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Safety Oversight Manual Part A – The Establishment and Management of a State Safety Oversight System

Third Edition, 2017



Approved by and published under the authority of the Secretary General

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AMENDMENTS

Amendments are announced in the supplements to the *Products and Services Catalogue*; the Catalogue and its supplements are available on the ICAO website at www.icao.int. The space below is provided to keep a record of such amendments.

RECORD OF AMENDMENTS AND CORRIGENDA

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FOREWORD

This manual relates to the responsibilities, functions and duties of ICAO Member States with respect to aviation safety oversight in compliance with their obligations as signatories to the Convention on International Civil Aviation (the “Chicago Convention”). It is directed at State authorities and intended as a guide to assist States in establishing and managing an effective and sustainable State safety oversight system through the implementation of the eight critical elements of such a system.

The manual adopts the definition of “safety oversight” as stated in Annex 19 to the Chicago Convention — *Safety Management* (Second edition, July 2016):

“a function performed by a State to ensure that individuals and organizations performing an aviation activity comply with safety-related national laws and regulations.”

The manual focuses on the eight critical elements identified as the essential components of a State safety oversight system. These critical elements are as follows:

- CE-1 — Primary aviation legislation;
- CE-2 — Specific operating regulations;
- CE-3 — State system and functions;
- CE-4 — Qualified technical personnel;
- CE-5 — Technical guidance, tools and provision of safety-critical information;
- CE-6 — Licensing, certification, authorization and approval obligations;
- CE-7 — Surveillance obligations; and
- CE-8 — Resolution of safety issues.

The first edition of this manual, prepared with the assistance of the Safety Oversight Audit Study Group, addressed a safety oversight system as related to Annex 1 — *Personnel Licensing*, Annex 6 — *Operation of Aircraft* and Annex 8 — *Airworthiness of Aircraft*. The second edition addressed the transition to the comprehensive systems approach covering all safety-related provisions in all safety-related Annexes to the Convention. This third edition was developed to reflect the adoption of Amendment 1 to Annex 19 to the Chicago Convention — *Safety Management* (Second Edition, July 2016) as well as to provide additional guidance.

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. Regular revision will ensure that the manual remains both pertinent and accurate. Comments concerning this manual should be addressed to:

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Chapter 1

INTRODUCTION

1.1 OBJECTIVES OF THE MANUAL

1.1.1 This manual has been designed to emphasize the responsibilities, functions and duties for safety oversight of an ICAO Member State and to provide information and guidance to government decision makers on the establishment and management of an effective and sustainable State safety oversight (SSO) system through implementation of the eight critical elements (CEs) of such a system.

1.1.2 In this manual, the term “State” refers to the authority that is signatory to the Chicago Convention and which normally establishes a Civil Aviation Authority (CAA) and other aviation-related authorities. The “State” also appoints a Head of the CAA with powers to exercise authority over civil aviation activities in the State, as established.

1.1.3 Annex 19 — *Safety Management* (Second Edition, July 2016) defines safety oversight as:

“a function performed by a State to ensure that individuals and organizations performing an aviation activity comply with safety-related national laws and regulations”.

Note.— In the first (1999) and second (2006) editions of Doc 9734, Part A, safety oversight was defined as follows:

“a function by means of which States ensure effective implementation of the safety-related Standards and Recommended Practices (SARPs) and associated procedures contained in the Annexes to the Convention on International Civil Aviation and related ICAO documents.”

1.1.4 Under the ICAO Universal Safety Oversight Audit Programme (USOAP), the eight CEs of an SSO system have been used to assess the State's capability for safety oversight as well as for aircraft accident and incident investigation (with the exception of CE-6 and CE-7 which do not apply to that area). This is in line with Note 3 of Appendix 1 to Annex 19, which states that “the SSO system CEs are applied, as appropriate, to authorities performing safety oversight functions as well as authorities performing investigation of accidents and incidents or other State safety management activities”.

1.1.5. Note 1 of Chapter 3 of Annex 19 also states that “the State safety oversight (SSO) system critical elements (CEs) found in Appendix 1 constitute the foundation of an SSP (State safety programme).” These CEs are expressly addressed by this manual, while other aspects of the State safety management responsibilities are covered in the *Safety Management Manual (SMM)* (Doc 9859).

1.2 ABOUT THE MANUAL

1.2.1 The responsibilities, functions, duties and related guidance described in this manual are derived from various sources, including the Chicago Convention and its Annexes, Procedures for Air Navigation Services (PANS) and guidance material published by ICAO to assist its Member States in the implementation of the SARPs.

1.2.2 This manual also incorporates the experiences and lessons learned by ICAO from the safety oversight audits, validation missions and other activities conducted since the inception of USOAP in 1999.

1.3 ICAO REFERENCE DOCUMENTS

The ICAO documents referred to in the manual and other ICAO reference publications are listed in the Appendix and provide additional guidance for the oversight of individuals and organizations performing an aviation activity.

1.4 DEFINITIONS AND TERMINOLOGY

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 AIP 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 suitable and provides an acceptable level of 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 (ANS). Services provided to air traffic during all phases of operations including air traffic management (ATM), communication, 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 manoeuvring 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, independent and documented process for obtaining evidence and evaluating it objectively to determine the extent to which requirements and audit criteria are fulfilled.

Authorized person. A person authorized in writing by the Director General of Civil Aviation or equivalent official to act under the provision in which the expression occurs.

Cabin crew member. 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 (CAA). 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 a flight duty period.

Dangerous goods. Articles or substances which are capable of posing a risk to health, safety, property or the environment and which are shown in the list of dangerous goods in the *Technical Instructions for the Safe Transport of Dangerous Good by Air* (Doc 9284) or which are classified according to those Instructions.

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

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, security and efficiency of aeronautical operations.

Inspection. An examination of specific activities, products or services of an aviation licence, certificate, approval or authorization holder (or applicant) performed by civil aviation inspectors to confirm compliance with requirements for the licence, certificate, approval or authorization already issued (or being issued) by the State.

Inspector. A qualified person authorized by the State to carry out oversight activities for civil aviation.

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.

Legislation. Generic term used to include primary aviation legislation and specific operating regulations, as defined in Critical Elements 1 and 2 of a State safety oversight system, respectively.

(USOAP CMA) **Online Framework.** A suite of web-integrated applications, grouped under different modules, enabling States to access, submit and obtain information and data as part of ICAO's continuous monitoring and reporting of safety-related information and documentation under the USOAP continuous monitoring approach.

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

Operator. The 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.

Safety. The state in which risks associated with aviation activities, related to, or in direct support of the operation of aircraft, are reduced and controlled to an acceptable level.

Safety oversight. A function performed by a State to ensure that individuals and organizations performing an aviation activity comply with safety-related national laws and regulations.

Safety risk. The predicted probability and severity of the consequences or outcomes of a hazard.

Service provider. An organization providing aviation products and/or services. The term thus encompasses approved training organizations, aircraft operators, approved maintenance organizations, organizations responsible for type design or manufacture of aircraft, engines or propellers, air traffic service providers and other air navigation service providers and aerodrome operators.

Significant Safety Concern. Within the context of safety oversight, this refers to any condition, practice, or violation that occurs when a State allows the holder of a licence, certificate, approval or authorization to exercise the privileges attached to the licence, certificate, approval or authorization without the holder meeting the minimum requirements established by the State and by the Standards set forth in the Annexes to the Chicago Convention and resulting in an immediate safety risk to international civil aviation.

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

State of Manufacture. The State having jurisdiction over the organization responsible for the final assembly of the aircraft, engine or propeller.

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

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

Surveillance. The activities through which the State proactively verifies through inspections, audits and other activities that aviation licence, certificate, authorization or approval holders continue to meet the established requirements and function at the level of competency and safety required by the State.