

Doc 9734
AN/959



Safety Oversight Manual

Part B
**The Establishment and Management
of a Regional Safety Oversight System**

Approved by the Secretary General
and published under his authority

First Edition — 2006

International Civil Aviation Organization

FOREWORD

This manual provides guidance on the establishment and management of a regional safety oversight organization (RSOO) and outlines the duties and responsibilities of ICAO Contracting States, individually and/or collectively, with respect to the establishment and management of a regional safety oversight system. It is addressed to high-level government decision makers, as it highlights States' obligations as signatories to the *Convention on International Civil Aviation* (Chicago Convention) signed in Chicago on 7 December 1944, and provides information and guidance on the establishment and management of an RSOO to assist Contracting States in fulfilling part or all of their safety oversight-related obligations.

In accordance with the Convention, a State has complete and exclusive sovereignty over the airspace above its territory. Nevertheless, on adhering to the Convention, States agree to certain principles and arrangements in order that international civil aviation may be developed in a safe and orderly manner. The safe and orderly development of international civil aviation requires that all civil aviation operations be conducted under internationally accepted minimum operating standards, procedures and practices. That States must collaborate to the highest degree to achieve standardization and harmonization in regulations, rules, standards, procedures and practices is thus a requirement of the Convention (Articles 12 and 37 refer).

This manual, therefore, presents guidance to States on how to establish and manage a regional safety oversight system within a particular region or subregion, should they wish to fulfil their safety oversight obligations through such a system. The effectiveness of a regional safety oversight system, like that of an individual State's safety oversight system, depends highly on the effective implementation of the critical elements of a safety oversight system.

Critical elements of safety oversight in general address issues related to:

- primary aviation legislation;
- specific operating regulations;
- state civil aviation system and safety oversight functions;
- technical personnel qualification and training;
- technical guidance, tools and provision of safety critical information;
- licensing, certification, authorization and/or approval obligations;
- surveillance obligations; and
- the resolution of safety concerns.

Consequently, guidance on the establishment and implementation of a regional safety oversight system should include a comprehensive plan that applies a systemic approach and focuses on both the oversight capability of Contracting States and the effective implementation of the safety oversight critical elements as part of the

permanent activities of a regional safety oversight system. The critical elements of safety oversight are described in detail in Part A of this manual — *The Establishment and Management of a State's Safety Oversight System*, and are used extensively in this part of the manual to ensure the effectiveness of a regional safety oversight system.

Under its Technical Cooperation Programme, ICAO has implemented a large number of projects over several decades to improve civil aviation safety in many developing States. However, despite these efforts as well as numerous initiatives designed to help States meet their safety oversight responsibilities, in many regions a number of States have failed to develop the capability for safety oversight. Safety oversight audits and audit follow-ups conducted by ICAO in the last six years indicate that a number of States have not been able to implement an effective safety oversight system over their aviation activities. The main reason identified for this situation is lack of adequate resources, specifically in terms of qualified technical expertise. This has led ICAO to conclude that regional or subregional safety oversight organizations may be required to overcome this problem through shared objectives, strategies and activities and, most importantly, that they would enable Member States to pool resources and thus be able to attract, recruit and retain appropriately qualified and experienced personnel.

A regional safety oversight system can also provide economies of scale by allowing for the sharing of required resources and thus building the capability for an effective safety oversight system. In addition, working together, Contracting States of a region or subregion can have a more persuasive voice on the world stage and can help secure a more favourable climate aimed at a safer international air transportation system. Furthermore, the aviation industry will benefit from the incorporation of harmonized regulations and procedures at a regional or subregional level.

Effective regional cooperation requires an organizational structure for the establishment and management of a regional safety oversight system. Membership in one of these organizations provides several benefits. At the basic level, technical cooperation would provide an opportunity to share experience and discuss problems in areas of common interest. This would, in turn, allow States to make informed decisions and avert duplication on the part of States with respect to meeting their safety oversight obligations.

In many areas of regional cooperation, States can produce economies of scale leading to increased efficiency due to the possibility of sharing and pooling of human and financial resources. Regional programmes can be more effective through joint action, where they can address external factors and constraints more effectively. Participant States will also increase their capacity to develop harmonized regulations adapted to their local environment and in compliance with ICAO Standards and Recommended Practices (SARPs).

In the international arena, the existence and effective operation of regional organizations is a demonstration of regional solidarity and increases the involvement of individual States in aviation activities relating to the region or subregion. A regional strategy should seek to empower Contracting States to determine common priorities and programmes, to solve regional safety-related deficiencies and, eventually, to secure donor support for improving the regional aviation structure and implementing a more efficient allocation of resources.

In order to strengthen safety oversight capabilities within States, ICAO, through its Technical Cooperation Programme, has formulated intra-State (regional) projects, known as the Cooperative Development of Operational Safety and Continuing Airworthiness Projects (COSCAPS). These projects are designed to achieve a level of regional cooperation that will ensure cost-effectiveness and optimization of human resources. The goal is to overcome financial and labour shortages that have adversely affected the effective implementation of State safety oversight obligations in the past and thus achieve regional harmonization of safety regulations, policies and procedures.

Although this is the first ICAO manual providing guidance for the establishment and management of regional safety oversight systems, it should be noted that a number of States have already established RSOOs or are in the process of doing so, in order to take advantage of the economies of scale that such cooperation presents.

In order to keep this manual relevant and accurate, suggestions for improving it in terms of format, content or presentation are welcome. Any such recommendation or suggestion will be examined and, if found suitable, will be included in the next edition of the manual on the approval of the Secretary General. Regular revision will ensure that the manual remains both pertinent and accurate.

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Chapter 1

INTRODUCTION

1.1 OBJECTIVES OF THE MANUAL

1.1.1 The objective of this part of the *Safety Oversight Manual* is to provide guidance for States that wish to form a regional safety oversight system. To achieve this objective, the manual formulates a regional strategy that will bring together the efforts, experience and resources of Contracting States, international and regional organizations, aviation manufacturers, financial and other funding institutions, and ICAO. This strategy allows for the undertaking of safety oversight initiatives to assist States in a region or subregion with the establishment and management of a regional safety oversight system.

1.1.2 The provision of safety oversight on a regional basis should emphasize Contracting States' individual obligations and responsibilities vis-à-vis the Convention on International Civil Aviation (Chicago Convention). Taking into account the difficulties encountered by many Contracting States in fulfilling their Convention obligations, this manual advocates the effective implementation of a safety oversight system and provides guidance on resolving the difficulties experienced in implementing international Standards and Recommended Practices (SARPs).

1.1.3 The Conference of Directors General of Civil Aviation on a Global Strategy for Safety Oversight (1997) emphasized the need for coordinating and harmonizing the principles and procedures for assessing safety oversight at a global level, recognizing at the same time the advantages of adopting a regional focus. In that context, the Conference recommended that ICAO promote the establishment of regional mechanisms with a view to achieving the long-term support of safety oversight capability at a global level.

1.1.4 Globalization of international civil aviation operations has been gaining momentum worldwide. Some elements of the international civil aviation system that are setting the pace of globalization are mergers, alliances and transnational ownership of airlines; global satellite-based communication and navigation systems; and the multinational manufacturing and maintenance of aircraft and other aeronautical products. States need more than ever to pursue, as far as possible, harmonization or mutual recognition of regulatory practices and procedures based on the implementation of SARPs.

1.1.5 Harmonization of civil aviation regulations among States of a region or subregion offers an opportunity not only to enhance safety, but also to promote compatibility among safety management systems, to improve efficiency and effectiveness and to reduce the economic burden on airlines and other aviation activities.

1.2 ABOUT THE MANUAL

1.2.1 The manual describes States' obligations and responsibilities for safety oversight and provides related guidance derived from various sources, such as documented experiences in setting up a regional safety oversight system. The Chicago Convention and its Annexes, ICAO guidance material, and examples of incipient or well-established regional safety oversight organizations are used extensively.

1.2.2 ICAO has long been aware of the difficulties experienced by several Contracting States in implementing SARPs and has tried to assist them through its Technical Cooperation Programme, direct Regional Office support, and Headquarters' involvement. Safety oversight audits conducted under the ICAO Universal Safety Oversight Audit Programme (USOAP) have highlighted the extent of deficiencies encountered by those States in meeting their safety oversight obligations.

1.2.3 Part A of this manual — *The Establishment and Management of a State's Safety Oversight System* refers to the common deficiencies identified in the majority of assessed and audited States as:

- a) lack of an adequate safety oversight organization; and
- b) lack of sufficient qualified technical personnel.

In the majority of cases, these deficiencies are the result of insufficient resource allocation by the government to the national civil aviation body. Consequently, such States are unable to comply in full with national and international requirements concerning the safety of civil aircraft operations.

1.2.4 ICAO safety oversight audits and other ICAO missions have shown that many Contracting States have not established effective safety oversight systems and that control and supervision of aircraft operations, airworthiness of aircraft and the licensing of personnel are often deficient, thereby creating an opportunity for unsafe conditions. The establishment and management of an effective safety oversight system require a high-level government commitment, without which a Contracting State cannot fully satisfy its aviation system safety-related responsibilities.

1.2.5 Audit findings and other sources of information convinced ICAO that it should further assist Contracting States in the development of regional safety oversight systems as well as provide them with related guidance material to deal with identified deficiencies.

1.2.6 In order to provide comprehensive and meaningful guidance on the establishment and management of a regional safety oversight system, the organizational structure of a generic RSOO is presented in Chapter 3. States are encouraged to establish such a self-contained structure capable of meeting their individual responsibilities for safety oversight.

1.3 ICAO REFERENCE DOCUMENTS

The ICAO documents listed in Appendix A are referred to in the manual and provide additional guidance material for the certification and surveillance of air transport operators and associated operations and infrastructure.

1.4 DEFINITIONS

The definitions used in this manual are similar to those found in relevant Annexes to the *Convention on International Civil Aviation*, other ICAO documentation (such as the ICAO lexicon) or are the definitions intended by the Safety Oversight Audit Section (SOA) solely for the purpose of this document and the safety oversight audit process. Definitions used in this manual are contained in Appendix B.

1.5 ABBREVIATIONS/ACRONYMS

Some common abbreviations/acronyms used in this manual are as follows:

AOC	Air operator certificate
DGCA	Director General of Civil Aviation
ICAO	International Civil Aviation Organization
MOC	Memorandum of Cooperation
MOU	Memorandum of Understanding
NCAA	National Civil Aviation Authority
RSOO	Regional Safety Oversight Organization
SARPs	Standards and Recommended Practices
SMS	Safety management system
SOA	Safety Oversight Audit Section
USOAP	ICAO Universal Safety Oversight Audit Programme
USP	Unified Strategy Programme

Chapter 2

THE NEED TO DEVELOP A REGIONAL SAFETY OVERSIGHT SYSTEM

2.1 BACKGROUND

2.1.1 The Convention on International Civil Aviation (Chicago Convention) and its Annexes allocate responsibility for aviation safety to individual States. Each State bears responsibility for the continuing airworthiness of aircraft; safe and efficient aircraft operations; the licensing and/or certification of personnel; and safe air traffic flow within its airspace, including the provision of air traffic services and an adequate airport infrastructure. Aviation safety may be endangered if there is no full observance of these international obligations by Contracting States.

2.1.2 At the November 1997 Conference of Directors General of Civil Aviation, ICAO highlighted the findings of its safety oversight assessments, which indicated that a significant number of Contracting States were experiencing problems in implementing Standards and Recommended Practices (SARPs), recruiting qualified personnel and, in general, fulfilling their safety oversight obligations. Since SARPs are designed to ensure, *inter alia*, a minimum level of safety for international civil aviation, the lack of implementation of SARPs threatens the safety of aircraft operation.

2.1.3 Safety oversight audits carried out under the ICAO Universal Safety Oversight Audit Programme (USOAP) have also confirmed States' difficulties in fulfilling their safety oversight obligations and responsibilities. The most common cause of this is that States have not committed adequate resources to the task.

2.1.4 Four areas of States' safety oversight obligations are of special concern:

- a) *Primary aviation legislation, regulations and operational procedures.* Several Contracting States assessed or audited by ICAO either have not promulgated basic aviation laws or their existing aviation legislation is out of date and therefore fails to provide the necessary legal foundation for civil aviation to function in the intended way. Safety of aircraft operation requires that national regulations or requirements emanating from primary aviation legislation, and providing for standardized operational equipment and infrastructures (including management and training systems), should conform to the requirements of the Chicago Convention and comply with ICAO Annex provisions. It has been noted that some States have implemented regulations and operational procedures by using poor translations of regulations from States that have bigger aviation industries. As a result, civil aviation authorities often find it very difficult to interpret correctly the meaning of certain rules and usually apply them incorrectly, with serious consequences to the industry and to operational safety.
- b) *Institutional structures.* In many Contracting States, the organizations responsible for regulating and supervising aviation safety do not have the authority and independence required to fulfil their regulatory obligations effectively. Experience shows that civil aviation authorities are more successful when they are more autonomous. This occurs when the

civil aviation authority is able to administer and manage its own budget, which is in turn made possible by an internal accounting system funded through the recovery of fees for the provision of licensing, certification and inspection, air navigation and other services to the aviation industry. In some States such income may need to be augmented by government funding.

- c) *Qualified personnel.* There are often not enough qualified experts available for States to fulfil their safety oversight responsibilities. In addition, resources are often not available for the necessary training of experts, and even when they are, trained staff often leave for better paying jobs in the aviation industry. Since the entities in charge of safety oversight or air traffic services are generally government departments, salaries are often fixed to a common civil service rate that may not be competitive enough to attract, recruit and retain qualified personnel. Changing this may also be impossible without disrupting the governmental pay structure. In addition, in States with small aviation industries, the only source of qualified personnel is the same air operator that is being certified and inspected. This could affect the objectivity of the inspector who has to supervise former peers or potential employers.
- d) *Financial resources.* Many entities in charge of civil aviation safety are not provided with the necessary financial resources to carry out their obligations. The improvement of air safety is not a high priority on the political agenda when compared to other issues such as health and poverty. Moreover, when a system has been put in place to recover costs from users, all too often these resources are not re-allocated to the operation of these entities and cannot therefore contribute to the improvement of aviation safety.

In conclusion, to properly implement ICAO SARPS, a sound legislative base, adequate staffing and sufficient funds are essential prerequisites.

2.1.5 Expectations from airline passengers and residents living near airports for continued high levels of safety have put pressure on several governments to establish audit and assessment programmes to evaluate the capacity of other States to fulfil their international aviation safety commitments and ensure that operators from States that fall short of compliance with ICAO Standards will not be afforded the rights they would normally enjoy under agreements based on the provisions of the Chicago Convention.

2.1.6 Individually, some Contracting States face serious limitations in their access to the skills, information and financial resources needed for successful development of an effective safety oversight system. However, if States are organized regionally, they may have a better opportunity to overcome safety oversight shortcomings by pooling human resources and developing the ability to attract and retain qualified and experienced personnel. Regional safety oversight systems thus provide economies of scale, allowing for the sharing of technical capability and providing administrative savings by sharing costs that would otherwise be prohibitive given an individual State's resources.

2.1.7 One of the essential obligations and responsibilities of Contracting States is to ensure the safety of aircraft operation in their States and regions in order to benefit the development of air transport and the users of the system. Working together, Contracting States can have a more effective approach to enhancing safety and resolving deficiencies. The establishment of regional and/or subregional safety oversight organizations were recognized by the 35th Session of the ICAO Assembly (Resolution A35-7 — Unified strategy to resolve safety-related deficiencies) as having great potential to assist States in meeting their safety oversight obligations under the Convention.

2.1.8 Effective regional cooperation requires sound and efficient organizational structures, and cooperation may take place through many different types of organizations. The following chapters will

address the concept of the establishment and management of a regional safety oversight system to assist States in establishing a safety oversight system to meet their safety oversight obligations.

2.2 A STRATEGY FOR ESTABLISHING A REGIONAL SYSTEM

2.2.1 A commitment to the provision of a safe civil aviation system must be made at the highest levels of every government and with the involvement of the aviation industry in the State. A strong regional partnership and cooperation are two of the conditions needed to develop and integrate efforts to improve regional aviation safety oversight. Contracting States of a specific region can expand their aviation safety oversight capability by working together at least in the performance of safety oversight tasks. Agreements implemented among States of a region will contribute to a better execution of regional plans related to the establishment of air navigation facilities and services and the implementation of SARPs.

2.2.2 In addition, given the tremendous growth and globalization of the aviation industry, it is critical that civil aviation authorities in States where industrial efforts may not be adequate to meet international obligations be given the necessary incentives and flexibility to participate in regional safety oversight organizations (RSOOs) and be encouraged to monitor their own organizational and technical performance in developing and implementing a safety management system for their region.

2.2.3 In general terms, a strategy for the establishment of an RSOO seeks to empower Contracting States to determine their own priorities and programmes within a regional perspective and to secure donor support for the establishment and implementation of an effective safety oversight system. The key objective of a regional strategy is to improve the effectiveness of regional cooperation by ensuring that the targeted priorities reflect genuine critical needs that can be met in a more cost-effective manner through a joint and cooperative use of resources.

2.2.4 The reasons for adopting a strategy to establish an RSOO would be to:

- a) eliminate duplication of effort by standardizing regulatory and enforcement provisions over a large area of aviation activities;
- b) achieve economies of scale leading to effectiveness and efficiency;
- c) pool human and financial resources;
- d) institute effective regional programmes through the joint action of States;
- e) address external factors and constraints more effectively;
- f) develop and implement a safety management system that would allow for the implementation of similar standards and procedures to measure the safety performance of civil aviation organizations in the region;
- g) supplement shortfalls in the scope of domestic or bilateral interventions;
- h) prove organizational ability by testing activities before making important commitments under national programmes;
- i) meet industry expectations by encouraging compliance and providing the support to enable industry to demonstrate compliance with regulations;

- j) demonstrate, as a responsible regional organization, improved regional solidarity;
- k) improve the objectivity and independence of inspectors; and
- l) develop the capability for drafting and amending regulations and procedures as well as for producing clearer standards based on international requirements and adapted to the regional environment and aviation industry needs.

2.2.5 For the successful implementation of a regional safety oversight system, it is crucial that its goals mirror national priorities. In addition, a regional safety oversight system should relate to, complement, supplement and strengthen national aviation safety programmes. States eager to develop a regional strategy for the establishment and management of a regional safety oversight system should consider the following elements:

- a) Adequate resources are essential since many civil aviation authorities receive insufficient funding and support at the national level.
- b) The provision of safety oversight on a regional basis requires an efficient use of resources to increase the level of safety and security of aviation activities in the region.
- c) There is a need for coordination between high-level government officials (at a ministerial level) responsible for the various areas of civil aviation activities, especially when those activities are not established under the same ministry.
- d) Continuity is an essential component in the management of civil aviation safety and security, particularly during a change of government.
- e) Regulatory authorities can be more effective if they maintain a cordial but well-defined relationship with the entities that they are supposed to regulate.
- f) A code of ethics can be developed and implemented in order to avoid conflicts of interest between parties. This may be relevant during a reorganization process, such as when a government enlists the help of individuals in making regulatory policy that may have an impact on the aviation industry, or when individuals leave government positions for temporary assignments in the aviation industry.
- g) The relationship between civil aviation activities and the economic development of any State in the region calls for close cooperation among the ministries that benefit from civil aviation activities, such as tourism, transport and labour.
- h) The responsibility for safety oversight in the State remains with the State. Tasks delegated to RSOOs must be done in a controlled manner with the proper mechanisms in place to ensure the tasks are carried out by appropriately qualified and trained individuals and in accordance with established requirements and procedures.

2.3 STRATEGY: DEFINITION, OBLIGATIONS AND PREREQUISITES

2.3.1 It is important that States wishing to establish a regional safety oversight system formulate a strategy that is well-defined in terms of purpose, objectives, activities, output, result indicators, duration and the expected results or outcomes from establishing an effective regional safety oversight system. ICAO can play a significant role in assisting States in the development of such a strategy.

2.3.2 A comprehensive analysis of the need for the establishment of a regional organization and the modalities of its management would lead to the design and implementation of an effective strategy. The strategy should consider a system for monitoring the end product, with well-defined success indicators, to enable the adoption of timely and appropriate corrective measures, thus ensuring the competency and continuity of the regional organization to be established.

2.3.3 The strategy should also include a description of all its activities, the expected output at the conclusion of each activity, and the length of time for each activity and for the entire strategy. Member States should indicate the legal, technical, financial, institutional and environmental feasibility of the strategy and should identify any national or regional elements that will benefit the strategy directly or indirectly. They should accept that strategies demonstrating a higher regional impact will have to be allocated a higher priority. ICAO could assist in the formulation of the strategy and the establishment of a regional arrangement to ensure financial stability, cost-effectiveness and optimization of human resources. In addition to improving the aviation safety oversight framework of the region, it is very important to determine the contribution of a regional safety oversight system toward the improvement of the economic, social and environmental sectors of participating States.

2.3.4 Prior to the establishment of the regional safety oversight system it must be ensured that Member States are committed to fully support the RSOO in all aspects, including the adoption of the joint operating regulations and procedures to be developed by it. The adoption of joint operating regulations and procedures for the certification of commercial air transport operators, aircraft maintenance organizations, aeronautical personnel and aeronautical training centres should reduce the cost of doing business, for both the States concerned and the aviation industry.

2.3.5 The use of common requirements and procedures does not constitute, in any way, the use of less stringent standards. On the contrary, the aim is to standardize the criteria to be implemented by Member States to achieve compliance with international requirements. Standardization of regulations that fully meet international requirements should help raise the level of air transport safety in the region. It would also enhance the safety oversight capability of States because they would also have access to a wider base of expertise.

2.3.6 Member States would still be responsible for the issuance of air operator certificates, the approval of aircraft maintenance organizations, design organizations, product organizations, the certification of aircraft and aerodromes, the issuance of aeronautical licenses and ratings and the certification and approval of training centres, although tasks leading to the issuance of licences and certificates and the approval of organizations would be performed by the regional safety oversight system using the same requirements and procedures. The RSOO should also act as an information centre facilitating the efficient handling of information among Member States.

2.4 THE RESPONSIBILITY OF CONTRACTING STATES AND THE ROLE OF GOVERNMENTS

Responsibility of Contracting States

2.4.1 The majority of the articles of the Chicago Convention establish the rights and obligations of all Contracting States and provide for the adoption of international SARPs regulating international air transport. The Convention recognizes the fundamental principle that every State has complete and exclusive sovereignty over the airspace above and within its territory.

2.4.2 Over the last six decades, the main technical achievement of ICAO has been the agreement of its Contracting States on the necessary level of standardization for the safe, efficient and regular operation of air services. Standardization has been achieved primarily through the adoption of the 18 Annexes to the Chicago Convention, which cover the entire spectrum of civil aviation operations.

2.4.3 Through the provision of national regulations, States are expected to implement and enforce SARPs contained in the Annexes to the Convention. Article 12 of the Chicago Convention is very clear in this respect. It states that:

Each contracting State undertakes to adopt measures to insure that every aircraft flying over or maneuvering 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 maneuver 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.

Further, the Article states that:

Each contracting State undertakes to insure the prosecution of all persons violating the regulations applicable.

This and other related articles enshrine States' responsibilities for safety oversight under the Convention and leave no doubt as to a Contracting State's responsibility for control and supervision of all its aviation activities.

2.4.4 Article 38 of the Convention specifies that any State which finds it impracticable to comply with any 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 from those established by international standard shall give immediate notification to ICAO of differences between its own practices and those established by the international standard.

2.4.5 A State's responsibility under the Convention includes:

- the licensing of operational personnel;
- the certification of aircraft, air operators, aerodromes, and maintenance organizations;
- the control and supervision of licensed personnel, certified products, and approved organizations;
- the provision of air navigation services (inclusive of meteorological services, aeronautical telecommunications, search and rescue services, charts and the distribution of information); and
- aircraft accident and incident investigation.

Ensuring that this responsibility is carried out in the most effective manner is fundamental to the health of aircraft operations and related operations across borders and throughout the world.

2.4.6 This responsibility is enshrined in several Articles of the Convention. Article 31, for example, requires the State of Registry to issue a certificate of airworthiness or to validate a certificate of airworthiness

issued by another Contracting State for every aircraft engaged in international air navigation. In Article 32, the same State is charged with issuing certificates of competency and licences or validating such certificates or licences issued by other Contracting States to the pilot of every aircraft and to other members of the operating crew of every aircraft engaged in international navigation. The basis of these obligations is the desire to promote and conduct safe and regular aircraft operations through the development and implementation of internationally acceptable processes for the issuance of certificates and licences as well as the provision of air navigation services. Compliance with these processes should provide a State with assurance of its own organizational and individual competence and the competence of other Contracting States' regulatory authorities, service providers, operators and personnel, particularly in the area of change and systematic safety management. Furthermore, these processes are extended to domestic operations to ensure the overall safety of aircraft operation wherever it takes place.

Role of governments

2.4.7 Safety oversight audits conducted by ICAO have indicated that in a number of States, governments are not adequately supporting their national civil aviation authorities to effectively and efficiently undertake their safety oversight responsibilities and thereby fulfil the States' obligations for aviation safety. It has also been observed that a number of Contracting States do not have the necessary resources to support an effective safety oversight system on their own, often due to the lack of adequate financial resources. The RSOO is thus seen as a practical solution to this problem in that States would be able to share resources, both in terms of funding and qualified personnel. In this connection, governments are called upon to recognize the critical role that civil aviation plays in the overall economy of their respective States and to provide the national civil aviation system with the funding and support that it requires.

2.4.8 Governments should promote local aviation industries and activities in the region through better regional cooperation. In doing so, they should also aspire to protect the environment. Cooperation in this respect does not mean that governments should give up their sovereignty, authority or responsibilities. However, participating in a regional arrangement may present an effective and efficient way for a State to achieve the desired level of safety oversight capability and thus contribute to the enhancement of global aviation safety.

2.4.9 Governments should also ensure a clear separation between civil and military jurisdictions and functions, yet leaving sufficient room for coordination and cooperation on security and other common issues. They should continue to safeguard the independence and integrity of national air safety regulators and promote the standardization of applicable regulations by these bodies.

2.4.10 Governments should make the necessary investments to guarantee that their national aviation authorities have the required means and resources for the effective oversight of civil aviation activities and the implementation of international SARPs.

Chapter 3

THE ESTABLISHMENT AND MANAGEMENT OF A REGIONAL SAFETY OVERSIGHT ORGANIZATION

3.1 GENERAL

3.1.1 The Convention on International Civil Aviation (Chicago Convention) has as one of its main objectives the safe and orderly development of international civil aviation and the promotion of flight safety in international air navigation. ICAO is the international body created by the Chicago Convention to develop the principles and techniques of international air navigation and to foster the planning and development of international air transport. The Convention also provides the appropriate frame of reference for defining States' responsibilities with regard to civil aviation administration.

3.1.2 In order to obtain global uniformity in the adoption of international standards, recommended practices 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 order to facilitate and improve air navigation.

3.1.3 As Contracting States of ICAO, States participating in the establishment of a regional safety oversight system should accept specific obligations with respect to the implementation of internationally agreed Standards and Recommended Practices (SARPs) governing international civil aviation. The Director General of Civil Aviation, or similar administrative authority, in each participating State should be responsible for ensuring that the civil aviation administration observes and complies with the international obligations provided for under the Convention. Such obligations include the development and implementation of standards, procedures, facilities and services necessary for safe and efficient air operations. These obligations remain valid regardless of the system established to fulfil the State's safety oversight obligations.

3.1.4 The State in which an aircraft is registered and operated is responsible for compliance with the applicable operations and airworthiness regulations by the air operators and aircraft for which it issues operations and airworthiness certificates. Each State can exercise this responsibility directly, through its duly trained and experienced staff, or through the regional safety oversight organization (RSOO) to which it belongs. An RSOO could also serve to ensure compliance with operations and airworthiness regulations by air operators, aircraft maintenance organizations and licensed operations and maintenance personnel.

3.2 ESTABLISHMENT OF A REGIONAL SAFETY OVERSIGHT ORGANIZATION

3.2.1 The participation of a minimum number of Member States is required to ensure that the establishment of an RSOO is both realistic and feasible. One of the avenues available for establishing such an organization is to enter into a regional agreement by signing a Memorandum of Understanding (MOU) or a Memorandum of Cooperation (MOC). The agreement document should emphasize the need to coordinate and harmonize the principles, rules and procedures for conducting effective safety oversight in each of the Member States, taking advantage of the opportunities presented by pooling resources and expertise.

3.2.2 The agreement document should contain articles promoting and enabling the establishment of an RSOO that is designed to enable Member States to meet their safety oversight responsibilities in conformity with the safety provisions of the Chicago Convention and its Annexes. For the regional organization to succeed, Member States should commit to full participation in all of its activities.

3.2.3 In addition to defining the legal status of the RSOO, the agreement document should emphasize several aspects and objectives that would enable the organization to be effective, as follows:

- a) The organizational and operational procedures of the RSOO should be defined and presented in an internal set of approved regulations and in a manual of internal technical procedures that must be agreed upon by Member States.
- b) The RSOO should be capable of recommending necessary measures and providing technical assistance to enable Member States to overcome the deficiencies identified by the ICAO Universal Safety Oversight Audit Programme (USOAP) and other safety oversight-related audits.
- c) The RSOO should develop and adopt technical and operating regulations, in accordance with ICAO SARPs, for the uniform development of the civil aviation activities in the region.
- d) The RSOO should establish a system for amending its operational regulations and procedures in line with the amendments introduced to relevant Annex provisions.
- e) Based on commonly adopted operational regulations and procedures, the RSOO should be able to provide the required assistance to Member States in the certification of air operators, aerodromes, aircraft maintenance organizations, aviation personnel and aviation training centres in order to achieve a homogeneous licensing and certification system.

3.2.4 To effectively implement and participate in the RSOO, Member States should honour the commitments and obligations contained in the agreement document by providing information that would enable the RSOO to:

- a) inform Member States about the domestic status of safety in order to adopt appropriate safety measures;
- b) request Member States to take proper steps to overcome the deficiencies identified by USOAP and other safety oversight-related audits; and
- c) ensure that technical personnel assigned to the RSOO neither request nor receive instructions with regard to the performance of their duties from any authority other than the authorities of the RSOO, in accordance with established rules and on the basis of the approved regulations and internal procedures of the RSOO.

3.2.5 The host State should support the work of the RSOO by facilitating its smooth operation, including the provision of authorizations, approvals, permits and logistic support required for the conduct of RSOO activities.

3.2.6 Member States should provide the necessary support to ensure the effective operation of the organization and the achievement of its objectives and should also meet their financial obligations as established by the agreement document.

3.2.7 The organizational structure of the RSOO should be based on a legal foundation. Thus, its components and the primary functions of its officers should be established in the agreement document. Figure 3-1 depicts an example of the organizational structure of a generic RSOO. The duties and responsibilities of the officers are detailed in 3.8.

3.3 LEGAL FRAMEWORK

3.3.1 To provide an adequate legal framework for the proposed RSOO, an agreement acceptable to all interested States, which meets their common operational safety oversight needs, must be reached. Different approaches can be taken depending on the purpose and objectives of Member States:

- a) Member States may opt for the legal establishment of an RSOO by means of a diplomatic conference attended by high-level government decision makers who agree to the creation of a constitutional charter for an RSOO that clearly describes the required commitment, dedication, function and responsibility of Member States in the implementation and continuity of the RSOO. The organization created under the constitutional charter may progressively assume functions transferred to it by the civil aviation authorities of its Member States, starting with the development and approval of common, standardized regulations and procedures relating to the certification and supervision (control) of aeronautical products, aeronautical personnel, and air operators (including the approval and supervision of maintenance organizations and training schools) and, eventually, the licensing, certification and approval of personnel and aviation organizations. Transfer of such responsibilities however does not absolve States from their safety oversight obligations under the Chicago Convention.
- b) Member States may agree to the establishment of an RSOO whose responsibilities are limited to the conduct of safety oversight tasks on their behalf. Such an arrangement may be limited to the oversight of activities relating to their safety obligations or may also include the development of standardized regional aviation regulations; the establishment of procedures for the certification of personnel, organizations and aeronautical products; and the provision of specific technical assistance without involvement in the actual licensing and certification process.
- c) States in a region may agree only to improved collaboration among their respective civil aviation authorities, in terms of the compatibility of aviation regulations and the provision of technical support. Although this type of arrangement may contribute to the enhancement of safety in the region, it does not constitute the establishment of an RSOO, as advocated in this manual.

3.3.2 In either case cited in 3.3.1 a) or b), the most important consideration in establishing an RSOO is that it be established on a legal basis that clearly indicates its legal standing and the level of its responsibility in Member States.

3.3.3 One of the legal instruments available to States is the Memorandum of Understanding (MOU) or Memorandum of Cooperation (MOC). In practical terms, there is very little difference between the two; what really matters is the level of authority Member States bestow on the regional organization. In all cases, the legal status of the regional organization, including the extent of its duties and the level of its authority, should be clearly determined and spelled out in the agreement document.

3.3.4 The agreement document should also define the role and responsibility of each of the Member States in relation to the RSOO, including the following:

- a) the level of participation of a State's civil aviation authority in the activities of the RSOO;
- b) whether the RSOO conducts its activities on the basis of a Member State's national regulations or common regulations to be promulgated and equally implemented in all Member States;
- c) if no common regulations are promulgated, how the RSOO would reconcile differences that exist between the regulations of Member States and international SARPs;
- d) the role of national inspectors during the conduct of a safety oversight activity by the RSOO; and
- e) what types of oversight will be conducted by Member States of the RSOO to ensure the fulfilment of each Member States' responsibility under the Convention.

The above points and other similar questions should be clearly addressed during the initial stage of defining the legal status of the regional organization.

3.4 OBJECTIVES

3.4.1 The main objective of the RSOO is to assist Member States in meeting their safety oversight obligations and responsibilities under the Chicago Convention, its Annexes and other safety-related procedures and practices.

3.4.2 Effective implementation of the main objective of the RSOO will require that Member States:

- a) undertake the necessary steps to develop and promulgate common aeronautical regulations, operational safety rules, methods and procedures for the licensing, certification and authorization of, and provision of permits for, aviation-related activities;
- b) participate in RSOO activities with the objective of assisting other Member States in the certification or approval of organizations involved in aviation activities;
- c) develop and establish a regional training programme for the technical personnel of Member States including training courses and seminars/workshops aimed at understanding and implementing common aeronautical regulations, and the uniform application of operational safety rules and certification procedures;
- d) contribute to the maintenance of a safe, efficient and economic air transport system as a means to support the social, economic and cultural development of the region;
- e) endeavour to implement a cost-effective safety system with a minimum regulatory burden so as to contribute to the competitiveness of the regional aviation industry; and
- f) promote a comprehensive systems approach to safety management within Member States by adopting and implementing the safety management system (SMS) concept.

3.4.3 Additional objectives of an RSOO may include the following:

- a) strengthening of the regional institutional framework for aviation safety and assistance in the development of a harmonized regulatory framework for the region;
- b) promotion of a comprehensive systems approach to the conduct of safety oversight activities, focusing on the effective implementation of SARPs, an efficient oversight capability in Member States, and the effective implementation of the critical elements of safety oversight;
- c) development of an information system to facilitate access to safety-related and safety-critical information within the region; and
- d) modernization of the civil aviation authorities of Member States to enable them to comply with international and national safety standards.

3.4.4 It is important to note that ICAO's support of regional initiative relies on:

- a) well-defined and documented strategic objectives, requiring the active participation of civil aviation administrations in their preparation;
- b) the strong commitment of recipient governments or administrations to the concept of a regional safety oversight system; and
- c) a degree of assurance of the viability and sustainability of the system to be established.

3.5 THE ROLE OF ICAO

3.5.1 ICAO can provide assistance to States that are willing to enter into a cooperative agreement for the establishment and management of an RSOO on the basis of an agreement between ICAO and the interested parties.

3.5.2 One type of assistance that could be provided is the management of the RSOO until such time that Member States develop the ability to manage it. This would entail the training of personnel by ICAO to take over the management of the RSOO at a future date.

3.5.3 ICAO may also provide technical and logistic support as well as information and documents that the RSOO may need and, at the request of Member States, may also agree to monitor the effectiveness of the RSOO.

3.5.4 ICAO may also provide advice or propose the most appropriate course of action for required activities that the regional safety oversight system is not able to implement, or act in any other capacity deemed appropriate and necessary by Member States.

3.5.5 The USP of ICAO will coordinate assistance to States and foster regional and subregional cooperation and partnerships to strengthen safety oversight capabilities.

3.6 RELATIONSHIP WITH AVIATION-RELATED ORGANIZATIONS

3.6.1 Having decided to establish a regional safety oversight system and in order to enhance their safety oversight capability, Member States may cooperate with other aviation-related international and

regional organizations in all areas of international civil aviation, particularly in the safety, environmental and air traffic management fields, within their respective mandates, including, but not limited to, the following:

- a) regulations and legislation;
- b) international events and meetings;
- c) assistance in locating financial resources;
- d) training of technical and administrative personnel; and
- e) identification of areas of common interest.

3.6.2 In establishing a regional safety oversight system, Member States may engage in different levels of consultation and establish and maintain permanent relationships with other aviation-related organizations through:

- a) the exchange of letters and documents;
- b) mutual visits;
- c) invitations to attend meetings; and
- d) consultations and coordination.

3.6.3 Air operators, aircraft maintenance organizations and service providers are responsible for the safe, regular and efficient conduct of aircraft operations, including compliance with any laws or regulations that the State of Registry, the State of the Operator and the State where the aircraft is operating may promulgate. The establishment of an RSOO and the adoption of joint operating regulations and procedures for the certification of commercial air operators, aircraft maintenance organizations, aeronautical personnel and aeronautical training centres should not increase the operational cost of the aviation industry as a whole, even as they help industry to expand its businesses and achieve optimum utilization of aircraft and personnel, as well as the mutual recognition of the certificates and licences issued by Member States.

3.7 DUTIES AND RESPONSIBILITIES OF A REGIONAL SAFETY OVERSIGHT ORGANIZATION

3.7.1 The RSOO should have a clearly defined mission statement that should also be included in the agreement document. The mission statement will depend on what Member States agree should be the duties and responsibilities of the RSOO, but it should include the provision of advice and assistance to Member States. The mission statement should contain elements to enable Member States to implement an effective and efficient safety oversight system.

3.7.2 The mission statement should also provide for the implementation of common aeronautical regulations, standards, procedures and documentation relating to safety oversight and requiring Member States to standardize their processes and procedures for licensing, certification and supervision of the aviation industry, on the basis of international requirements.

3.8 ORGANIZATIONAL STRUCTURE OF A REGIONAL SAFETY OVERSIGHT ORGANIZATION

3.8.1 General

3.8.1.1 The establishment and management of a regional safety oversight system should be based on the participation and commitment of the civil aviation authorities of Member States. Its ultimate purpose, objectives, activities, output, result indicators and duration should be clearly defined before it becomes fully functional.

3.8.1.2 States may wish to start with a basic RSOO structure that can evolve into a more complex organization. The rate of evolution could depend on the success or failure of States to comply with the defined objectives of the proposed regional system and on their interest in meeting the demand for an effective decision-making process required for the establishment and management of an effective and robust regional safety oversight system.

3.8.1.3 In a basic regional organization, the national civil aviation authorities retain full responsibility for licensing, approving, certificating and supervising aviation activities, while the RSOO develops and provides standardized, common aviation regulations and procedures for licensing, approving, certificating and supervising those activities, and also provides advice, guidance and assistance to Member States.

3.8.1.4 In a more complex regional organization, the national civil aviation authorities may delegate part of their functions and responsibilities concerning licensing, approval and certification of personnel, organizations and aeronautical products, based on common regional regulations and procedures, while retaining responsibility for the oversight of all aviation activities, the resolution of safety concerns and the enforcement of applicable national laws and common regional aviation regulations.

3.8.2 Organizational structure of a generic RSOO

3.8.2.1 The organizational structure of a generic RSOO is illustrated in Figure 3-1. It is not all-inclusive, and States are encouraged to build on the example provided in order to establish a regional safety oversight system that meets their particular needs.

Governing Body

3.8.2.2 For a regional safety oversight system to be effective, it is essential that all Member States be represented in the Governing Body of the RSOO.

3.8.2.3 The Governing Body should be responsible for formulating policy, appointing the Director General (DG) or Chief Executive Officer (CEO), determining the budget, specifying the terms of reference and performing other activities related to the overall management and policy-making process of the RSOO. The Governing Body should also be responsible for providing guidance to the DG (or CEO) on issues related to regional and international relationships and for determining the general principles that will guide the work of the RSOO.

3.8.2.4 It should be noted that the responsibility for safety and the implementation of SARPs and common operational regulations (including the responsibility for the issuance, modification, suspension and/or revocation of licences, certificates, authorizations and approvals) remains that of individual Member States and not that of the regional organization or its Governing Body.

3.8.2.5 As indicated earlier, the primary responsibility of the RSOO is to perform safety oversight-related tasks on behalf of Member States under the overall guidance of the Governing Body, which should be composed of high-level representatives from Member States.

The Director General/Chief Executive Officer

3.8.2.6 The Director General (DG) or Chief Executive Officer (CEO) appointed by the Governing Body is responsible for the overall management and administration of the RSOO as well as the implementation of the policies formulated by the Governing Body in line with the established terms of reference and guidance provided. The DG/CEO is responsible to the Governing Body of the RSOO. The duties and responsibilities of the DG/CEO should include, but not be limited to:

- a) administering the overall activities of the RSOO and overseeing the activities of all RSOO staff members in order to:
 - 1) liaise with RSOO Member States on issues related to safety oversight and, specifically, the development of regulations, procedures and processes relating to aviation activities in Member States; and
 - 2) ensure the standardization and quality of all RSOO products, such as common regulations, directives, procedures and processes for the licensing of aviation personnel and certification of aviation activities in Member States;
- b) guiding the planning and execution, as necessary, of additional RSOO activities, such as the:
 - 1) training and recurrent training of the technical staff of the RSOO;
 - 2) development and conduct of seminars/workshops for the administrative and technical staff of Member States;
 - 3) development, publication and maintenance of safety oversight-related documentation (guidance material) for Member States; and
 - 4) development, publication and maintenance of manuals and handbooks required for the management and administration of the RSOO;
- c) coordinating the resources and activities of the RSOO to ensure its effective and efficient operation;
- d) liaising with Member States' administrations and other organizations that have established a relationship with the RSOO in order to second experts or secure funding for the proper operation of the RSOO;
- e) representing the RSOO or Member States at international and regional safety oversight-related meetings, conferences, symposia, etc.;
- f) developing reports and working papers for the Governing Body, as required, on the activities of the RSOO; and
- g) performing other duties as assigned by the Governing Body.

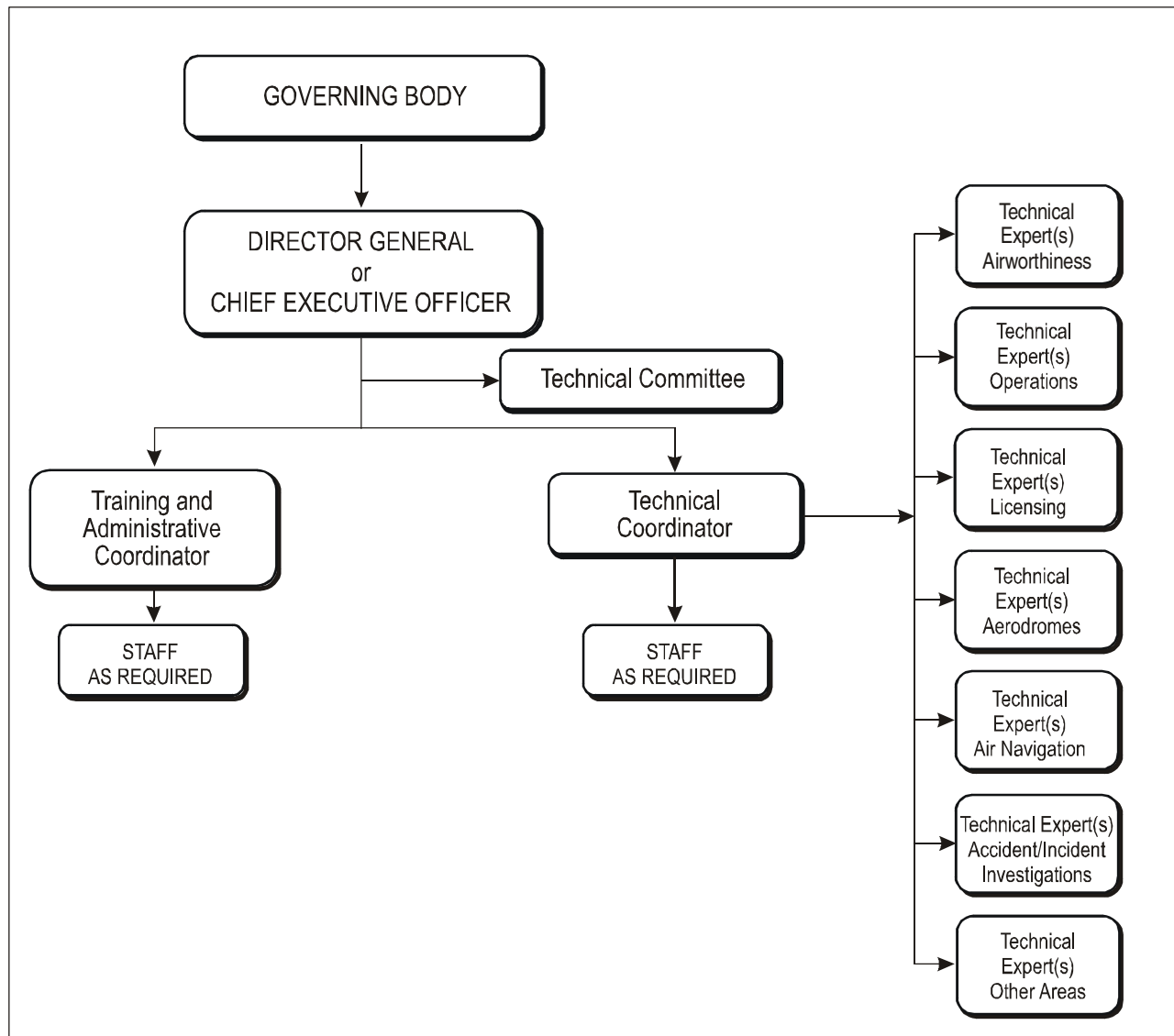


Figure 3-1. Organizational structure of a generic RSOO

Technical Committees

3.8.2.7 A Technical Committee consisting of technical experts from Member States may be formed to assist the DG/CEO with technical requirements and assist in the implementation of these requirements in each Member State.

3.8.2.8 Several possibilities exist for the composition of a Technical Committee. One option is the formation of one single Committee consisting of members with diverse expertise. The Technical Committee may meet a few times a year to discuss the technical work of the RSOO and share with the RSOO the technical concerns as it relates to each Member State and agree with a technical programme to be followed. A second option is the formation of various committees based on specific areas of expertise.

3.8.2.9 Regardless of the type and composition of the Technical Committee, its duties and responsibilities should be clearly defined. Most of all, it should be made clear that the Technical Committee's main purpose is to bring to the attention of the RSOO the technical concerns of each Member State, facilitate the development of common operating regulations and procedures and facilitate the implementation of these regulations and procedures in each Member State in a standardized manner.

3.8.2.10 The Governing Body may add to, amend or eliminate the duties and responsibilities of the Technical Committee to reflect regional needs and specifically the requirements of the RSOO. The following are some of the duties and responsibilities of the Technical Committee:

- a) to agree on common operating regulations concerning the core safety oversight functions of Member States (such as personnel licensing, aircraft operations, airworthiness of aircraft, aerodromes, air traffic management systems, and accident investigation) to enable Member States to implement SARPs in a standardized manner;
- b) to agree on technical guidance including implementation procedures and checklists for use by the national experts as well as the technical staff of the RSOO;
- c) the development of a technical cooperation programme for safety oversight in Member States to facilitate the work of the RSOO Secretariat;
- d) the establishment of subcommittees, panels and/or study groups to study technical requirements based on a specific need and to address speciality areas as may be required from time to time;
- e) the examination of reports from groups of experts, panels and/or study groups and the development of recommendations for the consideration of the Governing Body and/or the Secretariat;
- f) the proposal of amendments to operating regulations as necessary and the review of proposed amendments to operating regulations, practices and procedures presented by Member States and/or the Secretariat; and
- g) the review of the technical reports of the Secretariat and preparation of recommendations to the Governing Body.

Training and Administrative Coordinator (TAC)

3.8.2.11 The Training and Administrative Coordinator (TAC) is responsible for all training-related activities of the RSOO and also assists the DG or CEO in the administration of the RSOO.

3.8.2.12 Training-related responsibilities include the planning, development under the guidance from the Technical Coordinator and maintenance of training courses, seminar/workshop material and guidance for the Secretariat as well as the technical experts of Member States.

3.8.2.13 Administration-related responsibilities include the management of the selection and recruitment process; assignment of tasks; planning and development of activities and schedules; and the timely dissemination of RSOO products.

3.8.2.14 Depending on the size of the RSOO, the level of its authority and the complexity of its activities, the duties and responsibilities of the TAC may be split into two distinct offices: Training

Coordinator and Administrative Coordinator. However, whether structured under one office or two, the duties and responsibilities of the TAC should include but not be limited to:

- a) planning, developing under the guidance from the Technical Coordinator, organizing, coordinating and conducting safety oversight-related seminars, workshops and auditor training courses;
- b) preparing and coordinating the preparation of safety oversight seminars, workshops and training material and ensuring the timely submission of seminar and training material by other officers;
- c) planning and coordinating activities related to the development and updating of technical training manuals and guidance material;
- d) ensuring that material required for seminars, workshops and training courses is up to date and readily available;
- e) developing and coordinating the development of guidance material for RSOO staff and the technical staff of Member States;
- f) coordinating and integrating the guidance material produced by the RSOO Secretariat, consultants or other external organizations;
- g) coordinating with the Technical Coordinator the development and dissemination of information relating to RSOO activities;
- h) ensuring the timely production and distribution of RSOO products, such as reports, documents, and time-sensitive correspondence;
- i) monitoring the supervision of administrative support activities performed by the RSOO general service staff;
- j) representing the RSOO at international and regional safety oversight-related meetings, conferences, symposia, etc.;
- k) supervising the maintenance of RSOO personnel records, including records relating to the training of personnel;
- l) liaising with the relevant sections of the RSOO for the collection and collation of material required for the development of guidance material, training, seminars and workshops;
- m) reviewing travel claims for accuracy and for adherence to staff rules and regulations;
- n) performing other assignments as necessary and as assigned by the DG/CEO; and
- o) keeping abreast of developments and trends in the specialized fields of concern to the RSOO by studying periodicals, reports and manuals.

Technical Coordinator

3.8.2.15 The Technical Coordinator has, under the leadership of the DG/CEO, the overall responsibility for all technical work conducted by the RSOO including the supervision and control of the activities of the

technical staff and the technical support (administrative) staff. The Technical Coordinator should also act as the secretary of the Technical Committee. The responsibilities of the Technical Coordinator include but are not limited to:

- a) developing for the approval of the DG/CEO and Governing Body the qualification and experience criteria for the selection and recruitment of the technical staff;
- b) assigning and distributing duties to the technical staff and conducting overall supervision of their work-related activities;
- c) assisting the DG/CEO and Member States with the technical activities of the RSOO as well as with related activities within Member States;
- d) liaising with regional and international aviation-related organizations on technical issues of mutual interest aimed at enhancing the safety of aircraft operations;
- e) ensuring the quality of the technical work of the technical staff through the provision of training, guidance and briefings, as required;
- f) ensuring the quality of the technical products of the organization and the harmonization of its technical documentation;
- g) analysing the technical reports produced by the technical staff and approving all technical reports before their submission to the DG/CEO, the Governing Body or Member States, as appropriate;
- h) implementing the technical recommendations of the Technical Committee as approved/accepted by the DG/CEO and/or the Governing Body;
- i) assisting in the planning, development and implementation of the work plan of the organization and activities related to the conduct of safety oversight supervision and inspections;
- j) providing guidance to and assisting, as necessary, RSOO technical staff in the conduct of their specific duties within Member States;
- k) representing the RSOO at international and regional seminars, workshops, conferences, symposia, etc.;
- l) providing guidance to TAC on the development of training materials related to technical aspects, and participating in the conduct of the RSOO technical staff training courses, seminars and workshops;
- m) following up on the implementation of recommendations forwarded to Member States with respect to RSOO activities;
- n) assisting the DG/CEO in the planning and execution, as necessary, of all additional activities of the organization, such as the:
 - 1) training and recurrent training of the technical staff of the organization;
 - 2) development, publication and maintenance of safety oversight-related documentation (guidance material) for the use of Member States; and

- 3) development, publication and maintenance of manuals and handbooks required for the management and administration of the technical programme of the organization;
- o) performing other duties as assigned by the DG/CEO; and
- p) keeping abreast of developments and trends relating to aviation safety in general, and safety oversight in particular, by studying periodicals, reports and manuals.

Technical Experts (RSOO technical staff/personnel)

3.8.2.16 The proposed organizational structure assumes that qualified technical personnel would be recruited by the RSOO to cover all areas of its responsibility.

3.8.2.17 The number and composition of the technical staff very much depends on the level of activities of the RSOO and the level of authority bestowed on it. Several modalities can be considered in this regard. For example, Member States may second technical staff under a separate agreement, or under the principal agreement that established the organization, as part of their contribution to the establishment and maintenance of the RSOO. Alternatively, Member States may allow technical experts to be directly recruited by the RSOO under the sole responsibility of the organization. In any case, the RSOO should have at least one expert in a given speciality area to serve as a focal point for activities related to that speciality.

3.8.2.18 Member States, depending on the extent of the tasks (and responsibility) they intend to transfer to the RSOO, may need to maintain a certain level of capability in several areas such as licensing, certification and authorization, accident and incident investigation, which are the direct obligations of a State under the Convention. Regardless of the level of authority bestowed on the RSOO, Member States should be mindful that the ultimate responsibility for these activities remains that of the individual Contracting State. The major benefits of establishing a regional safety oversight system (sharing of resources) can only be achieved if the RSOO is enabled to act on behalf of Member States, to the highest possible extent, with States maintaining supervisory control to ensure that the system established is enabling them to effectively meet their international obligations.

3.8.2.19 Depending on the structure of the RSOO and arrangements agreed upon by Member States, its technical experts may be required to assist Member States with their licensing and certification obligations as well as in conducting inspections and surveillance of the aviation industry on their behalf. Because these activities would be conducted under the direct control of the individual Member States, it would enable them to individually meet their responsibilities and obligations.

3.8.2.20 The ability of the RSOO to effectively assist Member States depends, to a large extent, on the competence of its technical staff. To effectively fulfil its responsibilities, the RSOO must be properly organized and staffed with appropriately qualified and experienced personnel capable of accomplishing the wide range of technical duties assigned to the organization.

3.8.2.21 The licensing, certification and supervision of civil aviation activities include a wide range of complex evaluations, inspections, analyses and interventions to ensure compliance with common or national regulations, operating procedures and practices. Effective execution of these tasks depends, to a large extent, on the qualifications, experience, competence and dedication of the technical staff of the RSOO.

3.8.2.22 In addition to technical competency, it is critical that technical staff possess a high degree of integrity, be impartial in carrying out their tasks, be tactful, have a good understanding of human nature and possess good communication skills. Considering the specialized and sensitive nature of the RSOO's mission, it is vitally important that the qualifications, previous experience and personal characteristics of

each person employed, whether directly recruited by the RSOO or seconded from Member States to perform safety oversight-related tasks on their behalf, including inspection and surveillance duties, be verified and carefully evaluated before they are selected.

3.8.2.23 Ideally, RSOO technical staff should be at least as qualified as the personnel to be inspected or supervised. With respect to personnel licensing officers, the qualifications required should include considerable experience in one of the professions for which the licence or rating is issued. If the licensing officer is involved in conducting examinations and tests, the qualifications and experience required should be similar to those which are required for licence holders at the level that the examination or testing is being conducted.

3.8.2.24 The certification and surveillance of civil aviation activities involves the performance of tasks far beyond the review and approval of documentation, including the timely inspection by qualified personnel of all civil aviation activities, starting with the certification process through to ongoing, periodic surveillance long after the certificate has been issued. Although the technical staff are expected to be at least as qualified as those who are being supervised and inspected, it is not expected or required that in all cases any one technical expert should possess the same experience as all the personnel under inspection.

3.8.2.25 With respect to aircraft accident and incident investigation, an RSOO technical expert in this field should assist Member States in related matters, such as: investigations of safety occurrences, ensuring that they are conducted in compliance with the provisions of Annex 13, *Aircraft Accident and Incident Investigation* and development of accident prevention programmes; serving as a depository of safety-related information, ensuring that such information is made available to States and is used solely for the purpose of accident prevention.

3.8.2.26 The intent is for the RSOO to be organizationally competent, which may require it to recruit a team of technical personnel with expertise in a mix of disciplines. As much as practicable, they should be as knowledgeable, qualified and experienced, individually or as a team, as the organization being inspected. Licensing and other skills or qualifications as well as an acceptable level of proficiency in and knowledge of civil aviation activities, limitations, equipment, systems, operations, etc., will permit RSOO technical staff to better assess the knowledge, techniques and overall competence of the civil aviation personnel, operators, service providers and maintenance organizations in Member States.

Chapter 4

FINANCING A REGIONAL SAFETY OVERSIGHT ORGANIZATION

4.1 BENEFITS FROM ECONOMIES OF SCALE

4.1.1 The key objective of establishing a regional safety oversight system is to enable States to meet their international safety oversight obligations in the most effective and efficient manner. Establishing a regional safety oversight system allows for:

- a) economies of scale to be achieved;
- b) technical personnel, knowledge and technology to be shared; and
- c) administrative savings to be realized without sacrificing effectiveness.

4.1.2 In achieving economies of scale, many factors must be considered, not least of which is the implementation of a regional technical assistance system for Member States in order to:

- a) share objectives, strategies and activities in order to overcome shortcomings in the implementation of safety oversight responsibilities at the national and regional levels;
- b) attract, pool and retain highly skilled technical personnel for the multinational and multifunctional teams of experts that assist Member States in meeting their obligations for licensing, certification, approval and supervision of aviation in their respective States; and
- c) develop and implement joint aviation regulations, standards, safety procedures and common guidance material to be applied at the regional level, benefiting all aviation activities in the region and also enhancing harmonization at the global level.

4.2 SOURCES OF FINANCING

4.2.1 Entering into an agreement to establish an RSOO requires the preparation of an estimate of the level of funding that will be required to maintain and sustain the organization in terms of legal and organizational structure, administrative and office equipment, personnel training, material, equipment upgrades and other costs related to its operation.

4.2.2 Together, Member States should identify the resources required to establish and manage the new organization over the long term. In some cases, the establishment of the organization may require assistance (financial and/or technical) from the Technical Co-operation Bureau (TCB) of ICAO, donor States, international or regional organizations, financial institutions, manufacturers or other sponsors. In all instances, it is imperative that the amount required for the establishment and maintenance of the organization be estimated and its financing planned for.

4.2.3 It should also be noted that funding partners, regardless of their size, shape or nature, will want to ensure the commitment of Member States, in part through a planned contribution programme, to the establishment and effective maintenance of the RSOO.

4.3 TRUST FUNDS

4.3.1 Member States willing to establish an RSOO may wish to contact TCB which has the capability to efficiently implement civil aviation development projects, including the global recruitment of highly qualified technical experts, the management of training programmes and the cost-effective purchase of equipment. TCB's capabilities, at least in the developmental stage, may ensure the creation of an appropriately structured RSOO. Should Member States elect TCB to assist them in the establishment of the RSOO, TCB will study the financial requirements and advise Member States of the funding required to establish and manage the RSOO.

4.3.2 TCB services are normally funded through trust funds coming from the States themselves or provided by other entities on behalf of States. Funds made available to ICAO by Member States are administered as trust funds that could be subject to upward or downward adjustment in accordance with the actual costs incurred. Any interest earned is added to the trust fund and is used, when necessary, to cover project activities. The trust fund account will be maintained by ICAO in accordance with relevant financial regulations. ICAO furnishes periodic statements showing the quarterly status of the trust fund. The year-end statement is only submitted when the accounts for the year have been closed and audited by an external auditor.

4.3.3 The service provided by ICAO in administering trust funds is one example of funding possibilities, and States can also investigate similar arrangements that may be available in the market. What is important is that States intending to establish an RSOO should, as one of the first steps, consider the financial obligations and funding sources.

4.4 STATES' OBLIGATIONS AND CONTRIBUTIONS

4.4.1 Member States should establish a mechanism to ensure that the funds required for the establishment and management of an RSOO, corresponding to the cost sharing plan of Member States, are deposited in a timely manner. The lack of timely payment of Member States' contributions to the organization could delay or impede its effectiveness. Possible delays in the time required to process these payments should also be taken into account because processing delays will have the same negative effect as would non-payment.

4.4.2 The success of the regional organization will depend greatly on the commitment of its Member States to fulfilling their obligations towards the RSOO. Meeting their financial obligations will be a strong indicator of their commitment without which the RSOO may fail to function effectively and States may not be able to meet their safety oversight obligations.

4.5 DEVELOPMENT OF A BUDGET

4.5.1 The financial requirements should be based on an annual budget that includes the estimated operating cost of the RSOO. It is possible that the financial requirements of an RSOO may not be fully met

by the contributions from Member States, and it may have to devise a system to generate additional funds. However, although the RSOO may be able to generate funds in the long term, it is imperative that, at least in the first few years of its existence, an adequate annual budget be developed that can be fully supported through the contributions from Member States.

4.5.2 The amount to be paid by each Member State may vary depending on the size and complexity of its aviation activities. This, of course, would have to be addressed early in the agreement entered into by Member States. However, it should be noted also that the amount contributed by States with significantly larger aviation activities will have a greater impact than that of States with smaller aviation activities.

4.5.3 It is advisable that the budget should specifically indicate the annual contribution required from each Member State and the other sources of funding that the RSOO has obtained.

Chapter 5

IMPLEMENTATION OF THE REGIONAL SAFETY OVERSIGHT PROGRAMME/SYSTEM

5.1 INTRODUCTION

5.1.1 Once established, the major objective of a regional safety oversight organization (RSOO) is to implement its programme and ensure the fulfilment of States' obligations for safety oversight. Member States have the responsibility to formalize the announced objectives of the RSOO and to meet their commitments to enable the RSOO to implement the established programme.

5.1.2 The specific objectives of an RSOO should be to:

- a) strengthen the regional institutional framework for aviation safety and assist in the development of a harmonized regulatory framework among Member States;
- b) promote a comprehensive systems approach to the conduct of safety oversight activities, focusing on the effective implementation of Standards and Recommended Practices (SARPs), the efficient oversight capability of Member States and the effective implementation of the critical elements of safety oversight;
- c) develop a regional information-sharing system in order to improve access to safety-related information; and
- d) assist the civil aviation authorities of Member States in their efforts to comply with international and national safety standards.

5.2 COMPLIANCE WITH SARPs

5.2.1 The majority of the articles of the Chicago Convention establish the rights and obligations of all Contracting States and provide for the adoption of international SARPs regulating international air transport. The Convention recognizes the fundamental principle that every State has complete and exclusive sovereignty over the airspace above and within its territory.

5.2.2 Article 37 of the Chicago Convention specifies that Contracting States must 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. To this end, ICAO has adopted SARPs dealing with practically all activities concerning the operation of an aircraft. However, it is the integration of these SARPs into the national regulations and practices of Contracting States and their timely implementation that will ultimately achieve safety and regularity of aircraft operations worldwide.

5.2.3 Through the provision of national regulations, States are expected to implement and enforce SARPs contained in the Annexes to the Convention. 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 the Convention.

5.2.4 One of the objectives of the RSOO should be to assist Member States in developing and implementing common operating regulations and procedures to ensure timely amendment and approval of changes to the regulations that may be required from time to time.

5.3 REGULATIONS, GUIDANCE MATERIAL, PROCEDURES AND PROCESSES

5.3.1 When implementing the objectives of the RSOO, Member States must keep in mind that the obligations of an individual State under the Chicago Convention remain unchanged. These obligations include, *inter alia*, the licensing of operational personnel; the certification of aircraft, air operators, aerodromes and maintenance organizations; the control and supervision of licensed personnel, certified products and approved organizations; the provision of air navigation services (including meteorological services, aeronautical telecommunications, search and rescue services, charts and the distribution of information); and the conduct of aircraft accident and incident investigation.

5.3.2 Depending on its terms of reference and the way it is structured, the RSOO may be in a good position to assist Member States in fulfilling these obligations through the use of multinational and multifunctional teams of competent experts at its disposal.

5.3.3 The RSOO should develop and provide its technical experts with guidance on how to accomplish their specific functions, including procedures for evaluating documentation and demonstrating its operational suitability for the initial and continued certification and licensing of applicants. ICAO has developed and published various technical guidance materials to assist States in implementing Annex provisions which may also be used by the RSOO. However, the RSOO may need to develop and publish its own technical guidance material to assist its technical experts in the implementation of the joint aviation regulations, procedures and practices.

5.3.4 Joint aviation regulations promulgated or adopted by Member States as well as the policies, procedures and guidance material developed by the RSOO should facilitate the processes and procedures needed for the issuance of common certificates, aeronautical licences and/or approvals in Member States. This should result in increased efficiency and effectiveness, optimum user satisfaction and the optimization of Member States' resources.

5.4 IMPLEMENTATION OF THE CRITICAL ELEMENTS OF SAFETY OVERSIGHT

5.4.1 The critical elements of a safety oversight system are essentially the safety defence tools required for the effective implementation of safety-related regulations, policy and operating procedures. Member States are expected to implement the critical elements of safety oversight in a way that assumes the shared responsibility of the State and the aviation community of the region.

5.4.2 The critical elements of a safety oversight system encompass the whole spectrum of civil aviation activities, including areas such as aerodromes, air traffic control, communications, personnel

licensing, flight operations, airworthiness of aircraft, accident/incident investigation, and transport of dangerous goods by air. The critical elements of a safety oversight system are described in considerable detail in Part A of this manual — *The Establishment and Management of a State's Safety Oversight System*.

5.5 JOINT CERTIFICATION AND LICENSING SYSTEM

5.5.1 The adoption of joint aviation regulations and procedures for the certification of commercial air operators, aircraft maintenance organizations, design organizations, production organizations, aerodromes, aeronautical personnel and aeronautical training centres should help to reduce the operational costs of both the civil aviation authority and the aviation industry, thereby facilitating healthy industry growth in Member States.

5.5.2 The use of common requirements and procedures does not constitute in any way the use of less stringent standards; on the contrary, the aim is to standardize criteria in order to motivate Member States to achieve the required safety level of an international civil aviation system. A joint certification and licensing system would enhance the level of air transport safety in the region by allowing the oversight of the aviation system in the region to be conducted in a standardized format because the RSOO would be using the same regulations and procedures for its own purpose. The ability to assign qualified and experienced technical experts, who may otherwise not be available to individual Member States due to financial capability, would also enhance the safety level in the region.

5.5.3 The civil aviation authorities of Member States would remain the sole licensing and certification authorities for the issuance of operator certificates, approval of aircraft maintenance organizations, approval of design and production organizations, issuance of aeronautical licences and ratings, and the certification of training centres because this is the responsibility of each Contracting State. However, the tasks leading to certification and licensing would be performed by the regional organization.

5.6 INSPECTION AND SURVEILLANCE

5.6.1 A Contracting State's obligation and responsibility for a safe and orderly international civil aviation system does not end with the issuance of a licence or certificate. Maintenance of continued safe operations, particularly during periods of significant change, demands that a State also establish a system of ensuring continuing organizational as well as individual, professional competency of licence/rating/certificate holders; continuing validity of licences/ratings/certificates; continuing capacity to maintain a safe and regular operation by air operators and service providers; and continuing capacity to properly maintain approved maintenance organizations.

5.6.2 Maintenance of continued safe operations as detailed in 5.6.1 can be assured only if the State regulatory authority is in a position to attract, recruit and retain experts with the requisite level of competency and expertise. Lack of appropriate competency and expertise in many States resulting from inadequate resources necessitates an alternative solution to enable States to meet their safety obligations. The role of the RSOO, therefore, is to assist Member States in carrying out these obligations and responsibilities by providing highly skilled technical personnel for the supervision or auditing of licensed personnel and certificated organizations. This can include certification and inspection of flight crew, competency checks and others, as applicable.

5.6.3 The required surveillance and related inspections should be planned and conducted by RSOO technical personnel whenever such services are necessary or requested by a Member State. In this respect

RSOO personnel must be appropriately qualified and be in possession of current and appropriate credentials identifying them as technical experts of the RSOO, approved or accepted by the civil aviation authorities of Member States. The right of the RSOO staff responsible to have unhindered access to inspect aircraft, documents, aerodromes, air traffic services and other relevant facilities must be clearly established in the personal identification of each technical person, and mandated by the civil aviation authorities of Member States.

5.6.4 The surveillance function should be accomplished on a continuing basis, performed at specified times or intervals or conducted in conjunction with the renewal of a licence or certificate. Scheduled inspections must be augmented by periodic, random inspections of all facets of the operation. ICAO publishes guidance on inspection periodicity in a number of guidance documents. In the case of an air operator or a maintenance organization, regardless of the method used for surveillance, all significant aspects of the air operator's or maintenance organization's procedures and practices should be evaluated and appropriate inspections conducted regularly.

5.6.5 Throughout all phases of the surveillance programme, the standards of capability and competence should be equal to or exceed those required at the time of original certification. Accordingly, RSOO technical personnel conducting surveillance and related inspections should carry out such activities in a thorough, convincing manner to demonstrate that operations and/or maintenance of competency are being carried out in accordance with the requirements of the certificate issued, the related operations/maintenance requirements/specifications, the operations manuals, control manuals and appropriate civil aviation regulations. As a consequence, the authority acquired through the initial issuance of the relevant certificate should be renewed as applicable.

5.6.6 In summary, the surveillance and inspection programme should provide a comprehensive and conclusive assessment of the maintenance of competency of licence/certificate/rating holders and of the continuing competency of air operators and maintenance organizations. Moreover, the associated inspection reports should indicate whether the inspection and surveillance system and procedures employed by the RSOO are effective in determining the competence, record of compliance and overall capability of industry's aeronautical personnel. Each Member State retains the responsibility for ensuring the work carried out by the RSOO is done by appropriately qualified technical personnel and in accordance with established requirements and procedures.

5.7 REPORTING AND SHARING OF INFORMATION

5.7.1 The RSOO should establish procedures for sharing among Member States safety-related information as well as reports of its findings. As the organization undertaking safety oversight-related tasks on behalf of Member States, it has the responsibility to ensure that every Member State is well informed about the safety oversight situation in every other Member State.

5.7.2 The RSOO could also serve as a depository of safety-related information to ensure that safety-critical information is made available to States and the industry, as applicable.

5.7.3 Member States should also be encouraged to directly share safety-related information among themselves as well as with other ICAO Contracting States. The non-sharing of safety-critical information among States, although such information is already known by one or more States, has been identified as a serious shortcoming with the potential for a negative impact on safe aircraft operation. It is believed that had some safety-critical information been freely shared among States, a number of accidents and incidents could have been prevented.

5.7.4 It is very important that the RSOO maintains a record and copies of all reports disseminated and of all safety-related information transmitted to Member States, so that such reports and information can be retrieved for accident prevention purposes when necessary.

Chapter 6

TRAINING PROGRAMME OF THE REGIONAL SAFETY OVERSIGHT ORGANIZATION

6.1 TRAINING OF TECHNICAL STAFF

6.1.1 The regional safety oversight organization (RSOO) must determine the minimum professional qualifications of its technical personnel and also provide for the technical and administrative training necessary for them to effectively accomplish their duties and responsibilities. The technical personnel represent the authority and, as such, require the continuing development of their knowledge and skills related to their respective responsibilities. This should be accomplished through initial and periodic training and refresher courses in all the disciplines for which the technical officers are responsible. Participation in seminars and workshops organized by ICAO and international and regional aviation-related organizations can also enable RSOO technical staff to widen their horizons and share experience with experts from other regions. Additional studies, such as courses in technical report writing and supervisory training will also assist the technical experts in improving their effectiveness and efficiency.

6.1.2 Periodic practical and theoretical specialized (technical) training, including supervisory courses, will enable technical personnel to maintain a high level of knowledge and expertise and undertake their duties and responsibilities in a more effective and efficient manner. Training of technical personnel shall not be limited to strictly professional elements such as the maintenance of competency and currency. It is essential that inspectors also be provided with training on subjects such as applicable joint aviation regulations; inspectors' skills, knowledge, duties and responsibilities; and procedures for the implementation and enforcement of requirements.

6.2 TRAINING POLICY AND OBJECTIVE

6.2.1 One of the stated objectives of the RSOO could be the institution of a regional training policy, together with the development and establishment of a regional training programme, in order to provide the technical personnel of Member States with specialized training courses and seminars/workshops. The aim of such a policy would be the preparation and implementation of joint aviation regulations and operational safety rules and procedures, as well as the certification and supervisory procedures and the implementation of a comprehensive systems approach for the development, throughout the region, of the regional safety management system (SMS) concept.

6.2.2 This objective should be further enhanced through the implementation of relevant ICAO SARPs, associated procedures, guidance material and safety-related practices, and the effective execution of the critical elements of a regional safety oversight system. Furthermore, RSOO training policies, quality management requirements, resource management and process design should be considered when developing the regional training programme to ensure that the required training will be directed towards satisfying RSOO needs. The training objective should be reviewed, evaluated, updated, or replaced, as deemed appropriate, using a process-based approach.

6.3 TRAINING PROGRAMME

6.3.1 The Training and Administrative Coordinator (TAC) or a person with similar authority should be in charge of the development and implementation of the regional training programme. The TAC, assisted by a training officer/assistant, should periodically evaluate the training needs of the technical personnel assigned to functions and responsibilities related to the certification and supervisory processes carried out in the region to determine the RSOO training programme covering the needs of all RSOO staff. At this stage, it should be emphasized that training programmes should be established for all staff members and not only for the technical staff.

6.3.2 Different levels of training will be needed for safety oversight experts in the RSOO and in the national civil aviation authorities (NCAAs) of Member States. During the initial implementation of the training programme, specific training in safety oversight will have to be provided to the technical personnel involved in the development of joint regulations and certification and supervisory procedures. Once the RSOO is fully established, the training needs of other experts in the NCAA should be addressed in order to strengthen the safety oversight capability of the NCAAs and the RSOO.

6.3.3 An analysis of training needs should be conducted on the basis of the job description of each staff member, and training addressing those needs should be developed and delivered to the personnel concerned.

6.3.4 The training programme's preliminary indoctrination, initial and on-the-job training of new personnel, as well as the specific, recurrent and external training of existing personnel should ensure that RSOO permanent personnel, along with NCAA technical staff, are aware of the relevance and importance of their activities within the system and that they completely understand how they contribute to the overall achievement of the organization's policy and objectives.

6.3.5 If training is provided through the services of an external training service provider, the RSOO should continually monitor the quality of the training provided to its staff. The success of the training activities will depend in part on effectiveness of the interactions between the TAC, the training service providers and the trainees.

6.4 TRAINING PROCESS

6.4.1 In order to close the gap between the existing and required competence of experts, when selecting and implementing the RSOO training programme, the training coordinator should closely monitor the following stages of the training process:

- a) determination of training needs;
- b) design and planning of training;
- c) provision of training; and
- d) evaluation of training outcomes.

6.4.2 Through their participation in the training process, RSOO technical personnel and seconded experts from Member States, whose competence is being developed through the regional training programme, would develop a sense of ownership of the process, resulting in their assuming greater responsibility to ensure its success. The RSOO training process should be monitored on an ongoing basis and improved or amended as deemed necessary.

6.5 TRAINING REQUIREMENTS

6.5.1 The RSOO training programme should be an integral part of its regular activity, and RSOO technical personnel and seconded experts from Member States should be adequately trained, properly qualified and fully experienced to perform the job. In addition to any technical training, staff should also be provided with training in the overall responsibilities and activities of the RSOO, the regional safety oversight system, management policies, the development and implementation of joint aviation regulations, and the certification and supervisory procedures under development.

6.5.2 The RSOO should also take advantage of external training programmes provided by international or regional organizations and the aviation industry. It is very common for international or regional organizations (such as the United States Federal Aviation Administration, the European Aviation Safety Agency, and the European Organisation for the Safety of Air Navigation (EUROCONTROL)), aircraft manufacturers or airlines to periodically offer training courses or seminars/workshops with the objective of enhancing the knowledge and skills of aviation personnel. Such external training programmes may benefit RSOO staff as well as the technical staff of Member States and enhance its capability to assist Member States in meeting their safety oversight obligations.

6.6 MAINTENANCE OF TRAINING RECORDS

Records of the training history of all RSOO technical personnel and of the experts seconded from Member States should be maintained at all times. Training records of all staff should be stored in a secure place where their confidentiality should be maintained at all times. The TAC and individual staff members are responsible for ensuring that training records are kept up to date and that their confidentiality is ensured at all times.

6.7 TRAINING EVALUATION

6.7.1 The purpose of the training evaluation is to confirm that both the organizational and training objectives have been met. Input used to evaluate training outcomes includes the specifications for training needs and for the regional training programme, and the records from the delivery of the training. It should be recognized that the results of the training often cannot be fully analysed and validated until the trainee can be observed and tested on the job.

6.7.2 Evaluations should be carried out on both a short-term and long-term basis as follows:

- a) In the short-term, trainees' feedback should be obtained regarding the training methods used, as well as the knowledge and skills gained as a result of the training.
- b) In the long-term, improvement in the trainees' job performance and productivity should be assessed.

6.7.3 Training evaluation/monitoring should be conducted on the basis of established criteria. The main purpose of monitoring is to ensure that the RSOO training programme is being managed and implemented as required so as to provide objective evidence that the programme is effective in meeting RSOO training requirements. Monitoring involves reviewing the entire training process at each of the four steps previously described (see 6.4.1).

6.7.4 Input for monitoring may include all records from all stages in the training programme. Based on these records, a review of the different stages can be performed to detect nonconformity issues for corrective and/or preventive actions. Such input can be collected on an ongoing basis to provide the basis for validating the training programme and for making recommendations for improvement.

6.8 COMPETENCE REQUIREMENTS

6.8.1 The RSOO's training policy, safety management requirements, resource management and training process design should be considered by the Training Coordinator, when initiating a training programme, to ensure that the required training will be directed toward satisfying the RSOO's training needs.

6.8.2 Competence requirements must also be documented. This documentation can be reviewed periodically or whenever necessary as tasks and responsibility assignments are made and the performance of each technical person and expert seconded from Member States is assessed. The definition of the RSOO's future needs, relative to its strategic goals and training objectives, including the required competence of its technical personnel and that of the experts seconded, may be derived from a variety of internal and external sources, as follows:

- a) organizational or technological changes that affect work processes or impact on the nature of services provided by the organization;
- b) training objectives reviewed and amended, as identified during the RSOO's Technical Committee review meeting;
- c) data recorded from past and current training;
- d) the RSOO's appraisal of the competence of each technical person and expert seconded from Member States for performing specified tasks and responsibilities;
- e) turnover or seasonal fluctuation records involving experts available in Member States;
- f) internal or external certification needed for the performance of specific tasks or functions;
- g) requests from RSOO technical personnel identifying opportunities for personal development, which contribute to the organization's objectives;
- h) the result of process reviews and corrective actions taken due to customer complaints or reports of nonconformity;
- i) directives from Member States' civil aviation authorities and/or Technical Committee directives or standards affecting RSOO activities and resources; and
- j) identification or anticipation of new customer requirements.

6.8.3 The Training Coordinator should conduct a regular review of the documents that indicate the competence required for every process and of the records that list the competence of each technical person and expert seconded from Member States. The review should be related to task requirements and task performance. Different methods can be used to review the competence of technical personnel, such as:

- a) interviews/questionnaires with technical personnel, supervisors and managers;

- b) observation;
 - c) group discussions; and
 - d) input from subject matter experts.
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APPENDICES

Appendix A

REFERENCES

The following ICAO publications are referred to in this manual and provide additional guidance material for the certification and surveillance of air transport operators.

Conventions and Related Acts

Convention on International Civil Aviation (Doc 7300)

Annexes to the Convention on International Civil Aviation

Annex 1 — Personnel Licensing

Annex 2 — Rules of the Air

Annex 3 — Meteorological Service for International Air Navigation

Annex 4 — Aeronautical Charts

Annex 5 — Units of Measurement to be Used in Air and Ground Operations

Annex 6 — Operation of Aircraft

Part I — International Commercial Air Transport — Aeroplanes

Part II — International General Aviation — Aeroplanes

Part III — International Operations — Helicopters

Annex 7 — Aircraft Nationality and Registration Marks

Annex 8 — Airworthiness of Aircraft

Annex 10 — Aeronautical Telecommunications

Volume I — (Radio Navigation Aids)

Volume II — Communication Procedures including those with PANS status

Annex 11 — Air Traffic Services

Annex 12 — Search and Rescue

Annex 13 — Aircraft Accident and Incident Investigation

Annex 14 — Aerodromes

Volume I — Aerodrome Design and Operations

Volume II — Heliports

Annex 15 — *Aeronautical Information Services*

Annex 16 — *Environmental Protection*

Volume I — *Aircraft Noise*

Volume II — *Aircraft Engine Emissions*

Annex 18 — *The Safe Transport of Dangerous Goods by Air*

Assembly Resolutions

Assembly Resolutions in Force (as of 8 October 2004) (Doc 9848)

Manuals and Circulars

Safety Oversight Manual (Doc 9734)

Part A — *The Establishment and Management of a State's Safety Oversight System*

Appendix B

DEFINITIONS

The definitions used in this manual are similar to those found in relevant Annexes to the Convention and in other ICAO documentation (such as the *International Civil Aviation Vocabulary* (Doc 9713)) or are the definitions intended by the Safety Oversight Audit Section (SOA) for this document and the safety oversight audit process.

Accident. An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, in which:

a) a person is fatally or seriously injured as a result of:

- being in the aircraft, or
- direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or
- direct exposure to jet blast,

except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or

b) the aircraft sustains damage or structural failure which:

- adversely affects the structural strength, performance or flight characteristics of the aircraft, and
- would normally require major repair or replacement of the affected component,

except for engine failure or damage, when the damage is limited to the engine, its cowlings or accessories; or for damage limited to propellers, wing tips, antennas, tires, brakes, fairings, small dents or puncture holes in the aircraft skin; or

c) the aircraft is missing or is completely inaccessible.

Note 1.— For statistical uniformity only, an injury resulting in death within 30 days of the date of the accident is classified as a fatal injury by ICAO.

Note 2.— An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.

Aerodrome. A defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.

Aerodrome certificate. A certificate issued by the appropriate authority under applicable regulations for the operation of an aerodrome.

Aerodrome manual. A manual that forms part of the safety assurance in an application for an aerodrome certificate, containing material required by a State's certification requirements as well as material for use by aerodrome operational personnel in the execution of their duties.

Aeronautical Information Publication (AIP). A publication issued by or with the authority of a State and containing aeronautical information of a lasting character essential to air navigation.

Note.— The term includes details of aerodrome certification conditions and exemptions/exceptions granted by the State aviation authority in relation to aerodrome certification requirements.

Aeronautical study. A study of an aeronautical problem to identify possible solutions and select a solution that is acceptable without degrading safety.

Aircraft. Any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.

Air navigation services. Services provided to air traffic during all phases of operations including air traffic management (ATM), communications, navigation and surveillance (CNS), meteorological services for air navigation (MET), search and rescue (SAR) and aeronautical information services (AIS).

Air operator certificate (AOC). A certificate authorizing an operator to carry out specified commercial air transport operations.

Air traffic. All aircraft in flight or operating on the movement area of an aerodrome.

Air traffic service (ATS). A generic term meaning variously, flight information service, alerting service, air traffic advisory service, air traffic control service (area control service, approach control service or aerodrome control service).

Audit. A systematic and objective review of a State's aviation framework to verify compliance with the provisions of the Chicago Convention or national regulation, conformance with or adherence to SARPs, procedures and good aviation safety practices.

Authorized person. A person authorized by the Director General of Civil Aviation (DGCA) or empowering Head of State in writing to act under the provision in which the expression occurs.

Cabin crew. A crew member who performs, in the interest of safety of passengers, duties assigned by the operator or the pilot-in-command of the aircraft, but who shall not act as a flight crew member.

Certified aerodrome. An aerodrome whose operator has been granted an aerodrome certificate.

Civil aviation authority. The governmental entity or entities, however titled, that are directly responsible for the regulation of all aspects of civil air transport, technical (i.e. air navigation and aviation safety) and economic (i.e. the commercial aspects of air transport).

Commercial air transport operation. An aircraft operation involving the transport of passengers, cargo or mail for remuneration or hire.

Crew member. A person assigned by an operator to duty on an aircraft during flight time.

Dangerous goods. Articles or substances which are capable of posing significant risk to health, safety or property when transported by air.

Note.— *Dangerous goods are classified in Chapter 3 of Annex 18 — The Safe Transport of Dangerous Goods by Air.*

Flight crew member. A licensed crew member charged with duties essential to the operation of an aircraft during flight time.

General aviation operation. An aircraft operation other than a commercial air transport operation or an aerial work operation.

Human Factors principles. Principles which apply to aeronautical design, certification, training, operations and maintenance, and which seek safe interface between the human and other system components by proper consideration to human performance.

Human performance. Human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations.

Inspection. The basic activity of an audit, which involves examination of the specific characteristics of the safety oversight programme of the Contracting State (*Safety Oversight Audit Manual (Doc 9735)*).

Inspector. A person trained and authorized to undertake inspections.

Investigator (of an accident or incident). A person charged, on the basis of his or her qualifications, with the responsibility to participate in the conduct and control of an investigation.

(Legal) Person. A person or an association of people or special purpose funds (e.g. a foundation) having legal personality and possessing legal capacity.

Operations manual. A manual containing procedures, instructions and guidance for use by operational personnel in the execution of their duties.

Operator. A person, organization or enterprise engaged in or offering to engage in the operation of an aircraft, aerodrome or associated aviation activity.

Public use (aerodrome). An aerodrome licensed to be available to all persons on equal terms and conditions for the take-off or landing of aircraft.

Regulation. The giving of authoritative direction to bring about and maintain a desired degree of order.

Note.— *For the purpose of this manual, this term includes but is not limited to instructions, rules, edicts, directives, sets of laws, requirements, policies, and orders.*

Responsibility/accountability. The state of being responsible for an undertaking, person, thing or action and for which an organization or individual or both are liable to be called to account.

Risk analysis/aeronautical study. A mechanism, part of a Safety Management System, used to assess the risk (combination of event or hazard severity and probability of occurrence) posed by a particular set of circumstances. It is used to compare the outcome of such an analysis against the intended outcome of a particular Standard, Recommended Practice or national requirement so that a solution can be selected that will not degrade safety below that which is intended.

Service provider. An organization, serving operators and other providers, that is part of the aviation activity and is functionally separated from its regulator.

State of Design. The State with jurisdiction over the organization responsible for the type design.

State of Manufacture. The State with jurisdiction over the organization responsible for the final assembly of the aircraft.

State of Occurrence. The State in whose territory an accident or incident occurs.

State of Registry. The State on whose register the aircraft is entered.

State of the Operator. The State where the operator's principal place of business is located or, if there is no such place of business, where the operator's permanent residence is.

Subsidiary legislation. Legislation arising from primary legislation.

— END —