## ICAO SECRETARIAT STUDY ON THE SAFETY AND SECURITY ASPECTS OF ECONOMIC LIBERALIZATION

(Presented to the Council on 1 June 2005)

#### 1. **INTRODUCTION**

- 1.1 This study emanates from the work of the fifth Worldwide Air Transport Conference (ATConf/5). While the issues addressed by the Conference mainly dealt with the economic aspect of air transport liberalization, safety and security aspects were a theme throughout its deliberations and results. The Conference noted that globalization, liberalization and privatization in the last two decades have brought about fundamental changes in the air transport industry, some of which also have implications for safety and security regulation.
- 1.2 In view of these, the Conference stressed: the paramount importance of safety and security in any regulatory change; the need for clear lines of responsibility; the leading role of ICAO in developing global strategies for safety and security under liberalization; and the means to address the limited resources available in many developing States to ensure safety and security. Recognizing that the increasingly multinational operating environment has raised issues with the essentially national-based safety and security regulatory system, the Conference called for an ICAO study to clarify "the definition of the State or States responsible for safety and security oversight, and possibly to recommend amendments to the existing ICAO regulatory provisions in this area".
- 1.3 As the United Nations' specialized agency responsible for setting international standards for civil aviation, ICAO has been called upon to play a leadership role in developing global strategies for the regulation and oversight of aviation safety and security, both definitively and in the context of facilitating economic regulatory reform. This study is part of the response by the Organization to ensure that the global safety and security regulatory system will continue to be capable of adapting to changes and addressing concerns.
- As one of the ATConf/5 follow-up actions endorsed by the Council, the Secretariat launched the study in March 2004. The task was carried out through a coordinated inter-Bureaux (Air Transport Bureau, Air Navigation Bureau and Legal Bureau) review of various liberalization arrangements and relevant ICAO Standards and Recommended Practices (SARPs) and guidance material with a view to: a) identifying areas which could have safety and/or security implications, and b) determining if any gaps exist in the existing ICAO provisions.
- 1.5 The review involved a four-step exercise, namely, taking stock of specific situations (actual or potential) which raised safety and/or security questions; analysing how such situations could affect safety and/or security regulation; finding out if such situations can be addressed by existing ICAO SARPs and guidance material; and determining what, if any, action is required by ICAO and/or States. During the course of the review, members of the Air Transport Regulation Panel (ATRP) and the Aviation Security Panel (AVSECP), as well as ICAO regional offices, were consulted through correspondence where their input was useful. This paper presents the findings of the study. A table of specific problems/situations and relevant ICAO provisions and guidance material is also appended pursuant to the decision of the Council.

#### 2. FINDINGS OF THE STUDY

# 2.1 The interrelationship between economic liberalization and safety and security regulation

- 2.1.1 The issue of the potential impact of liberalization on safety and security and their interrelationship is not new. The issue was a subject of discussion at the two most recent air transport conferences held in 1994 and 2003. The results of the conferences reflected a consensus that liberalization is a general goal that should be pursued by each State at its own choice and own pace. At the same time, the conferences made clear that safety and security must remain of paramount importance, irrespective of any change in regulatory arrangements. As liberalization spreads, there continues to be a need to address existing as well as potential concerns over its implications on safety and security. The challenge for States is how to capture the benefits of economic liberalization without compromising safety and security. Therefore, while liberalization per se is not at issue, it is essential to ensure the maintenance of safety and security as liberalization spreads.
- 2.1.2 It is generally recognized that liberalized policies (e.g. on market access, airline designation, capacity, pricing, and commercial opportunities) could bring about many economic benefits for States, the industry and consumers, such as growth in traffic (both in terms of passenger/cargo traffic and aircraft movements), multiple air carriers (including low-cost carriers) entering the market, increased service options and pricing competition, development of travel and tourism, and job creation. Moreover, in addition to the economic benefits derived, safety standards in many liberalized markets have been maintained. Nevertheless, it is also clear that the resulting growth in air transport activity and complex commercial arrangements from the evolution of business and operating practices could put additional pressure on the State in terms of its capacity in safety/security regulation. A State is required to provide safety/security oversight not only to its own aircraft operators but also those foreign operators that operate in its airspace. It would not be able to cope with the consequences of market growth and liberalization if it does not have the necessary legal, regulatory and organizational infrastructure and human and financial resources to perform the required safety/security regulatory functions.
- 2.1.3. In this regard, many ICAO member States are already facing problems with respect to safety oversight. For example, the findings of the initial safety oversight audit conducted by ICAO relating to Annex 1– *Personnel Licensing*, Annex 6 *Operation of Aircraft* and Annex 8 *Airworthiness of Aircraft*, indicated that of the 181 Contracting States that were audited between March 1999 and July 2004, considerable numbers of States had deficiencies in respect of a number of requirements under these Annexes. Furthermore, audit follow-up missions have revealed that in many cases, significant deficiencies identified during the initial audits remain (A35-WP/67). Therefore, where States are facing market growth resulting from liberalization and globalization, due regard should be given not only to economic benefits but also its potential impact on safety and security regulation, and to their continued capacity to meet those requirements, and thereby ensure the continued safe, secure and orderly development of civil aviation.

# 2.2 Some situations that could have implications for safety and/or security regulation

2.2.1 In order to determine if the existing ICAO provisions can meet the safety and security challenges in the constantly changing environment, it is necessary to first find out which arrangements or practices arising from a liberalizing, globalizing commercial and operating environment could have implications for safety and security. For this purpose, a review was undertaken of various situations in the following areas that had been considered as having certain implications on safety and security. They are:

ground handling, aircraft leasing, airline codesharing, franchising, air carrier ownership and control, market access, outsourcing and the commercialization of airports and air navigation services providers.

- 2.2.2 The review has found that concerns over safety and security arise mainly from those commercial arrangements or practices which impinge on the operation of aircraft or the operating personnel. The various situations reviewed can fall into two basic categories. The first are those that could have an impact on safety/security regulation (such as increasing the pressure on licensing and oversight) but do not pose a problem in terms of identifying the State's responsibility. Such situations concern mostly activity taking place within a single State, for example, operations involving non-traditional, new entrant operators or services providers; airlines facing financial exigencies; and transfer of government operations as a result of commercialization or privatization of airports or air navigation services providers.
- 2.2.3 The second are those situations involving multiple States which could raise questions regarding the delineation of accountability or responsibility for safety/security oversight under the existing regulatory system based on ICAO provisions. It is mainly this type of situation that led to the call for the present study. Following are some examples illustrating the issues such situations could raise.
- 2.2.3.1 Operations involving foreign registered aircraft. The past two decades have seen air operators increasingly employ foreign registered aircraft for various reasons. More and more, aircraft might be leased or otherwise interchanged and operated outside the State of Registry, sometimes for long periods of time. In some cases, a foreign registered aircraft might be leased or sub-leased or chartered from one country to another. While such arrangements are legitimate from an economic regulatory perspective, they can present problems from a safety viewpoint because of the bifurcation of the State of Registry and State of the Operator. For example, this could result in a situation where operators can be subject to the SARPs as implemented by different States. A major safety concern is the problem of "flags of convenience" associated with foreign registered aircraft. When an aircraft rarely, if ever, returns to the State of Registry, its airworthiness oversight becomes an issue in the absence of safety oversight arrangements between the State of Registry and the State of the Operator. There are broadly two groups of foreign registered aircraft that can be deemed to operate under a flag of convenience: those done for fiscal purposes and those done to take advantage of a system with no or minimal economic or technical oversight. The first group may not pose a serious problem if arrangements are made between concerned States to ensure proper oversight, for example through bilateral agreements under Article 83 bis, which permits States to transfer all or a part of certain safety oversight responsibilities under the Convention. Even for this group, the reality remains far from satisfactory in that relatively few bilateral agreements implementing Article 83 bis have been notified to ICAO (by March 2005, 114 agreements are in force involving only 34 States), and numerous aircraft of all types all over the world are still subject to split oversight responsibility. It is the second group that creates a major safety problem which needs to be addressed<sup>2</sup>.
- 2.2.3.2 **Operations involving foreign flight crew**. Split oversight problems could also occur in respect of foreign-licensed flight crew. Article 32 (a) of the Convention requires that "The pilot of every aircraft and the other members of the operating crew of every aircraft engaged in international navigation shall be provided with certificates of competency and licenses issued or rendered valid by the State in which the aircraft is registered". As a result, where an aircraft is operated by a State different than the

<sup>1</sup>Flags of convenience is a term derived from the maritime industry which denotes a situation in which commercial vessels owned by nationals of a State, but registered in another State, are allowed to operate freely between and among other States.

<sup>&</sup>lt;sup>2</sup>This problem is currently being addressed separately by the Air Navigation Commission and the Council in association with the Unified Strategy to resolve safety-related deficiencies within the scope of Article 54 j) of the Convention.

State of Registry, such as in the case of dry leases (i.e. the lease of an aircraft without crew), the problem of validation of foreign crew licenses by the State of Registry could arise. The issue becomes complicated when the rules and requirements for crew licenses in the State of Registry are at variance with the corresponding rules in the State that initially issued the licenses. Differences between the laws and regulations of the State of Registry and those of the State of the Operator may also exist in the case of wet leases (i.e. a lease of aircraft with crew). While the lessor usually remains the official operator in such cases, the lessee may already operate aircraft of a similar type under its Air Operator Certificate (AOC). It may happen then that the wet-leased aircraft are operated under the lessee's AOC and, consequently, the State of the lessee becomes the State of the Operator. In such circumstances, proper surveillance of the operating crew may become difficult. The situation could become more complicated if the operation involves a mixed crew (e.g. the cabin crew from the lessee carrier and the cockpit crew from a foreign lessor carrier).

- 2.2.3.3 "Off-shore" operations (i.e. flight operations away from the designating State, State of Registry or State of the Operator). In a situation where the designated airlines of a bilateral agreement are granted the so-called 7th freedom rights (i.e. to carry traffic from the second State to/from third State(s) without the need for the service to connect the home State), such airlines may set up an operational base in a second country for services to/from third countries. Where cabotage or right of establishment is permitted, air carriers may operate in the territory of the granting State. Such a situation could raise the question as to how the required safety oversight should be handled between the State of the Operator and the State in which the operation is based.
- Operations involving multiple parties and the use of other's brand, such as codesharing and franchising. Codesharing has been the most prevalent element in transnational airline alliance arrangements and can take a variety of forms. Although it is usually treated as a commercial arrangement, because of the complexity of some codesharing arrangements (e.g. a flight using the codes of several carriers from different countries), the safety/security authorities may find it difficult to determine their level of involvement vis-à-vis other authorities. In these circumstances, the questions of responsibility and accountability for safety/security can lead to uncertainty (see Circ 269, Implications of Airline Codesharing). Also, since such arrangements allow an operator to use the name or assume the public face of another carrier (e.g. in the case of franchising), the need to safeguard reputation in terms of service/safety quality have led to some regulatory action on safety/security. For example, some States require foreign airlines with which their national airlines have codesharing arrangements to meet a similar level of safety. This could also raise a question of whether all States whose airlines are involved in a codesharing operation should be involved in such safety oversight, and to what extent each should be involved. Another concern arising from codesharing relates to the security implications caused by the potential transfer of a security threat, which may exist against one airline and be spread to its partner or partners in a codesharing arrangement, and any subsequent additional security measures imposed by the appropriate authorities. Since technical and operational regulations may vary considerably from one partner airline/State to the other, this raises the question as to how the accountability and responsibility for safety/security should be handled amongst the partner airlines and States.
- 2.2.3.5 **Cross-border airline merger/acquisition**. Where this is allowed, it could lead to such companies having operations or places of business in different States, or operating mainly outside the State in which their registered offices and/or owners are located. This situation could raise questions regarding the attribution of regulatory oversight responsibility amongst the States concerned (e.g. in the case of the merged airline having two principal places of business), or on the application of whose standards, where they differ between the countries concerned.
- 2.2.3.6 **Outsourcing of activity affecting aircraft operation**. Examples include: airlines outsourcing their ground handling; sending their aircraft to be repaired and/maintained in foreign

countries; and contracting out certain flight operations and/or crew administration to another airline or company. In each of these cases, multinational industries have emerged to provide such services. Some States also encountered such a situation where an AOC applicant had only a corporate skeleton with most of the proposed operational activities to be performed/provided by foreign companies (including the aircraft and flight crews). This situation could present challenges for the licensing and safety oversight authorities from both the State issuing the AOC and the State of the outsourced activity on how to ensure that such practice or entity properly meet the safety and security requirements.

- 2.2.3.7 While some of the above situations already make it difficult individually for identifying or attributing the responsibility for safety/security compliance and oversight, it could become even more problematic when dealing with a complex situation that combines many or all of the above features. As reflected in the above, there is an increasing number of situations in which one is dealing with a cascade of States, each having a share of responsibility in an air transport operation. The challenge for States is how to ensure that, regardless of the form of regulatory or commercial arrangement, there should always be a clear point of contact for the safety and security oversight responsibility in a clearly identified State or its delegated authority for any given aircraft operation
- Along with the trend of liberalization and globalization as well as broader regional 2.2.4 economic integration, many States have taken a regional approach as an effective means in pursuing regulatory change in international air transport. Substantial steps have also been taken on a regional basis to strengthen safety regulation. For example, the programme of the European Civil Aviation Conference (ECAC) includes safety assessments not only of aircraft of its member States but also of other air carriers operating into Europe. The European Union has established a European Aviation Safety Agency (EASA), whose functions already include certification of aeronautical products and may extend to approval of air operations and personnel licensing. Similar approaches to safety coordination are also being pursued in other regions (e.g. Autorité Africaine et Malgache de l'Aviation Civile (AAMAC); the Regional System for Cooperation on Operational Safety Oversight (SRVSOP) of the Latin American Civil Aviation Commission (LACAC); the Regional Aviation Safety Oversight System for the Caribbean (RASOS); the Central American Agency for Aviation Safety (ACSA); and the Pacific Aviation Safety Organization (PASO)). While these regional arrangements have many advantages and can bring benefits, chiefly including economies of scale and the promotion of uniformity within the region, they vary a great deal in the extent to which they have been delegated the execution of national responsibilities. This situation could raise the issue of harmonization on a broader scale (e.g. the assessment of compliance by one body may differ from that of another). In addition, there is clearly a need for transparency of such regional arrangements so that all parties affected, especially third parties, know exactly what functions have been delegated to the regional body and what remains with the State.

### 2.3 Could existing ICAO provisions address the issues?

- 2.3.1 The Chicago Convention and its Annexes provide the legal and operational framework for Contracting States to build and maintain a civil aviation safety/security system based on mutual trust and recognition. From a strict legal viewpoint, the system is designed to ensure that international civil aviation operates in a safe and secure manner independently of the air transport policy and economic regulations that Contracting States may follow. Therefore, regardless of any change in economic arrangements, the responsibility for safety/security compliance and oversight remains vested in the Contracting States. States implement their safety and security oversight obligations imposed by the Convention and its Annexes through relevant national laws and regulations, as well as provisions in bilateral air services agreements.
- 2.3.2 Against the backdrop of globalization and liberalization, it is important for ICAO to make sure that the SARPs and guidance material it has developed for safety and security remain effective and

capable of handling the changes. For the purpose of the study, a review was carried out of the existing provisions contained in the Convention and relevant Annexes against the situations identified. It was found that, as far as establishing the respective responsibilities of involved States are concerned, existing SARPs and guidance material are deemed to be generally adequate. However, more work could be done to improve the existing SARPs and/or guidance material to address the new challenges brought about by the evolution of business practices in international air transport.

- 2.3.3 More specifically, for situations involving service providers with a permanent base (such as ground handling companies, airport operators and air navigation service providers), it is clear that the State in which such companies are based shall be responsible for safety and security oversight in accordance with the requirements set out in the applicable Annexes (e.g. regarding certification and surveillance of aerodrome operators and ground handling companies).
- 2.3.4 For those **situations involving the operation of aircraft**, the safety aspects are addressed by Annexes 6 and 8. There are three levels of responsibility referred to in Annex 6 regarding the operation of aircraft which are assigned respectively to the State of Registry, the State of the Operator, and the Operator of the aircraft. The logical trail of responsibility is easy to follow in a situation where all three are part of the same State. In this case the operator is responsible to the State of the Operator, which is also the State of Registry. There are, however, situations that are more complex, which are described below.
- 2.3.4.1 Identification of the operator (in the context of Annex 6) in the case of lease, codesharing or franchising. Under Annex 6 provisions, an air operator is responsible for conducting the commercial operations in accordance with the AOC issued by the State of the Operator. Therefore, codesharing or franchising flights are conducted under the responsibility of the operator that is actually operating the flight no matter what the aircraft livery or flight number might be. The oversight of such operation is normally conducted by the State of the Operator. However, if the operator uses aircraft registered in a State other than that of the operator, oversight may be required by the State of Registry if an agreement such as Article 83 bis or a bilateral agreement is not in place between the States concerned. It should be noted that any operator, codesharing partner or not, is expected to meet the applicable requirements of the ICAO SARPs when engaged in international operations. In leasing situations, the aircraft can only be operated under an AOC issued by the State of the Operator. In the case of a dry lease (i.e. a lease without crew), the lessee State will always be the State of the Operator, and will always be responsible for issuing the AOC. In the case of a wet lease (i.e. a lease with crew), the aircraft will generally be operated under the lessor's AOC and the State of the Operator responsible for the AOC is the lessor State. However, depending on the provisions and circumstances of the lease, the lessee State may become the State of the Operator, and therefore will be responsible for the AOC. In addition, the lessee State must ensure that the flight crew, licensed in the lessor State, are trained and demonstrate competency in accordance with applicable regulatory requirements and conditions of the AOC issued by the lessee State. Note that certain regulatory authorities will not enter into this type of agreement, as the training of flight crews to satisfy the requirements incumbent on the lessee can present difficulties. Guidance material concerning lease, charter and interchange agreements is contained in the Manual of Procedures for Operations Inspection, Certification and Continued Surveillance (Doc 8335), the Airworthiness Manual (Doc 9760) and in the Guidance on the Implementation of Article 83 bis of the Convention on International Civil Aviation (Circ 295).
- 2.3.4.2 The State of the Operator is different from the State of Registry. Annexes 6 and 8 establish the respective responsibilities for the safety of operations and airworthiness of the aircraft. In terms of Annex 6 requirements, the operator has the responsibility of maintaining adequate organization, control and supervision of flight operation. It has also the responsibility to establish and maintain appropriate maintenance arrangements to ensure that the aircraft, under its control, meets all the

applicable airworthiness requirements that are under the responsibility of the State of Registry. The State of the Operator has therefore the ultimate oversight responsibility for the safety of flight operations conducted by the operator, and the State of Registry has the responsibility for the airworthiness of each individual aircraft on its registry. While the respective responsibilities of the State of the Operator and the State of Registry are clearly spelled out in the Annexes, the actual situation may be complex and lead to some fragmentation of responsibilities. For example, several States of Registry may be involved if an operator=s fleet includes aircraft registered in different States. An additional potential level of complexity is that the State of Registry may validate a certificate issued by another State rather than issuing its own Certificate of Airworthiness. In most instances, the sharing of responsibility between the State of the Operator and the State(s) of Registry can be handled through well-established rules and procedures, even in complex cases. However, it does complicate the accountability for safety oversight and, in the absence of proper implementation of the rules, may be a potential area of weakness of the existing system.

2.3.4.3 The allocation of responsibility between the State of the Operator and the State of Registry derives to a large extent from the Convention that assigns the responsibility for aircraft airworthiness and flight crew licences to the State of Registry and only recognizes the role of the State of Operator in Article 83 bis. As a result, there are only limited ways in which the potential fragmentation of responsibility described in the previous paragraph can be avoided. In this context, the transfer of certain functions from the State of Registry to the State of the Operator by way of implementing Article 83 bis, in respect of lease, charter and interchange of aircraft, provides an effective solution but one that is nevertheless limited by the voluntary nature of such agreement. Another course of action that can be considered is an amendment to Annex 6 that would require that a certified true copy of the AOC under which the aircraft is operated be carried on board on international flights. This would help in identifying the States responsible for safety oversight on the occasion of any verification process such as ramp inspections. This provision could also be complemented by a Standard specifying that a given aircraft can only be operated under one AOC at any given time. Additional clarification in the form of guidance material on the relationship between the State of Registry, the State of the Operator, and the Operator could be developed. This guidance should address the responsibilities of each party involved in relation to the Convention and its Annexes, and in relation to each other.

Surveillance and inspection by States other than the State of Registry or the State of the Operator. Article 16 of the Convention gives the right to States 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 this Convention which include the licence of the flight crew and the certificate of airworthiness. There are, however, some practical limits to what can be achieved through the application of Article 16, which are mainly due to the fact that a valid certificate of airworthiness does not necessarily mean that the aircraft is airworthy and to the absence of a requirement in the Convention or in the Annexes on the carriage of a copy of the AOC. With regard to the latter, a suggestion to make the carriage mandatory is included in paragraph 2.3.4.3 above. With regard to the former, the reason is that a temporary loss of airworthiness, caused by a malfunction or other event, is normally dealt with by the operating regulations requiring an aircraft to be airworthy before it is operated (e.g. Annex 8, Part I, Paragraph 3.5 or Annex 6, Part I, Paragraph 8.1.1 a)) rather than by a suspension or revocation of a certificate of airworthiness. However, Annex 8, Part I, Paragraph 3.6.2, enables the authorities of a Contracting State to detain a damaged airplane registered in another Contracting State, provided that the State of Registry is advised immediately and given all of the necessary information to enable the State of Registry to determine the airworthiness of the aircraft. Amendment 100 to Annex 8, which will become applicable on 13 December 2007, clarifies the responsibilities of the respective States in this situation by introducing a requirement for the State of Registry to consider limitations proposed by the Contracting State that detained the aircraft, when authorizing a ferry flight to an aerodrome where the necessary maintenance can be carried out.

- 2.3.5 **With respect to personnel**, the provisions in Article 32 and Annex 1 and Annex 6, Part I, are generally adequate for addressing the various situations involving flight crew members. The responsibility for validation or conversion of the licences and for maintaining the licence validity lies with the State of Registry while the responsibility for maintaining the competence of the crew lies with the State of the Operator. Although the maintenance of validity of the licence under Annex 1 and the maintenance of competency under Annex 6 are technically independent, the proficiency check of Annex 6 is accepted in practice for maintaining a valid pilot licence and there is a note to that effect in Annex 1. One particular safety aspect of the economic liberalization is the increasing use of validation for flight crew licences. The safety oversight audits have indicated a certain number of problems with validations that relate to the traceability of the original licence (in particular to the limitation or restriction that may have been attached to it) and to extension of privilege of the original licence (type ratings in particular). These issues were reviewed by the Flight Crew Licensing and Training Panel as part of its global revision of flight crew licensing SARPs. The Panel has proposed some changes to Annex 1 and to the guidance material that will be presented to the Air Navigation Commission during the second quarter of 2005.
- 2.3.6 **On the security side**, Annex 17 *Aviation security* and related guidance material are deemed to be generally adequate in addressing most existing situations (e.g. concerns regarding ground handling personnel, transfer of security threats via codesharing, outsourcing of airport security screening). Each State is responsible for ensuring the security of air transport activities in its territory, including the establishment and enforcement of national civil aviation security programmes. The SARPs in Annex 17 cover many specific aspects of aviation security requirements, such as security measures for domestic operations, threat assessment, airport security programmes, operator security programmes, personnel background checks and selection, training and standard of performance, certification of screeners, quality control programmes as well as cooperation between States. Guidance material developed to assist States in implementing Annex 17 includes: the *Security Manual for the Safeguarding of Civil Aviation Against Acts of Unlawful Interference* (Doc 8973 Restricted) and the Aviation Security Training Packages (ASTPs) which are updated on a regular basis. In addition, the ICAO worldwide network of Aviation Security Training Centres (ASTCs) offers States and Industry stakeholders a large variety of training courses and workshops in the aviation security field.
- 2.3.7 **Regarding regional or supra-national bodies**, while Contracting States are not prevented from making arrangements for entrusting certain safety/security regulation to other entities, including national autonomous or private entities, or international or supra-national organizations, or the performance of such function, they should be fully aware that the responsibilities imposed by the Convention and its Annexes remain vested in the States concerned. When considering making such types of arrangements, they should take precautions to ensure the necessary accountability of the entities performing those functions. Transparency may also be required regarding what exactly has been delegated by States to such regional or supra-national entities.

### 3. CONCLUSIONS

- 3.1 From the above findings, the following conclusions may be drawn:
  - a) Economic liberalization as well as the evolution of business and operating practices have implications for safety and security regulation, which need to be addressed properly. In this constantly evolving environment, due regard should be paid to its impact on safety and security so that a more coherent policy may be developed. Potential problems for identifying the line of responsibility tend to arise in situations where the operation or arrangement involves multiple parties from different States, or

where the aircraft is based and operated in places other than the State of Registry and/or State of the Operator. Such situations deserve closer attention by States.

- b) Existing ICAO provisions and guidance material regarding States' responsibility for aviation safety and security are generally adequate in addressing various situations resulting from liberalization (such as those reviewed by the study). However, more work could be undertaken to improve the existing SARPs and/or guidance material to adapt to the evolution of business practices (such as those identified in paragraph 2.3). In particular, States should be strongly encouraged to use Article 83 bis which provides a useful means of avoiding complex situations involving aircraft transferred abroad. More attention should also be given to improving the enforcement and implementation of relevant SARPs and guidance material. In this connection, the problems identified by the study may need to be taken into account in addressing the identified safety and security oversight shortfalls on a worldwide basis.
- c) Safety and security must remain of paramount importance in the operation and development of international air transport and should at no time be compromised by economic considerations. ICAO should continue to monitor closely industry and regulatory developments and take appropriate action to ensure that the global regulatory system for aviation safety and security continue to work effectively in dealing with the evolution of the air transport industry and the increasingly complex, often multinational business practices.
- d) There is a need for all parties, governments and service providers, to realize the importance of having a clear understanding of their respective responsibilities for safety and security compliance and oversight. States must accept their primary responsibility for ensuring regulatory oversight of safety and security, irrespective of any change in economic regulatory arrangements. In this regard, the findings of the study could be useful to help enhance the awareness of States so that appropriate preventative or corrective measures may be developed and implemented. The findings (such as those situations deserving close attention) could be prepared in an appropriate manner and disseminated to States by means of correspondence and/or the ICAO website, and meetings such as workshops.

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#### ATTACHMENT A

### SPECIFIC SITUATIONS AND RELEVANT ICAO PROVISIONS AND GUIDANCE MATERIAL

### SITUATIONS WARRANTING STATES' ATTENTION

### COMMENTARY AND DOCUMENT REFERENCES

#### **Situations Involving One State**

Situations in this section could have an impact on safety/security regulation but do not pose a problem in terms of identifying the State's responsibility.

Increased level of air transport activity, such as increase in the number of aircraft, airlines and other service providers, and operating personnel (air and ground); and growth in air traffic (both in terms of aircraft movements and passengers/cargo). This could put pressure on a State's capacity for safety and/or security regulation. In some cases, it may go beyond the regulatory oversight capacity of the State.

**Challenge:** How will the safety/security regulatory authorities maintain an effective safety and security regulatory system?

New entrant operators or non-traditional service providers entering or wishing to enter the market to compete in the businesses (such as new entrant airlines established by non-aviation interests, third party ground handling companies). There exists some concern that such entities, especially those without previous experience in the field, might not have the necessary safety culture, or qualified or properly trained personnel

Challenge: How to ensure that such companies and their personnel meet the required safety/security requirements for certification or licensing; and how to maintain continuous regulatory surveillance and oversight over their performance after they have been licensed.

to conduct the business.

The Chicago Convention and its Annexes require each Contracting State to provide safety and security oversight for its air operators and also surveillance of foreign operators that operate in its airspace. A State must be adequately equipped (in terms of legal, regulatory and organizational infrastructure, qualified personnel and financial resources) to handle the increased level of activity.

Chicago Convention (Doc 7300)

Annex 1 – Personnel Licensing

Annex 6 – Operation of Aircraft

Annex 8 – Airworthiness of Aircraft

Annex 17 – Security

(See also Attachment B)

The State in which such companies are based, in the case of a service provider, or the State of Registry/State of the Operator, in the case of an airline, shall be responsible for safety and security oversight in accordance with the requirements set out in the applicable Annexes (e.g. regarding certification and surveillance of air operators, aerodrome operators and ground handling companies).

Chicago Convention (Doc 7300)

Annex 1 – Personnel Licensing

Annex 6 – Operation of Aircraft

Annex 8 – Airworthiness of Aircraft

Annex 17 – Aviation security

Airlines facing financial exigencies often resort to various cost-saving/cutting measures. Where such measures impinge on aircraft operations or related personnel (such as staff cuts and outsourcing of certain operational activity), they could have a potential negative effect on the safety and security standards of their operations.

**Challenge**: How to ensure that the safety/security standards of these carriers are not affected by any cost-saving/cutting measures.

**Transfer of government operations** to autonomous entities or to the private sector as a result of commercialization or privatization of airports and air navigation services providers. With the change in ownership and control, such entities often place more emphasis on commercial results and may take some cost-saving measures to achieve such goals (e.g. through staff cuts) which could have a negative impact on the safety and security standards of their operations.

**Challenge**: How to ensure quality control, the maintenance and oversight of safety and security standards of such entities.

### COMMENTARY AND DOCUMENT REFERENCES

Each State must maintain effective surveillance for the safe operation of air carriers operating in its territory, and ensure that aviation safety and security will not be compromised by economic or commercial considerations.

Chicago Convention (Doc 7300) Annex 1 – Personnel Licensing Annex 6 – Operation of Aircraft Annex 8 – Airworthiness of Aircraft

Annex 17 – Aviation security

Irrespective of the change in ownership or management of these entities, the State is ultimately responsible for the safety, security and the economic oversight of their operations. ICAO recommends that where an autonomous body or entity is established, the State should condition its approval of such body by requiring that it observe all relevant obligations of the State specified in the Chicago Convention and its Annexes, and that States should conduct audits to ensure compliance.

Annex 1 – Personnel Licensing Annex 6 – Operation of Aircraft

Doc 9082, ICAO's Policies on Charges for Airports and Air Navigation Services

Doc 9562, Airport Economics Manual

Doc 9161, Manual on Air Navigation Services Economics

Circ 284, Privatization in the Provision of Airports and Air Navigation Services

#### **Situations Involving Different States**

Some situations in this section could raise questions regarding the delineation of accountability or responsibility for safety/security oversight amongst States involved

"Off-shore" operations (i.e. flight operations away from the home State) as a result of liberalization of market access and air carrier ownership and control.

Example 1: An airline uses **7th freedom** rights granted under a bilateral agreement to set up an operational base in the granting State for services to/from third countries.

Example 2: An airline uses 9<sup>th</sup> freedom rights (stand-alone cabotage) granted under a bilateral agreement to operate air services within the territory of the granting State.

Example 3: An airline acquires an airline of another country, with the latter continuing to

States may address this situation by including appropriate safety/security provisions in the relevant bilateral air services agreements, or through other mutually agreed arrangements.

The State issuing the AOC of the airline (i.e. the State of the Operator) is responsible for ensuring safety oversight, including the operator's foreign operations. The State in which the operations are based has a responsibility to carry out surveillance and inspection of operations by foreign operators to preserve the safety of operations.

### COMMENTARY AND DOCUMENT REFERENCES

operate in the second country but under the AOC of the first airline.

Challenge: Where flight operations are based in a country other than the designating State or the AOC issuing State (State of the Operator), how will the required safety/security oversight be handled by the designating State or the State of the Operator, and the State in which the operations are based?

Chicago Convention (Doc 7300)

Article 16 (re surveillance of foreign aircraft)

Annex 1 – Personnel Licensing

Annex 6 – Operation of Aircraft

Annex 8 – Airworthiness of Aircraft

Annex 17 – Aviation security

(See also Attachment B)

Where allowed, a State may **designate an airline** of a third country to operate, as its designated airline, the air services on routes between its territory and the bilateral partner State. A potential lack of oversight could happen if proper regulatory arrangements are not made and implemented by parties concerned.

States involved should mutually agree (in a bilateral agreement or other arrangement) on the line of responsibility for safety/security oversight, and to ensure that the operations meet the required safety/security standards.

**Challenge:** Where the operator is not the airline of the designating State, how would the designating State or the State of the Operator fulfil its safety and security oversight responsibility over the operation?

Chicago Convention

Article 16 of the Convention

Annex 1 – *Personnel Licensing* 

Annex 6 – *Operation of Aircraft* 

Annex 8 – Airworthiness of Aircraft

Annex 17 – Aviation security

(See also Attachment B)

Where "right of establishment" is permitted, an airline may establish a subsidiary airline in another State to operate in the latter's territory and to/from third countries.

See comment regarding "off-shore" operations.

Chicago Convention

Article 16

Annex 1 – Personnel Licensing

Annex 6 – Operation of Aircraft

Annex 8 – Airworthiness of Aircraft

Annex 17 – Aviation security

(See also Attachment B)

place other than the State where the airline's main office is registered or its owners are located, how would safety oversight be exercised? What are the respective roles of the States concerned?

Challenge: Where flight operations are based in a

A cross-border airline merger may lead to such an airline having more than one place of business in different States (e.g. when the original operational bases of the two airlines are maintained).

An operator must hold a valid AOC issued by the State in which its principal place of business is located. The State issuing the AOC is responsible for the operator's compliance with the aircraft operation requirements of Annex 6.

Challenge: How to attribute the regulatory oversight responsibilities amongst the States concerned. Which State should be the principal place of business of this airline? Whose AOC should this merged airline use? Whose safety/security standards should apply if they are different?

An aircraft can be operated only under one AOC at a given time. There can only be one State of Registry and one State of the Operator. All operators must meet the minimum ICAO standards set forth in the Annexes. They are encouraged to apply and maintain as far as practicable the highest level of standards.

#### Aircraft leasing

**Operations** involving foreign registered Where an aircraft is based and operated in a State

aircraft: Air operators increasingly employ foreign registered aircraft for various reasons. Aircraft might be leased or otherwise interchanged and operated outside the State of Registry, sometimes for long periods of time. Aircraft can be leased or sub-leased or chartered from one country to another. An operator's fleet can be composed of leased aircraft registered in different countries.

Problems could arise where safety oversight of the leased aircraft is split between the State of Registry and the State of the Operator in the absence of effective and proper oversight arrangements, as illustrated in the examples below.

Example 1 [a lease involving a third State as operating base]: An aircraft registered in State A, dry-leased to State B and subleased to State C for operation to State D.

Example 2: A sublease to State C as Example 1, but with the aircraft's maintenance work done in a 4th State.

Example 3 [flags of convenience]: Aircraft registered in a State with no or minimum economic and technical oversight, but are used in other countries and rarely return to State of registry.

The above examples can pose a serious problem if the parties concerned do not properly exercise safety oversight under their respective responsibility, or no arrangements are made between them to ensure proper oversight. A major concern is over the "flags of convenience" situation.

Challenge: How would the States concerned deal with in the above situations to ensure effective and adequate oversight?

### COMMENTARY AND DOCUMENT REFERENCES

other than the State of its registry, the safety oversight responsibility of the aircraft is shared between the State of Registry (for its airworthiness) and the State of the Operator (for its operation). The Convention, Annexes 6 and 8 (and guidance material such as Doc 8335) establish the respective responsibilities for the safety of operations and airworthiness of the aircraft.

The State of Registry has the responsibility for the airworthiness of each individual aircraft on its registry and flight crew licences (Article 32). The State of the Operator has the ultimate oversight responsibility for the safety of flight operations conducted by the operator.

Under Annex 6 provisions, the operator has the responsibility of maintaining adequate organization, control and supervision of flight operation. It has also the responsibility to establish and maintain appropriate maintenance arrangements to ensure that the aircraft, under its control, meets all the applicable airworthiness requirements that are under the responsibility of the State of Registry.

More specifically, the maintenance programme of the operator shall be approved by the State of Registry (Annex 6 Part I Para. 8.3.1). The Maintenance Control Manual shall be acceptable by the State of Registry (Annex 6 Part I Para. 8.2.1) and shall include material required by the State of Registry and State of Operator (Annex 6 Part I Para. 8.2.4)

Flight Operations are generally under the oversight of the State of the Operator but the State of Registry has responsibility for the Code of performance (Annex 6, Part I, Para. 5.1.1), the Flight Manual – Performance data (Annex 6, Part I, Para. 11.1 – Annex 8, Para. 2.2.1.1). The minimum equipment list (MEL) is approved by the State of the Operator but shall comply with airworthiness requirements established by the State of Registry (Annex 6, Part I, Para. 6.1.2).

Article 83 bis of the Convention permits the transfer of certain functions from the State of Registry to the State of the Operator in respect of lease, charter and interchange of aircraft. It provides a useful means to assist States to address safety oversight for aircraft based and operated abroad.

### Foreign licensed flight crew

Air carriers increasingly employ flight crew members whose licences are issued by different States. Some pilots are hired through a manning agency (which keeps a roster of licenced pilots available for hire).

Where the air operator uses leased aircraft registered in a foreign country, such as **in the case of dry leases**, the problem of validation of foreign crew licences by the State of Registry could arise. The issue becomes complicated when the rules and requirements for crew licences in the State of Registry are at variance with the corresponding rules in the State that initially issued the licences.

Differences between the laws and regulations of the State of Registry and those of the State of the Operator may also exist **in the case of wet leases**. While the lessor usually remains the official operator in such cases, the lessee may already operate aircraft of a similar type under its AOC. It may happen then that the wet-leased aircraft are operated under the lessee's AOC and, consequently, the State of the lessee becomes the State of the Operator.

The situation could become more complicated if the operation involves a mixed crew, such as in the case of **damp leases** (e.g. the cabin crew from the lessee carrier and the cockpit crew from a foreign lessor carrier). In such circumstances, proper surveillance of the operating crew may become difficult.

**Challenge:** How to ensure the States involved in the above situations fulfil their respective responsibilities concerning flight crew licences.

### COMMENTARY AND DOCUMENT REFERENCES

The responsibility for validation or conversion of the licences and for maintaining the licence validity lies with the **State of Registry** (Article 32 (a) of the Convention). The responsibility for maintaining the competence of the crew lies with the **State of the Operator**. An operator shall establish and maintain a ground and flight training programme, approved by the State of the Operator, which ensures that all flight crew members are adequately trained to perform their assigned duties (Annex 6, Part I, Para 9.3.1).

Article 32 of the Convention Annex 1 Annex 6

(See also Attachment B)

### Airline codesharing/franchising

Codesharing arrangements can take various forms and involve multiple partnerships (e.g. third and fourth freedom carriers of bilateral partner States, and fifth freedom carriers of third party States). Some codesharing is practiced by airlines to/from points where they do not hold traffic rights. A franchising arrangement allows a franchisee airline to use the name or assume the public face of a franchisor airline of another country. While such alliances can serve to "multinationalize" the economic identity of an operation, they can also add complexity to the exercise of safety/security oversight by States.

States should be clear about their oversight responsibilities for aircraft operations, including those under various commercial cooperative arrangements such as codesharing or franchising.

Any operator, whether it is a codesharing partner or not, should meet the applicable requirements of the ICAO SARPs when engaged in international operations.

Under Annex 6 provisions, an air operator is responsible for conducting the commercial operations in accordance with the AOC issued by the State of the

Codesharing involving multiple partners from different States, in which each party may have a certain share of responsibility:

- a) in terms of airline parties:
  - the airline actually operating the flight; and
  - the airlines whose flight designator codes are used for the codeshared flight.
- b) in terms of **State parties**:
  - the State whose airline is the actual operator (State of the Operator);
  - the States whose airlines are the partners to the codesharing arrangement (including bilateral partner State and third party States);
  - the State in which the aircraft is registered (State of Registry) when the flight uses a leased aircraft from a foreign State; and possibly,
  - a Seventh Freedom State, from which the flight originates and in which the operator is based.

#### **Challenge:**

- a) How to identify the respective responsibilities of the airlines and States involved;
- b) How to determine the degree of involvement or supervision of regulatory authorities on the operations of foreign airlines that codeshare with one of their own licensed carriers; and
- c) How to handle the situation where different regulatory requirements exist on codesharing.

### COMMENTARY AND DOCUMENT REFERENCES

Operator. Therefore, codesharing or franchising flights are conducted under the responsibility of the operator that is actually operating the flight no matter what the aircraft livery or flight number might be (Annex 6, Part I, Chapter 2 and Para. 4.2.1).

The oversight of such operation is normally conducted by the State of the Operator. However, if the operator uses aircraft registered in a State other than that of the operator, oversight may be required by the State of Registry if an agreement such as one pursuant to Article 83 bis or a bilateral agreement is not in place between the States concerned.

Chicago Convention
Article 16
Article 83 bis
Annex 1 – Personnel Licensing
Annex 6 – Operation of Aircraft
Annex 8 – Airworthiness of Aircraft
Annex 17 – Aviation security
(See also Attachment B)

### Outsourcing of activity affecting aircraft operation

Examples include: airlines outsourcing their ground handling; sending their aircraft to be repaired and/or maintained in foreign countries; and contracting out certain flight operations and/or crew administration to another airline or company. In some cases, an operator could have only a corporate skeleton with most of its actual operational activities performed/provided by foreign companies (including the aircraft and flight crews).

**Challenge:** How will the licensing and safety oversight authorities from both the State issuing the AOC and the State of the outsourced activity ensure that such practice or entity properly meets the safety and security requirements.

The State of Registry and State of the Operator are responsible for ensuring compliance with SARPs. The State of the Operator must ensure the operator it has licensed complies with the provisions of Annex 6.

States other than the State of Registry or the State of the Operator should exercise proper surveillance and inspection of operations by a foreign operator. Article 16 of the Convention gives the right to States 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 this Convention, which include the licence of the flight crew and the certificate of airworthiness. ICAO recently adopted a proposal for an amendment to Annex 6 requiring that each aircraft carries onboard a certified true copy of the AOC under which it is being operated.

### COMMENTARY AND DOCUMENT REFERENCES

#### **Aviation security**

Outsourcing of ground handling to third party providers (domestic or foreign), and flight crew administration to a foreign operator or entity has raised some concerns (e.g. on security clearance of ground handling personnel, flight crew).

Outsourcing of certain aviation security activity, such as screening at the airport, to private entities has also raised some concerns on whether private operators can meet the national and international requirements, or have qualified personnel, with background checks and security clearance and proper training.

Another concern is over the potential transfer of a security threat via codesharing, which may exist against one airline and be spread to its partner or partners in a codesharing arrangement. Different aviation security arrangements may exist between States whose airlines are partners in a codesharing arrangement. (e.g. one State may require that its specific requirements be applied on all flights originating from another State or community of States, and operated by the foreign partners of its own carriers). The complexity of codesharing arrangements involving multiple parties can make it difficult for the relevant authorities to determine their level of involvement vis-à-vis other authorities.

Each State is responsible for ensuring the security of air transport activities in its territory, including the establishment and enforcement of national civil aviation security programmes, in compliance with the SARPs in Annex 17 – Security.

Annex 17 covers many specific aspects of aviation security requirements, such as security measures for domestic operations (Standard 2.1.3), threat assessment (Standard 3.1.4), airport security programmes (Standard 3.2.1), operator security programmes (Standard 3.3.1), personnel background checks and selection (Standard 3.4.1), training and performance (Standard standard of 3.4.2),certification of screeners (Standard 3.4.3), quality control programmes (Standard 3.4.4) as well as cooperation between States (Standard 2.3.2).

Guidance material developed to assist States in implementing Annex 17 includes: Doc 8973 — Restricted, Security Manual for the Safeguarding of Civil Aviation Against Acts of Unlawful Interference; and the Aviation Security Training Packages (ASTPs) which are updated on a regular basis. In addition, the ICAO worldwide network of Aviation Security Training Centres (ASTCs) offers States and Industry stakeholders a large variety of training courses and workshops in the aviation security field.

#### SITUATIONS INVOLVING REGIONAL BODIES

In some regions, States have taken steps on a regional basis to strengthen safety regulation (including delegating to a supra-national body certain regulatory functions such as certification of aeronautical products, approval of air operations and personnel licensing). While these regional arrangements have many advantages and can bring benefits, chiefly including economies of scale and the promotion of uniformity within the region, they vary a great deal in the extent to which they have been delegated the execution of national responsibilities.

Challenge: How to achieve harmonization on a broader scale (e.g. to handle the situation where the assessment of compliance by one regional body may differ from that of another); How to ensure **transparency** of such regional arrangements so that all parties affected, especially

While Contracting States are not prevented from making arrangements for entrusting certain safety/security regulation or the performance of such functions to other entities, including supra-national organizations, they should be fully aware that the responsibilities imposed by the Convention and its Annexes remain vested in the States concerned. States should take precautions to ensure the necessary accountability of the entities performing those functions, and to provide the needed transparency of the arrangements.

SITUATIONS WARRANTING STATES' ATTENTION	COMMENTARY AND DOCUMENT REFERENCES
third parties, know exactly what functions have been delegated to the regional body and what remains with the State.	

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### ATTACHMENT B

# SUMMARY OF RESPONSIBILITIES OF THE STATE OF REGISTRY AND THE STATE OF THE OPERATOR

Document Reference	State of Registry Responsibilities	State of Operator Responsibilities
Convention on In	nternational Civil Aviation	
Article 3 bis	a. The Contracting States recognize that every State must refrain from resorting to the use of weapons against civil aircraft in flight and that, in case of interception, the lives of persons on board and the safety of aircraft must not be endangered. This provision shall not be interpreted as modifying in any way the rights and obligations of States set forth in the Charter of the United Nations.	
	b. The Contracting States recognize that every State, in the exercise of its sovereignty, is entitled to require the landing at some designated airport of a civil aircraft flying above its territory without authority or if there are reasonable grounds to conclude that it is being used for any purpose inconsistent with the aims of this Convention; it may also give such aircraft any other instructions to put an end to such violations. For this purpose, the Contracting States may resort to any appropriate means consistent with relevant rules of international law, including the relevant provisions of this Convention, specifically paragraph a) of this Article. Each Contracting State agrees to publish its regulations in force regarding the interception of civil aircraft.	
	c. Every civil aircraft shall comply with an order given in conformity with paragraph b) of this Article. To this end each Contracting State shall establish all necessary provisions in its national laws or regulations to make such compliance mandatory for any civil aircraft registered in that State or operated by an operator who has his principal place of business or permanent residence in that State. Each Contracting State shall make any violation of such applicable laws or regulations punishable by severe penalties and shall submit the case to its competent authorities in accordance with its laws or regulations.  d. Each Contracting State shall take	

Document Reference	State of Registry Responsibilities	State of Operator Responsibilities
	appropriate measures to prohibit the deliberate use of any civil aircraft registered in that State or operated by an operator who has his principal place of business or permanent residence in that State for any purpose inconsistent with the aims of this Convention. This provision shall not affect paragraph a) or derogate from paragraphs b) and c) of this Article.	
Article 12	Each Contracting State undertakes to adopt measures to insure that every aircraft flying over or manoeuvring within its territory and that every aircraft carrying its nationality mark, wherever such aircraft may be, shall comply with the rules and regulations relating to the flight and manoeuvre of aircraft there in force. Each Contracting State undertakes to keep its own regulations in these respects uniform, to the greatest possible extent, with those established from time to time under this Convention. Over the high seas, the rules in force shall be those established under this Convention. Each Contracting State undertakes to insure the prosecution of all persons violating the regulations applicable.	
Article 17	Nationality of aircraft  Aircraft have the nationality of the State in which they are registered.	
Article 18	Dual registration  An aircraft cannot be validly registered in more than one State, but its registration may be changed from one State to another.	
Article 19	National laws governing registration  The registration or transfer of registration of aircraft in any Contracting State shall be made in accordance with its laws and regulations.	
Article 20	Display of marks  Every aircraft engaged in international air navigation shall bear its appropriate nationality and registration marks.	

Document Reference	State of Registry Responsibilities	State of Operator Responsibilities
Article 21	Report of registrations  Each Contracting State undertakes to supply to any other Contracting State or to the International Civil Aviation Organization, on demand, information concerning the registration and ownership of any particular aircraft registered	
	in that State. In addition, each Contracting State shall furnish reports to the International Civil Aviation Organization, under such regulations as the latter may prescribe, giving such pertinent data as can be made available concerning the ownership and control of aircraft registered in that State and habitually engaged in international air navigation. The data thus obtained by the International Civil Aviation Organization shall be made available by it on request to the other Contracting States.	
Article 29	Documents carried in aircraft  Every aircraft of a Contracting State, engaged in international navigation, shall carry the following documents in conformity with the conditions prescribed in this Convention:	
	<ul><li>a) Its certificate of registration;</li><li>b) Its certificate of airworthiness;</li></ul>	
	c) The appropriate licenses for each member of the crew; d) Its journey log book;	
	e) If it is equipped with radio apparatus, the aircraft radio station license;	
	f) If it carries passengers, a list of their names and places of embarkation and destination;  If it carries cargo, a manifest and detailed declarations of the cargo.	

Document Reference	State of Registry Responsibilities	State of Operator Responsibilities
Article 30	Aircraft radio equipment  a) Aircraft of each Contracting State may,	
	in or over the territory of other Contracting States, carry radio transmitting apparatus only if a license to install and operate such apparatus has been issued by the appropriate authorities of the State in which the aircraft is registered. The use of radio transmitting apparatus in the territory of the Contracting State whose territory is flown over shall be in accordance with the regulations prescribed by that State.	
	b) Radio transmitting apparatus may be used only by members of the flight crew who are provided with a special license for the purpose, issued by the appropriate authorities of the State in which the aircraft is registered.	
Article 31	Certificates of airworthiness	
	Every aircraft engaged in international navigation shall be provided with a certificate of airworthiness issued or rendered valid by the State in which it is registered.	
Article 32	Licenses of personnel	
	a) The pilot of every aircraft and the other members of the operating crew of every aircraft engaged in international navigation shall be provided with certificates of competency and licenses issued or rendered valid by the State in which the aircraft is registered.	
	b) Each Contracting State reserves the right to refuse to recognize, for the purpose of flight above its own territory, certificates of competency and licenses granted to any of its nationals by another Contracting State.	
Article 33	Recognition of certificates and licenses	
	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 licences were issued or rendered valid are equal to or above the minimum standards which may be	

Document Reference	State of Registry Responsibilities	State of Operator Responsibilities
	established from time to time pursuant to this Convention.	
Article 34	Journey log books	
	There shall be maintained in respect of every aircraft engaged in international navigation a journey log book in which shall be entered particulars of the aircraft, its crew and of each journey, in such form as may be prescribed from time to time pursuant to this Convention.	
Article 37	Adoption of international standards and procedures	
	Each Contracting State undertakes to collaborate in securing 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.	
Article 38	Departures from international standards and procedures	
	Any State which finds it impracticable to comply in all respects with any such international standard or procedure, or to bring its own regulations or practices into full accord with any international standard or procedure after amendment of the latter, or which deems it necessary to adopt regulations or practices differing in any particular respect from those established by an international standard, shall give immediate notification to the International Civil Aviation Organization of the differences between its own practice and that established by the international standard. In the case of amendments to international standards, any State which does not make the appropriate amendments to its own regulations or practices shall give notice to the Council within sixty days of the adoption of the amendment to the international standard, or indicate the action which it proposes to take. In any such case, the Council shall make immediate notification to all other States of the difference which exists between one or more features of an international standard and the corresponding national practice of that State.	

Document Reference	State of Registry Responsibilities	State of Operator Responsibilities
Article 39	a) Any aircraft or part thereof with respect to which there exists an international standard of airworthiness or performance, and which failed in any respect to satisfy that standard at the time of its certification, shall have endorsed on or attached to its airworthiness certificate, a complete enumeration of the details in respect of which it so failed.  b) Any person holding a license who does not satisfy in full the conditions laid down in the international standard relating to the class of license or certificate which he holds, shall have endorsed on or attached to his license, a complete enumeration of the particulars in which he does not satisfy such conditions.	
Article 40	Validity of endorsed certificates and licenses  No aircraft or personnel having certificates or licenses so endorsed shall participate in international navigation, except with the permission of the State or States whose territory is entered. The registration or use of any such aircraft, or of any certificated aircraft part, in any State other than that in which it was originally certificated shall be at the discretion of the State into which the aircraft or part is imported.	
Article 43  Article 83 bis	a) Notwithstanding the provisions of Articles 12, 30, 31 and 32 a), when an aircraft registered in a Contracting State is operated pursuant to an agreement for the lease, charter or interchange of the aircraft or any similar arrangement by an operator who has his principal place of business or, if he has no such place of business, his permanent residence in another Contracting State, the State of registry may, by agreement with such other State, transfer to it all or part of its functions and duties as State of registry in respect of that aircraft under Articles 12, 30, 31 and 32 a). The State of registry shall be relieved of responsibility in respect of the functions and duties transferred.	

Document Reference	State of Registry Responsibilities	State of Operator Responsibilities
	b) The transfer shall not have effect in respect of other Contracting States before either the agreement between States in which it is embodied has been registered with the Council and made public pursuant to Article 83 or the existence and scope of the agreement have been directly communicated to the authorities of the other Contracting State or States concerned by a State party to the agreement.  c) The provisions of paragraphs a) and b) above shall also be applicable to cases covered by Article 77.	
Annex 6*, Part I		
Chapter 4, Paragraph 4.2		4.2 Operational certification and supervision
		4.2.1 The air operator certificate
		4.2.1.1 An operator shall not engage in commercial air transport operations unless in possession of a valid air operator certificate or equivalent document issued by the State of the Operator.
		4.2.1.2 The air operator certificate or equivalent document shall authorize the operator to conduct commercial air transport operations in accordance with such conditions and limitations as may be specified.
		4.2.1.3 The issue of an air operator certificate or equivalent document by the State of the Operator shall be dependent upon the operator demonstrating an adequate organization, method of control and supervision of flight operations, training programme as well as ground handling and maintenance arrangements consistent with the nature and extent of the operations specified.
		Note.— Attachment F contains guidance on the issue of an air operator certificate.
		4.2.1.4 The continued validity of an air operator certificate or equivalent document shall depend upon the operator maintaining the requirements of 4.2.1.3 under the supervision of the State of the

<sup>\*</sup> Secretariat note: States have a responsibility to ensure that air operators comply with the provisions of Annex 6.

Document Reference	State of Registry Responsibilities	State of Operator Responsibilities
		Operator.
		4.2.1.5 The air operator certificate or equivalent document shall contain at least the following:
		a) operator's identification (name, location);
		b) date of issue and period of validity;
		c) description of the types of operations authorized;
		d) the type(s) of aircraft authorized for use; and
		e) authorized areas of operation or routes.
		4.2.1.6 The State of the Operator shall establish a system for both the certification and the continued surveillance of the operator to ensure that the required standards of operations established in 4.2 are maintained.
Paragraph 4.2.2		4.2.2.2 The State of the Operator shall establish a requirement for the operator to provide a copy of the operations manual together with all amendments and/or revisions, for review and acceptance and, where required, approval. The operator shall incorporate in the operations manual such mandatory material as the State of the Operator may require.
		Note 1.— Requirements for the organization and content of an operations manual are provided in Appendix 2.
		Note 2.— Specific items in the operations manual require the approval of the State of the Operator in accordance with the Standards in 4.2.7, 6.1.2, 9.3.1, 12.4 and 13.4.1.
Paragraph 4.2.7.1		4.2.7.1 The State of the Operator shall require that the operator establish aerodrome operating minima for each aerodrome to be used in operations, and shall approve the method of determination of such minima. Such minima shall not be lower than any that may be established for such aerodromes by the State in which the aerodrome is located, except when specifically approved by that State.

Document Reference	State of Registry Responsibilities	State of Operator Responsibilities
Paragraph 4.2.7.2		4.2.7.2 The State of the Operator shall require that in establishing the aerodrome operating minima which will apply to any particular operation, full account shall be taken of:
		a) the type, performance and handling characteristics of the aeroplane;
		b) the composition of the flight crew, their competence and experience;
		c) the dimensions and characteristics of the runways which may be selected for use;
		d) the adequacy and performance of the available visual and non-visual ground aids;
		e) the equipment available on the aeroplane for the purpose of navigation and/or control of the flight path during the approach to landing and the missed approach;
		f) the obstacles in the approach and missed approach areas and the obstacle clearance altitude/height for the instrument approach procedures;
		g) the means used to determine and report meteorological conditions; and
		h) the obstacles in the climb-out areas and necessary clearance margins.
		Note.— Guidance on the establishment of aerodrome operating minima is contained in the Manual of All-Weather Operations (Doc 9365).
Paragraph 4.2.7.3		4.2.7.3 Category II and Category III instrument approach and landing operations shall not be authorized unless RVR information is provided.
Paragraph 4.2.9.1		4.2.9.1 An operator shall maintain fuel and oil records to enable the State of the Operator to ascertain that, for each flight, the requirements of 4.3.6 have been complied with.
Paragraph 4.2.10.2		4.2.10.2 Flight time, flight duty periods and rest periods. An operator shall formulate rules to limit flight time and flight duty periods and for the provision of adequate rest periods for all its crew members. These rules shall be in accordance with

Document Reference	State of Registry Responsibilities	State of Operator Responsibilities
		the regulations established by the State of the Operator, or approved by that State, and included in the operations manual.
Paragraph 4.3.6.3		4.3.6.3 Aeroplanes equipped with turbo-jet engines. The fuel and oil carried in order to comply with 4.3.6.1 shall, in the case of turbo-jet aeroplanes, be at least the amount sufficient to allow the aeroplane:
		4.3.6.3.1 When a destination alternate aerodrome is required, either:
		a) to fly to and execute an approach, and a missed approach, at the aerodrome to which the flight is planned, and thereafter:
		to fly to the alternate aerodrome specified in the operational and ATS flight plans; and then
		2. to fly for 30 minutes at holding speed at 450 m (1 500 ft) above the alternate aerodrome under standard temperature conditions, and approach and land; and
		3. to have an additional amount of fuel sufficient to provide for the increased consumption on the occurrence of any of the potential contingencies specified by the operator to the satisfaction of the State of the Operator; or
		b) to fly to the alternate aerodrome via any predetermined point and thereafter for 30 minutes at 450 m (1 500 ft) above the alternate aerodrome, due provision having been made for an additional amount of fuel sufficient to provide for the increased consumption on the occurrence of any of the potential contingencies specified by the operator to the satisfaction of the State of the Operator; provided that fuel shall not be less than the amount of fuel required to fly to the aerodrome to which the flight is planned and thereafter for two hours at normal cruise consumption.
Paragraph 4.7		4.7 Additional requirements for extended range operations by aeroplanes with two turbine power-units (ETOPS)

Document Reference	State of Registry Responsibilities	State of Operator Responsibilities
		4.7.1 Unless the operation has been specifically approved by the State of the Operator, an aeroplane with two turbine power-units shall not, except as provided in 4.7.4, be operated on a route where the flight time at single engine cruise speed to an adequate en-route alternate aerodrome exceeds a threshold time established for such operations by that State.
		Note 1.— Guidance on the value of the threshold time is contained in Attachment E.
		Note 2.— In the context of the approval of operations at which the requirements of 5.2.11 can be met, guidance material on adequate and suitable alternate aerodromes is contained in Attachment E.
		4.7.2 In approving the operation, the State of the Operator shall ensure that:
		a) the airworthiness certification of the aeroplane type;
		b) the reliability of the propulsion system; and
		c) the operator's maintenance procedures, operating practices, flight dispatch procedures and crew training programmes;
		provide the overall level of safety intended by the provisions of Annexes 6 and 8. In making this assessment, account shall be taken of the route to be flown, the anticipated operating conditions and the location of adequate en-route alternate aerodromes.
		Note 1.— Guidance on compliance with the requirements of this provision is contained in Attachment E.
		Note 2.— The Airworthiness Manual (Doc 9760) contains guidance on the level of performance and reliability of aeroplane systems intended by 4.7.2, as well as guidance on continuing airworthiness aspects of the requirements of 4.7.2.
		4.7.3 A flight to be conducted in accordance with 4.7.1 shall not be commenced unless, during

Document Reference	State of Registry Responsibilities	State of Operator Responsibilities
		the possible period of arrival, the required enroute alternate aerodrome(s) will be available and the available information indicates that conditions at those aerodromes will be at or above the aerodrome operating minima approved for the operation.
		4.7.4 <b>Recommendation.</b> — The State of the Operator of an aeroplane type with two turbine power-units which, prior to 25 March 1986 was authorized and operating on a route where the flight time at single-engine cruise speed to an adequate en-route alternate aerodrome exceeded the threshold time established for such operations in accordance with 4.7.1 should give consideration to permitting such an operation to continue on that route after that date.
Chapter 5		
Paragraph 5.1.1	5.1.1 Aeroplanes shall be operated in accordance with a comprehensive and detailed code of performance established by the State of Registry in compliance with the applicable Standards of this chapter.	
Paragraph 5.2.4	5.2.4 The State of Registry shall take such precautions as are reasonably possible to ensure that the general level of safety contemplated by these provisions is maintained under all expected operating conditions, including those not covered specifically by the provisions of this chapter.	
Chapter 6		
Paragraph 6.1.1	6.1.1 In addition to the minimum equipment necessary for the issuance of a certificate of airworthiness, the instruments, equipment and flight documents prescribed in the following paragraphs shall be installed or carried, as appropriate, in aeroplanes according to the aeroplane used and to the circumstances under which the flight is to be conducted. The prescribed instruments and equipment, including their installation, shall be approved or accepted by the State of Registry.	
Paragraph 6.1.2		6.1.2 The operator shall include in the operations manual a minimum equipment list (MEL), approved by the State of the Operator

Document Reference	State of Registry Responsibilities	State of Operator Responsibilities
		which will enable the pilot-in-command to determine whether a flight may be commenced or continued from any intermediate stop should any instrument, equipment or systems become inoperative. Where the State of the Operator is not the State of Registry, the State of the Operator shall ensure that the MEL does not affect the aeroplane's compliance with the airworthiness requirements applicable in the State of Registry.
Paragraph 6.13	An aeroplane shall carry a document attesting noise certification. When the document, or a suitable statement attesting noise certification as contained in another document approved by the State of Registry, is issued in a language other than English, it shall include an English translation.	
Paragraph 6.16.3	6.16.3 Cabin crew seats provided in accordance with 6.16.1 and 6.16.2 shall be located near floor level and other emergency exits as required by the State of Registry for emergency evacuation.	
Chapter 7		
Paragraph 7.2.2		7.2.2 For flights in defined portions of airspace or on routes where an RNP type has been prescribed, an aeroplane shall, in addition to the requirements specified in 7.2.1:
		a) be provided with navigation equipment which will enable it to operate in accordance with the prescribed RNP type(s); and
		b) be authorized by the State of the Operator for operations in such airspace.
Paragraph 7.2.3		7.2.3 For flights in defined portions of airspace where, based on Regional Air Navigation Agreement, minimum navigation performance specifications (MNPS) are prescribed, an aeroplane shall be provided with navigation equipment which:
		a) continuously provides indications to the flight crew of adherence to or departure from track to the required degree of accuracy at any point along that track; and
		b) has been authorized by the State of the

Document Reference	State of Registry Responsibilities	State of Operator Responsibilities
		Operator for MNPS operations concerned
Paragraph 7.2.4		7.2.4 For flights in defined portions of airspace where, based on Regional Air Navigation Agreement, a vertical separation minimum (VSM) of 300 m (1 000 ft) is applied above FL 290, an aeroplane:  a) shall be provided with equipment which is capable of:
		indicating to the flight crew the flight level being flown;
		automatically maintaining a selected flight level;
		3. providing an alert to the flight crew when a deviation occurs from the selected flight level. The threshold for the alert shall not exceed ± 90 m (300 ft); and
		4. automatically reporting pressure-altitude; and
		b) shall be authorized by the State of the Operator for operation in the airspace concerned.
Chapter 8		
Paragraph 8.1.1	8.1.1 Operators shall ensure that, in accordance with procedures acceptable to the State of Registry:	
	a) each aeroplane they operate is maintained in an airworthy condition;	
	b) the operational and emergency equipment necessary for an intended flight is serviceable;	
	c) the Certificate of Airworthiness of each aeroplane they operate remains valid.	
Paragraph 8.1.2	8.1.2 An operator shall not operate an aeroplane unless it is maintained and released to service by an organization approved in accordance with 8.7, or under an equivalent system, either of which shall be acceptable to the State of Registry.	

Document Reference	State of Registry Responsibilities	State of Operator Responsibilities
Paragraph 8.1.3	8.1.3 When the State of Registry accepts an equivalent system, the person signing the maintenance release shall be licensed in accordance with Annex 1.	
Paragraph 8.2.1	8.2.1 The operator shall provide, for the use and guidance of maintenance and operational personnel concerned, a maintenance control manual, acceptable to the State of Registry, in accordance with the requirements of 11.2.	
Paragraph 8.2.4	8.2.4 The operator shall provide the State of the Operator and the State of Registry with a copy of the operator's maintenance control manual, together with all amendments and/or revisions to it and shall incorporate in it such mandatory material as the State of the Operator or the State of Registry may require.	8.2.4 The operator shall provide the State of the Operator and the State of Registry with a copy of the operator's maintenance control manual, together with all amendments and/or revisions to it and shall incorporate in it such mandatory material as the State of the Operator or the State of Registry may require.
Paragraph 8.3.1	8.3.1 The operator shall provide, for the use and guidance of maintenance and operational personnel concerned, a maintenance programme, approved by the State of Registry, containing the information required by 11.3. The design and application of the operator's maintenance programme shall observe Human Factors principles.	
Paragraph 8.5.1	8.5.1 The operator of an aeroplane over 5 700 kg maximum certificated take-off mass shall monitor and assess maintenance and operational experience with respect to continuing airworthiness and provide the information as prescribed by the State of Registry and report through the system specified in Annex 8, Part II, 4.3.5 and 4.3.8.	
Paragraph 8.5.2	8.5.2 The operator of an aeroplane over 5 700 kg maximum certificated take-off mass shall obtain and assess continuing airworthiness information and recommendations available from the organization responsible for the type design and shall implement resulting actions considered necessary in accordance with a procedure acceptable to the State of Registry.	
Paragraph 8.6	8.6 Modifications and repairs  All modifications and repairs shall comply with airworthiness requirements acceptable to the State	

Document Reference	State of Registry Responsibilities	State of Operator Responsibilities
	of Registry. Procedures shall be established to ensure that the substantiating data supporting compliance with the airworthiness requirements are retained.	
Paragraph 8.7	8.7 Approved maintenance organization	8.7 Approved maintenance organization
0.7	8.7.1 Issue of approval	8.7.1 Issue of approval
	8.7.1.1 The issue of a maintenance organization approval by a State shall be dependent upon the applicant demonstrating compliance with the requirements of 8.7 for such organizations.	8.7.1.1 The issue of a maintenance organization approval by a State shall be dependent upon the applicant demonstrating compliance with the requirements of 8.7 for such organizations.
	8.7.1.2 The approval document shall contain at least the following:	8.7.1.2 The approval document shall contain at least the following:
	a) organization's name and location;	d) organization's name and location;
	b) date of issue and period of validity;	e) date of issue and period of validity;
	c) terms of approval.	f) terms of approval.
	8.7.1.3 The continued validity of the approval shall depend upon the organization remaining in compliance with the requirements of 8.7 for an approved maintenance organization.	8.7.1.3 The continued validity of the approval shall depend upon the organization remaining in compliance with the requirements of 8.7 for an approved maintenance organization.
Paragraph 8.7.5.3	8.7.5.3 The competence of maintenance personnel shall be established in accordance with a procedure and to a level acceptable to the State granting the approval. The person signing a maintenance release shall be qualified in accordance with Annex 1.	8.7.5.3 The competence of maintenance personnel shall be established in accordance with a procedure and to a level acceptable to the State granting the approval. The person signing a maintenance release shall be qualified in accordance with Annex 1.
Chapter 9		
Paragraph	9.1.2 Radio operator	
9.1.2	The flight crew shall include at least one member who holds a valid licence, issued or rendered valid by the State of Registry, authorizing operation of the type of radio transmitting equipment to be used.	
Paragraph 9.3.1		9.3 Flight crew member training programmes
		9.3.1 An operator shall establish and maintain a ground and flight training programme, approved

Document Reference	State of Registry Responsibilities	State of Operator Responsibilities
		by the State of the Operator, which ensures that all flight crew members are adequately trained to perform their assigned duties. Ground and flight training facilities and properly qualified instructors as determined by the State of the Operator shall be provided. The training programme shall consist of ground and flight training in the type(s) of aeroplane on which the flight crew member serves, and shall include proper flight crew coordination and training in all types of emergency or abnormal situations or procedures caused by power plant, airframe or systems malfunctions, fire or other abnormalities. The training programme shall also include training in knowledge and skills related to human performance and in the transport of dangerous goods. The training for each flight crew member, particularly that relating to abnormal or emergency procedures, shall ensure that all flight crew members know the functions for which they are responsible and the relation of these functions to the functions of other crew members. The training programme shall be given on a recurrent basis, as determined by the State of the Operator and shall include an examination to determine competence.
Paragraph 9.3.2		9.3.2 The requirement for recurrent flight training in a particular type of aeroplane shall be considered fulfilled by:  a) the use, to the extent deemed feasible by the State of the Operator, of aeroplane synthetic flight trainers approved by that State for that purpose; or  b) the completion within the appropriate period of the proficiency check required by 9.4.4 in that type of aeroplane.
Paragraph 9.4.3.4		9.4.3.4 The operator shall maintain a record, sufficient to satisfy the State of the Operator of the qualification of the pilot and of the manner in which such qualification has been achieved.
Paragraph 9.4.4		9.4.4 Pilot proficiency checks  An operator shall ensure that piloting technique and the ability to execute emergency procedures is checked in such a way as to demonstrate the pilot's competence. Where the operation may be

Document Reference	State of Registry Responsibilities	State of Operator Responsibilities
		conducted under instrument flight rules, an operator shall ensure that the pilot's competence to comply with such rules is demonstrated to either a check pilot of the operator or to a representative of the State of the Operator. Such checks shall be performed twice within any period of one year. Any two such checks which are similar and which occur within a period of four consecutive months shall not alone satisfy this requirement.
Paragraph 9.6		9.6 Flight time, flight duty periods and rest periods
		The State of the Operator shall establish regulations specifying the limitations applicable to the flight time and flight duty periods for flight crew members. These regulations shall also make provision for adequate rest periods and shall be such as to ensure that fatigue occurring either in a flight or successive flights or accumulated over a period of time due to these and other tasks, does not endanger the safety of a flight.
Chapter 11		
Paragraph 11.1	11.1 Flight manual  Note.— The flight manual contains the information specified in Annex 8.  The flight manual shall be updated by implementing changes made mandatory by the State of Registry.	
Paragraph 11.2	The operator's maintenance control manual provided in accordance with 8.2, which may be issued in separate parts, shall contain the following information:  a) a description of the procedures required	
	by 8.1.1 including, when applicable:  1. a description of the administrative arrangements between the operator and the approved maintenance organization;	
	2. a description of the maintenance procedures and the procedures for completing and signing a maintenance release when maintenance is based on a	

Document Reference	State of Registry Responsibilities	State of Operator Responsibilities
	system other than that of an approved maintenance organization.	
	b) names and duties of the person or persons required by 8.1.4;	
	c) a reference to the maintenance programme required by 8.3.1;	
	d) a description of the methods used for the completion and retention of the operator's maintenance records required by 8.4;	
	e) a description of the procedures for monitoring, assessing and reporting maintenance and operational experience required by 8.5.1;	
	f) a description of the procedures for complying with the service information reporting requirements of Annex 8, Part II, 4.3.5 and 4.3.8;	
	g) a description of procedures for assessing continuing airworthiness information and implementing any resulting actions, as required by 8.5.2;	
	h) a description of the procedures for implementing action resulting from mandatory continuing airworthiness information;	
	i) a description of establishing and maintaining a system of analysis and continued monitoring of the performance and efficiency of the maintenance programme, in order to correct any deficiency in that programme;	
	j) a description of aircraft types and models to which the manual applies;	
	k) a description of procedures for ensuring that unserviceabilities affecting airworthiness are recorded and rectified; and	
	l) a description of the procedures for advising the State of Registry of significant in-service occurrences.	
Chapter 12		
Paragraph 12.1		12.1 Assignment of emergency duties  An operator shall establish, to the satisfaction of

Document Reference	State of Registry Responsibilities	State of Operator Responsibilities
		the State of the Operator, the minimum number of cabin crew required for each type of aeroplane, based on seating capacity or the number of passengers carried, in order to effect a safe and expeditious evacuation of the aeroplane, and the necessary functions to be performed in an emergency or a situation requiring emergency evacuation. The operator shall assign these functions for each type of aeroplane.
Paragraph 12.4		12.4 Training
12.4		An operator shall establish and maintain a training programme, approved by the State of the Operator, to be completed by all persons before being assigned as a cabin crew member. Cabin crew shall complete a recurrent training programme annually. These training programmes shall ensure that each person is:
		a) competent to execute those safety duties and functions which the cabin crew member is assigned to perform in the event of an emergency or in a situation requiring emergency evacuation;
		b) drilled and capable in the use of emergency and life-saving equipment required to be carried, such as life jackets, life rafts, evacuation slides, emergency exits, portable fire extinguishers, oxygen equipment and first-aid kits;
		c) when serving on aeroplanes operated above 3 000 m (10 000 ft), knowledgeable as regards the effect of lack of oxygen and, in the case of pressurized aeroplanes, as regards physiological phenomena accompanying a loss of pressurization;
		d) aware of other crew members' assignments and functions in the event of an emergency so far as is necessary for the fulfilment of the cabin crew member's own duties;
		e) aware of the types of dangerous goods which may, and may not, be carried in a passenger cabin and has completed the dangerous goods training programme required by Annex 18; and
		f) knowledgeable about human performance as related to passenger cabin safety

Document Reference	State of Registry Responsibilities	State of Operator Responsibilities
		duties including flight crew-cabin crew coordination.
Paragraph 12.5		12.5 Flight time, flight duty periods and rest periods
		The State of the Operator shall establish regulations specifying the limits applicable to flight time, flight duty periods and rest periods for cabin crew.
Annex 7		
Chapter 6		
	6. REGISTER OF NATIONALITY, COMMON AND REGISTRATION MARKS  Each Contracting State or common mark registering authority shall maintain a current register showing for each aircraft registered by that State or common mark registering authority, the information recorded in the certificate of registration (see Section 7). The register of unmanned free balloons shall contain the date, time and location of release, the type of balloon and the name of the operator.	
Paragraph 7.2	7.2 When certificates of registration are issued in a language other than English, they shall include an English translation.	
Annex 8, Part II	(9th Edition)	
Chapter 1		
Paragraph 1.4.2	1.4.2 When a Contracting State, other than the State of Design, issues a Type Certificate for an aircraft type, it shall do so on the basis of satisfactory evidence that the aircraft type is in compliance with the design aspects of the appropriate airworthiness requirements.	
Chapter 3		
Paragraph	3.2.1 A Certificate of Airworthiness shall be	

Document Reference	State of Registry Responsibilities	State of Operator Responsibilities
3.2.1	issued by a Contracting State on the basis of satisfactory evidence that the aircraft complies with the design aspects of the appropriate airworthiness requirements.	
Paragraph 3.2.2	3.2.2 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.	
Paragraph 3.2.3	3.2.3 A Certificate of Airworthiness shall be renewed or shall remain valid, subject to the laws of the State of Registry, provided that the State of Registry shall require that the continuing airworthiness of the aircraft shall be determined by a periodical inspection at appropriate intervals having regard to lapse of time and type of service or, alternatively, by means of a system of inspection, approved by the State, that will produce at least an equivalent result.	
Paragraph 3.2.4	3.2.4 When an aircraft possessing a valid Certificate of Airworthiness issued by a Contracting State is entered on the register of another Contracting State, the new State of Registry, when issuing another Certificate of Airworthiness or rendering the original certificate valid, may consider prior issuance of the Certificate of Airworthiness by a Contracting State as satisfactory evidence, in whole or in part, that the aircraft is airworthy and in compliance with the appropriate airworthiness requirements. The validity of the authorization shall not extend beyond the period of validity of the Certificate of Airworthiness.  Note.— This applies both when the aircraft is registered for the first time and when the aircraft changes its nationality	
Paragraph 3.3.2	3.3.2 When Certificates of Airworthiness are issued in a language other than English, they shall include an English translation.	

Document Reference	State of Registry Responsibilities	State of Operator Responsibilities
Paragraph 3.4	3.4 Aircraft limitations and information  Each aircraft shall be provided with a flight manual, placards, or other documents stating the approved limitations within which the aircraft is considered airworthy as defined by the appropriate airworthiness requirements, and additional instructions and information necessary	
Paragraph	for the safe operation of the aircraft.  3.5 Temporary loss of airworthiness	
3.5	Any failure to maintain an aircraft in an airworthy condition as defined by the appropriate airworthiness requirements shall render the aircraft ineligible for operation until the aircraft is restored to an airworthy condition.	
Paragraph 3.6	3.6.1 When an aircraft has sustained damage, the State of Registry shall judge whether the damage is of a nature such that the aircraft is no longer airworthy as defined by the appropriate airworthiness requirements.	
Paragraph 3.6.2	3.6.2 If the damage is sustained or ascertained when the aircraft is in the territory of another Contracting State, the authorities of the other Contracting State shall be entitled to prevent the aircraft from resuming its flight on the condition that they shall advise the State of Registry immediately, communicating to it all details necessary to formulate the judgement referred to in 3.6.1.	
Paragraph 3.6.3	3.6.3 When the State of Registry considers that the damage sustained is of a nature such that the aircraft is no longer airworthy, it shall prohibit the aircraft from resuming flight until it is restored to an airworthy condition; the State of Registry may, however, in exceptional circumstances, pre-scribe particular limiting conditions to permit the aircraft to fly without fare-paying passengers to an aerodrome at which it will be restored to an airworthy condition, and the Contracting State that had originally, in accordance with 3.6.2, prevented the aircraft from resuming flights shall permit such flight.	

Document Reference	State of Registry Responsibilities	State of Operator Responsibilities	
Paragraph 3.6.4	3.6.4 When the State of Registry considers that the damage sustained is of a nature such that the aircraft is still airworthy, the aircraft shall be allowed to resume its flight.		
Chapter 4			
Paragraph 4.2.1	4.2 Determination of continuing airworthiness		
	4.2.1 The State of Registry shall develop or adopt requirements to ensure the continued airworthiness of the aircraft during its service life, including requirements to ensure that the aircraft:  a) continues to comply with the appropriate airworthiness requirements after a modification, a repair or the installation of a replacement part; and		
	b) is maintained in an airworthy condition and in compliance with the maintenance requirements of Annex 6 and, where applicable, Parts IIIA, IIIB and IV of this Annex.		
Paragraph 4.2.2	4.2.2 The continuing airworthiness of an aircraft shall be determined by the State of Registry in relation to the appropriate airworthiness requirements in force for that aircraft.		
Paragraph 4.3.1	4.3.1 When a Contracting State first enters on its register an aircraft of a particular type for which it is not the State of Design and issues or validates a Certificate of Airworthiness in accordance with 3.2.2 of this part, it shall advise the State of Design that it has entered such an aircraft on its register.		
Paragraph 4.3.3	4.3.3 The State of Registry shall, upon receipt of mandatory continuing airworthiness information from the State of Design, adopt the mandatory information directly or assess the information received and take appropriate action.		
Paragraph 4.3.4	4.3.4 Any Contracting State that has entered on its register an aircraft in respect of which that Contracting State is not the State of Design and for which it has issued or validated a Certificate of Airworthiness in accordance with 3.2 of this		

Document Reference	State of Registry Responsibilities	State of Operator Responsibilities
	part shall ensure the transmission to the State of Design of all mandatory continuing airworthiness information which it, as the State of Registry, originated in respect of that aircraft.	
Paragraph 4.3.5	4.3.5 The State of Registry shall ensure that in respect of aeroplanes of over 5 700 kg and helicopters over 3 180 kg maximum certificated take-off mass, there exists a system whereby information on faults, malfunctions, defects and other occurrences that cause or might cause adverse effects on the continuing airworthiness of the aircraft is transmitted to the organization responsible for the type design of that aircraft.	
Paragraph 4.3.8	4.3.8 Each Contracting State shall establish, in respect of aeroplanes over 5 700 kg and helicopters over 3 180 kg maxi-mum certificated take-off mass, the type of service information that is to be reported to its airworthiness authority by operators, organizations responsible for type design and maintenance organizations. Procedures for reporting this information shall also be established.	