiencies and enforcing global standards, to also address more decisively the ongoing erosion of the aviation safety system in terms of redundant regulatory oversight and waste of resources deriving from duplicate certifications. Regional cooperation can be seen as one of the principal answers to these challenges.

Regional cooperation, although only scarcely addressed in the Chicago Convention, is not a new subject for ICAO, who in 2010 adopted a comprehensive 'Policy and Framework for Regional Cooperation'. An integral part of this policy is recognition of the value and support that regional aviation safety organisations or RASOs can provide. Today there is a strong conviction amongst the international aviation community that:

[E]stablishment of subregional and regional aviation safety and safety oversight bodies, including regional safety oversight organizations, has great potential to assist States in complying with their obligations under the Chicago Convention through economies of scale and harmonization on a larger scale.²²⁹

The main test case for the effectiveness of RASOs will be in Africa, where many States do not individually have the necessary resources ‘to run a workable safety oversight system’, and where the overall safety levels – despite improvement – remain the lowest in the world. ICAO should also finalise the transition of COSCAPs into RASO type bodies where it is possible, as the parallel existence of RASGs, COSCAPs and RASOs creates the risk of duplication of effort and waste of resources. This duplication will be further demonstrated in Chapter 3.

Experiences from the international maritime sector and the European SA-FA programme demonstrate that regional cooperation can be an effective way to ensure more uniform implementation and enforcement of international safety standards. It can be argued however that ICAO should not be looking at RASOs merely from the perspective of tools to be deployed to address deficiencies in safety oversight systems of States which are unable to deal with such problems on their own. Instead RASOs should be fully integrated into the way ICAO manages safety and used as building blocks for a future GASON.

The architecture of the GASON should be based on ICAO relying on and working closely with a number of strong RASOs, which could ensure harmonised implementation of SARPs at regional levels and organise regional enforcement mechanisms. Such a system would not only allow ICAO to be more efficient in the use of resources, but would also contribute to more uniform implementation of SARPs, as instead of a multitude of national regimes, the system could ultimately provide for a more limited number of regional schemes which would be much easier to standardise and control. The regional approach would also contribute to harmonisation of actual safety performance through regional safety performance planning at RASG level and consistent with globally agreed GASP targets.

The concept of the GASON would however require a high level of confidence by ICAO in the robustness of the regional systems which it would be monitoring and relying on. This in turn would necessitate strong and appropriately empowered RASOs which is not yet always the case, as the following chapters - presenting and analysing these organisations in detail - will show.

²²⁹ Assembly Resolution A38-5, *supra* note 32 in Ch.1.