



Agenda Item 4

Air Navigation Matters

4.1 AN-Conf/12 Results and other Global/Regional Air Navigation Developments

**THE NEW ICAO ANNEX 19 ON
SAFETY MANAGEMENT OF AIR NAVIGATION**

(Presented by the Secretariat)

SUMMARY

This Working Paper presents an introduction of the new ICAO Annex 19 in the *Safety Management* of air navigation, which will be applicable on 14 November 2013.

The new Annex 19 presents a strategic approach to implement a comprehensive State Safety Programme (SSP) framework together with the Safety Management System (SMS) of air navigation service providers (ANSPs), which includes the four major elements: Policy and Standardization, Safety Monitoring, Safety Analysis and Implementation.

References:

- Doc 9734 - *Safety Oversight Manual*
- Doc 9735 - *Universal Safety Oversight Audit Programme Continuous Monitoring Manual*
- Doc 9859 – *Safety Management Manual (SMM)*
- State Letter (Ref.: AN 8/3-13/30) dated 8 April 2013, with the proposal for Annex 19 and related consequential amendments to Annexes 1, 6, 8, 11, 13 and 14, Volume I.

Strategic Objective	<i>This working paper is related to Strategic Objective: A Safety – Enhance global civil aviation safety</i>
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1. Background

1.1 A recommendation of the High-level Safety Conference held in 2010 provided the impetus for the development of a new Annex dedicated to Safety Management.

1.2 On 29 June 2012, the Secretary General sent to Contracting States and appropriate International Organizations State Letter AN 8/3-12/42, with the proposal for Annex 19 and related consequential amendments to Annexes 1, 6, 8, 11, 13 and 14, Volume I, envisaged for applicability on 14 November 2013.

1.3 The first safety management provisions were introduced into Annexes 11 and 14 in 2001, requiring what was known then as safety management programmes for Air Navigation Service Providers (ANSPs) and airport operators. Safety programme provisions for States (SSP) were then introduced in 2006 in Annexes 6, 11 and 14. Requirements for the implementation of SMS followed in 2009 for air operators, air navigation services providers (ANSPs) and airport operators.

1.4 On 8 April 2013, the Secretary General send State Letter AN 8/3.13/30, adopting Annex 19 and requesting States to notify any disapproval before 15 July 2013; as well as to notify any differences and compliance before 14 October 2013; and consider the use of the Electronic Filing of Differences System (EFOD) for notification of differences and compliance.

2. *Analysis*

2.1 *Chapter 3* of the new Annex 19 consolidates existing SSP standards from Annexes 1, 6, 8, 11, 13 and 14 related to the State's safety management responsibilities.

2.1.1 The four components of the SSP Framework such as State safety policy, State safety risk management, State safety assurance and State safety promotion have been elevated to standards.

2.1.2 The SSP framework also includes the implementation of SMS for aviation service providers. This approach aims to ensure that the new Annex would be established expeditiously while maintaining continuity with the current SSP and SMS requirements.

2.1.3 The requirement for States to achieve an Acceptable Level of Safety (ALoS) is now known as an Acceptable Level of Safety Performance (ALoSP), which is a conceptual change that links this requirement with specific safety indicators and safety targets.

2.2 *Chapter 4* of the new Annex 19 contains provisions related to the establishment of SMS, which remain essentially unchanged. The SMS Framework is contained in the Appendix 2. There are some editorial modifications due to the consolidation of these requirements into a single Annex.

2.2.1 The combined elements prescriptive and performance-based approaches support the implementation of SMS by service providers. The SMS requirements are explicit to ensure that the acceptance of a service provider's SMS is related to the State or States responsibility for the harmonized SMS approval or certification of a particular service provider.

2.2.2 The list of service providers includes approved maintenance organizations, approved training organizations, air operators, design and manufacturing organizations, ANSPs and operators of certified aerodromes. In the context of safety management, service providers are those entities for whom the SMS framework included in the Appendix 2 is applicable.

2.2.3 SMS implementation requires the installation of adequate mechanisms to measure the system performance security. Among these aspects are the evaluation of incidents in terms of probability and tolerability, risk classification and appropriate measures for solution in accordance with the Doc 4444 *Manual of Air Traffic Management* and Doc 9859 *Safety Management Manual (SMM)*

2.3 **Chapter 5** of the new Annex 19 includes provisions related to the collection, protection and analysis of safety data and through a prompt and secure exchange of safety information, as part of the SSP. There are some modifications to ensure that all State agencies with SSP responsibilities have appropriate access to safety data.

2.3.1 The Standards to establish a mandatory and a voluntary incident reporting systems were transferred from other existing Standards to consolidate safety management provisions. The editorial amendment to begin the provision with “*Each State shall establish...*” is consistent with the Chicago Convention on International Civil Aviation.

2.3.2 ICAO maintains a global accident/incident database of serious events reported by States through the Accident/Incident Data Reporting System (ADREP), which contains a taxonomy of categories of events. On their behalf, States should ensure the accuracy of the data reported on safety incidents using ADREP compatible systems.

2.3.3 In support of the implementation of a regional safety management framework, the ICAO NACC Regional Office organized several activities during the next months with the support of the regional project, such as SSP and SMS implementation courses/workshops to address States needs. Nevertheless, further actions are necessary to ensure the regional harmonized implementation of safety management.

3. Suggested Action

3.1 The Meeting is invited to:

- a) take note of the information in this Working Paper;
- b) identify the SMS implementation level of the air navigation service providers (ANSPs);
- c) urge States to develop safety supervision programmes in accordance with the new requirements of Annex 19;
- d) encourage States to establish accident and incident reporting systems and safety data collection and processing systems using ADREP-compatible systems;
- e) identify and support other regional activities towards the implementation of a regional safety management framework; and
- f) recommend other actions as deemed appropriate.

APPENDIX

APPENDIX 1. STATE SAFETY OVERSIGHT SYSTEM

(See Chapter 3, 3.2)

Note 1.— Guidance on the critical elements of a system that enables a State to discharge its responsibility for safety oversight is contained in the Safety Oversight Manual, Part A, The Establishment and Management of a State’s Safety Oversight System (Doc 9734).

Note 2.— The term “relevant authorities or agencies” is used in a generic sense to include all authorities with aviation safety oversight responsibility which may be established by the State as separate entities, such as: Civil Aviation Authorities, Airport Authorities, ATS Authorities, Accident Investigation Authority, and Meteorological Authority.

Note 3.— See Appendix 5 to Annex 6, Part I and Appendix 1 to Annex 6, Part III for provisions specific to the safety oversight of air operators.

Note 4.— Within the context of this appendix the term “service provider” refers to those organizations listed in Chapter 3, 3.1.3.

1. Primary aviation legislation

1.1 The State shall promulgate a comprehensive and effective aviation law, consistent with the size and complexity of the State’s aviation activity and with the requirements contained in the Convention on International Civil Aviation, that enables the State to regulate civil aviation and enforce regulations through the relevant authorities or agencies established for that purpose.

1.2 The aviation law shall provide personnel performing safety oversight functions access to the aircraft, operations, facilities, personnel and associated records, as applicable, of service providers.

2. Specific operating regulations

The State shall promulgate regulations to address, at a minimum, national requirements emanating from the primary aviation legislation, for standardized operational procedures, products, services, equipment and infrastructures in conformity with the Annexes to the Convention on International Civil Aviation.

Note.— The term “regulations” is used in a generic sense and includes but is not limited to instructions, rules, edicts, directives, sets of laws, requirements, policies, and orders.

3. State system and functions

3.1 The State shall establish relevant authorities or agencies, as appropriate, supported by sufficient and qualified personnel and provided with adequate financial resources. Each State authority or agency shall have stated safety functions and objectives to fulfil its safety management responsibilities.

3.2 **Recommendation.**— *The State should take necessary measures, such as remuneration and conditions of service, to ensure that qualified personnel performing safety oversight functions are recruited and retained.*

3.3 The State shall ensure that personnel performing safety oversight functions are provided with guidance that addresses ethics, personal conduct and the avoidance of actual or perceived conflicts of interest in the performance of official duties.

3.4 **Recommendation.**— *The State should use a methodology to determine its staffing requirements for personnel performing safety oversight functions, taking into account the size and complexity of the aviation activities in that State.*

Note.— In addition, Appendix 5 to Annex 6, Part I, and Appendix 1 to Annex 6, Part III, require the State of the Operator to use such a methodology to determine its inspector staffing requirements. Inspectors are a subset of personnel performing safety oversight functions.

4. Qualified technical personnel

4.1 The State shall establish minimum qualification requirements for the technical personnel performing safety oversight functions and provide for appropriate initial and recurrent training to maintain and enhance their competence at the desired level.

4.2 The State shall implement a system for the maintenance of training records.

5. Technical guidance, tools and provision of safety-critical information

5.1 The State shall provide appropriate facilities, comprehensive and up-to-date technical guidance material and procedures, safety critical information, tools and equipment, and transportation means, as applicable, to the technical personnel to enable them to perform their safety oversight functions effectively and in accordance with established procedures in a standardized manner.

5.2 The State shall provide technical guidance to the aviation industry on the implementation of relevant regulations.

6. Licensing, certification, authorization and/or approval obligations

The State shall implement documented processes and procedures to ensure that personnel and organizations performing an aviation activity meet the established requirements before they are allowed to exercise the privileges of a licence, certificate, authorization and/or approval to conduct the relevant aviation activity.

7. Surveillance obligations

The State shall implement documented surveillance processes, by defining and planning inspections, audits, and monitoring activities on a continuous basis, to proactively assure that aviation licence, certificate, authorization and/or approval holders continue to meet the established requirements. This includes the surveillance of personnel designated by the Authority to perform safety oversight functions on its behalf.

8. Resolution of safety issues

8.1 The State shall use a documented process to take appropriate corrective actions, up to and including enforcement measures, to resolve identified safety issues.

8.2 The State shall ensure that identified safety issues are resolved in a timely manner through a system which monitors and records progress, including actions taken by service providers in resolving such issues.
