



ICAO

International Standards
and Recommended Practices

Annex 17 to the Convention on International Civil Aviation

Aviation Security

Safeguarding International Civil Aviation
against Acts of Unlawful Interference

Twelfth Edition, July 2022



This edition supersedes, on 18 November 2022, all previous editions of Annex 17.

For information regarding the applicability of the Standards and Recommended Practices, see the Foreword.

INTERNATIONAL CIVIL AVIATION ORGANIZATION



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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

Historical background

The material included in this Annex was developed by the Council pursuant to the following two resolutions of the Assembly:

Resolution A17-10: Implementation by States of Security Specifications and Practices adopted by this Assembly and further work by ICAO related to such Specifications and Practices

.....

THE ASSEMBLY:

.....

- (3) REQUESTS the Council, with the assistance of the other constituent bodies of the Organization, to develop and incorporate, as appropriate, the material in the Appendices to this Resolution as Standards, Recommended Practices and Procedures in existing or new Annexes or other regulatory documents or guidance material of the Organization.

Resolution A18-10: Additional Technical Measures for the Protection of the Security of International Civil Air Transport

.....

THE ASSEMBLY:

- (1) REQUESTS the Council to ensure, with respect to the technical aspects of air transportation security, that:

- (a) the subject of air transportation security continues to be given adequate attention by the Secretary General, with a priority commensurate with the current threat to the security of air transportation;

.....

Following the work of the Air Navigation Commission, the Air Transport Committee and the Committee on Unlawful Interference¹, and as a result of the comments received from Contracting States and interested International Organizations, to whom draft material had been circulated, Standards and Recommended Practices on Security were adopted by the Council on 22 March 1974, pursuant to the provisions of Article 37 of the Convention on International Civil Aviation, and designated as Annex 17 to the Convention with the title “Standards and Recommended Practices — *Security*² — Safeguarding International Civil Aviation against Acts of Unlawful Interference”.

Table A shows the origin of subsequent amendments together with a list of the principal subjects involved and the dates on which the Annex and the amendments were adopted by the Council, when they became effective and when they became applicable.

¹ The Committee on Unlawful Interference was renamed the Aviation Security Committee at the 224th Session of the Council.

² As of the twelfth edition, the title is *Aviation Security*.

Introduction

In order that a comprehensive document may be available to States for implementation of the security measures prescribed by this Annex, an Attachment hereto reproduces extracts from other Annexes, *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284), PANS-ATM and PANS-OPS bearing on the subject of action to be taken by States to prevent unlawful interference with civil aviation, or when such interference has been committed.

Guidance material

The *Aviation Security Manual* (Doc 8973 — Restricted) provides detailed procedures and guidance on aspects of aviation security and is intended to assist States in the implementation of their respective national civil aviation security programmes required by the specifications in the Annexes to the Convention on International Civil Aviation.

Comprehensive aviation security training material to assist States in achieving civil aviation security objectives is contained in the ICAO Training Programme for Aviation Security comprising a series of Aviation Security Training Packages (ASTPs).

Action by Contracting States

Applicability. The provisions of the Standards and Recommended Practices in this document are to be applied by Contracting States.

Notification of differences. The attention of Contracting States is drawn to the obligation imposed by Article 38 of the Convention, by which Contracting States are required to notify the Organization of any differences between their national regulations and practices and the International Standards contained in this Annex and any amendments thereto. Contracting States are invited to keep the Organization currently informed of any differences which may subsequently occur, or of the withdrawal of any difference previously notified. A specific request for notification of differences will be sent to Contracting States immediately after the adoption of each amendment to this Annex.

Contracting States are also invited to extend such notification to any differences from the Recommended Practices contained in this Annex, and any amendment thereto, when the notification of such differences is important for the safety of air navigation.

Attention of States is also drawn to the provisions of Annex 15 related to the publication of differences between their national regulations and practices and the related ICAO Standards and Recommended Practices through the Aeronautical Information Service, in addition to the obligation of States under Article 38 of the Convention.

Promulgation of information. Information relating to the establishment and withdrawal of and changes to facilities, services and procedures affecting aircraft operations provided according to the Standards and Recommended Practices specified in this Annex should be notified and take effect in accordance with Annex 15.

Use of the text of the Annex in national regulations. The Council, on 13 April 1948, adopted a resolution inviting the attention of Contracting States to the desirability of using in their own national regulations, as far as practicable, the precise language of those ICAO Standards that are of a regulatory character and also of indicating departures from the Standards, including any additional national regulations that were important for the safety or regularity of air navigation. Wherever possible, the provisions of this Annex have been written in such a way as would facilitate incorporation, without major textual changes, into national legislation.

General information

An Annex is made up of the following component parts, not all of which, however, are necessarily found in every Annex; they have the status indicated:

1.— *Material comprising the Annex proper:*

- a) *Standards and Recommended Practices* adopted by the Council under the provisions of the Convention. They are defined as follows:

Standard: Any specification for physical characteristics, configuration, matériel, performance, personnel or procedure, the uniform application of which is recognized as necessary for the safety or regularity of international air navigation and to which Contracting States will conform in accordance with the Convention; in the event of impossibility of compliance, notification to the Council is compulsory under Article 38 of the Convention.

Recommended Practice: Any specification for physical characteristics, configuration, matériel, performance, personnel or procedure, the uniform application of which is recognized as desirable in the interests of safety, regularity or efficiency of international air navigation, and to which Contracting States will endeavour to conform in accordance with the Convention.

- b) *Appendices* comprising material grouped separately for convenience but forming part of the Standards and Recommended Practices adopted by the Council.
- c) *Definitions* of terms used in the Standards and Recommended Practices which are not self-explanatory in that they do not have accepted dictionary meanings. A definition does not have an independent status but is an essential part of each Standard and Recommended Practice in which the term is used, since a change in the meaning of the term would affect the specification.

2.— *Material approved by the Council for publication in association with the Standards and Recommended Practices:*

- a) *Forewords* comprising historical and explanatory material based on the action of the Council and including an explanation of the obligations of States with regard to the application of the Standards and Recommended Practices ensuing from the Convention and the Resolution of Adoption.
- b) *Introductions* comprising explanatory material introduced at the beginning of parts, chapters or sections of the Annex to assist in the understanding of the application of the text.
- c) *Notes* included in the text, where appropriate, to give factual information or references bearing on the Standards or Recommended Practices in question, but not constituting part of the Standards or Recommended Practices.
- d) *Attachments* comprising material supplementary to the Standards and Recommended Practices, or included as a guide to their application.

This Annex has been adopted in six languages — English, Arabic, Chinese, French, Russian and Spanish. Each Contracting State is requested to select one of those texts for the purpose of national implementation and for other effects provided for in the Convention, either through direct use or through translation into its own national language, and to notify the Organization accordingly.

The following practice has been adhered to in order to indicate at a glance the status of each statement: *Standards* have been printed in light face roman; *Recommended Practices* have been printed in light face italics, the status being indicated by the prefix **Recommendation**; *Notes* have been printed in light face italics, the status being indicated by the prefix *Note*.

Any reference to a portion of this document which is identified by a number includes all subdivisions of that portion.

Table A. Amendments to Annex 17

<i>Amendment</i>	<i>Source(s)</i>	<i>Subject(s)</i>	<i>Adopted Effective Applicable</i>
1st Edition	Council action in pursuance of Assembly Resolutions A17-10 and A18-10	—	22 March 1974 22 August 1974 27 February 1975
1	Council action in pursuance of Assembly Resolution A21-23	Change in status of 3.1.2 and 5.1.2 to a Standard; compilation and dissemination of information related to an aircraft being subjected to an act of unlawful interference.	31 March 1976 31 July 1976 30 December 1976
2	Proposals of some States and Council action in pursuance of Assembly Resolution A22-17	Transfer of specifications appearing in Chapter 9 of Annex 9 — <i>Facilitation</i> (Seventh Edition) to Annex 17; new provision in Chapter 5 concerning measures to be taken to control transfer and transit passengers and their cabin baggage; and amplification of the note to 5.2.4 (Annex 17, Chapter 5) on measures and procedures to prevent unauthorized access to specified areas on an aerodrome.	15 December 1977 15 April 1978 10 August 1978
3	Proposals of some States and the Secretariat and Council action in pursuance of Assembly Resolution A22-17	Specifications were added on the review of the level of threat by States, the development of training programmes, the isolation of security processed passengers, the inspection of aircraft for concealed weapons or other dangerous devices and the adoption of measures for the safety of passengers and crew of unlawfully diverted aircraft. A number of specifications were amplified and the status of one was changed to a Standard, related to the segregation and special guarding of aircraft liable to attack during stopovers.	13 December 1978 13 April 1979 29 November 1979
4 (2nd Edition)	Proposals of some States and an international organization and Council action in pursuance of Assembly Resolution A22-17	A specification was added on the transportation of persons in custody, and two specifications revised to provide for aircraft which were leased, chartered or interchanged. The status of a specification dealing with the safety of passengers and crew of an aircraft subjected to an act of unlawful interference was changed to a Standard; the provisions of a specification dealing with the prevention of sabotage were amplified and Chapter 1 — Applicability, deleted.	15 June 1981 15 October 1981 26 November 1981
5	Proposals of the Committee on Unlawful Interference and Council action in pursuance of Assembly Resolution A22-17	The note to Chapter 1 — Definitions was deleted. A specification setting out the action required for the transportation of weapons on board aircraft by law enforcement and other duly authorized persons was modified. A specification on the carriage of weapons in all other cases was added and the note to a specification dealing with the safeguarding of unattended aircraft was clarified.	30 November 1984 14 April 1985 21 November 1985
6 (3rd Edition)	Proposals of the Committee on Unlawful Interference with the assistance of an Ad Hoc Group of Experts — Unlawful Interference and Council action in pursuance of Assembly Resolution A22-17	On the instruction of the Council this amendment was undertaken as a matter of urgency by the Committee on Unlawful Interference with the assistance of an Ad Hoc Group of Experts on aviation security which had been appointed on the instruction of the Council. As a consequence 11 new specifications were introduced into the Annex and 19 specifications were adopted as Standards. Special effective and applicable dates for 5.1.4 are shown in the adjacent column. The Council recommended that those States that are able to implement the substance of 5.1.4 do so as soon as it is feasible and practicable before the applicable date.	19 December 1985 19 March 1986 19 May 1986 19 October 1987 19 December 1987

<i>Amendment</i>	<i>Source(s)</i>	<i>Subject(s)</i>	<i>Adopted Effective Applicable</i>
7 (4th Edition)	Proposals of the Committee on Unlawful Interference with the assistance of the Aviation Security Panel and Council action in pursuance of Assembly Resolution A26-7	This amendment includes: a) a reorganization of the chapters of the Annex directed at a rationalization of the sequence of objectives, obligations and necessary actions relating to organization, preventive security measures and management of response; b) the introduction of important new provisions to reflect developments and assist States in confronting new situations which arose from grave acts of unlawful interference against civil aviation, since the last revision of Annex 17 in 1985; and c) the amendment or fine tuning of existing provisions consequential to a) and b), as well as to reflect the experience gained in the implementation of such measures.	22 June 1989 30 October 1989 16 November 1989
8 (5th Edition)	Proposals of the Committee on Unlawful Interference with the assistance of the Aviation Security Panel (AVSECP) and Council action in pursuance of Assembly Resolution A27-7	This amendment includes the introduction of important new provisions in relation to the comprehensive security screening of checked baggage, security control over cargo, courier and express parcels and mail, variations to procedures relating to security programmes, pre-flight checks of international aircraft, and measures relating to the incorporation of security consideration into airport design for the purpose of assisting States in the consistent and uniform implementation of such measures.	11 September 1992 16 December 1992 1 April 1993
9 (6th Edition)	Proposals of the Committee on Unlawful Interference with the assistance of the Aviation Security Panel (AVSECP) and Council action in pursuance of Assembly Resolution A31-4	This amendment includes the introduction of new provisions in relation to the pre-employment checks and capabilities of persons engaged in implementing security controls, baggage accountability and authorization, measures to be applied to catering supplies and operators' stores and supplies, tests for programme effectiveness, and need for notification to the State of known or presumed destination of aircraft under a seized condition.	12 November 1996 31 March 1997 1 August 1997
10 (7th Edition)	Proposals of the Aviation Security Panel (AVSECP) and Council action in pursuance of Assembly Resolution A33-1	This amendment includes the introduction of various definitions and new provisions in relation to the applicability of this Annex to domestic operations, international cooperation relating to threat information, appropriate authority, National Aviation Security Committee, national quality control, access control, passengers and their cabin and hold baggage, in-flight security personnel and protection of the cockpit, code-sharing/collaborative arrangements, Human Factors and management of response to acts of unlawful interference. The status of a number of specifications was changed to Standards.	7 December 2001 15 April 2002 1 July 2002
11 (8th Edition)	Proposals of the Committee on Unlawful Interference with the assistance of the Aviation Security Panel (AVSECP) and Council action in pursuance of Assembly Resolution A35-9	This amendment includes provisions to further clarify the wording of existing Standards and Recommended Practices (SARPs) to facilitate both their common interpretation by Contracting States and their ease of auditing under the ICAO Universal Security Audit Programme (USAP). The amendment addresses the following: applicability of Annex 17; reinforcement of national civil aviation security control programme provisions; in-flight security officers (IFSOs); general aviation and aerial work; one-stop security concept for passengers and baggage; risk assessment concept; security for all-cargo operations; and definitions.	30 November 2005 10 April 2006 1 July 2006

<i>Amendment</i>	<i>Source(s)</i>	<i>Subject(s)</i>	<i>Adopted Effective Applicable</i>
12 (9th Edition)	Proposals of the Committee on Unlawful Interference with the assistance of the Aviation Security Panel (AVSECP) and Council action in pursuance of Assembly Resolution A36-20	This amendment includes provisions to further strengthen Standards and Recommended Practices in order to address new and emerging threats to civil aviation. The amendment includes the following: deployment of security equipment; security of air traffic service providers; training programmes and instructor certification system; random and unpredictable security measures; supply chain security; security for all-cargo operations; cyber threats; and definitions.	17 November 2010 26 March 2011 1 July 2011
13	Proposals of the Committee on Unlawful Interference with the assistance of the Aviation Security Panel (AVSECP), the recommendations of the 2012 High-level Conference on Aviation Security, and Council action in pursuance of Assembly Resolution A37-17.	This amendment includes a revision to access control measures with respect to persons other than passengers. The amendment also introduces a definition of and security requirements for transfer cargo and high-risk cargo, and establishes common baseline measures for cargo carried on passenger and all-cargo aircraft.	13 November 2012 15 March 2013 15 July 2013
14	Proposals of the Committee on Unlawful Interference with the assistance of the Aviation Security Panel (AVSECP), and Council action, in pursuance of Assembly Resolution A38-15.	This amendment includes a definition of unpredictability in relation to the implementation of security controls. It also includes a new Standard on appropriate screening methods for cargo and mail, and new Recommended Practices on international cooperation, landside security, security awareness training, oversight of external security service providers, and critical information and communications technology systems.	26 February 2014 14 July 2014 14 November 2014
15 (10th Edition)	Proposals of the 27th Meeting of the Aviation Security Panel (AVSECP/27) with the assistance of the Working Group on Annex 17 (WGA17).	This amendment includes a definition of behaviour detection in relation to the implementation of security controls. It also includes new/revised provisions on landside security, behaviour detection, innovation in aviation security and Man-Portable Air Defence Systems (MANPADS). In addition, the wording of existing provisions related to the conduct of risk assessments and measures relating to cyber threats have been revised for added clarity and improved readability.	23 November 2016 3 April 2017 3 August 2017
16	Proposals of the 28th Meeting of the Aviation Security Panel (AVSECP/28) with the assistance of the Working Group on Annex 17 (WGA17)	This amendment includes a reference to Aviation Security Training Packages. It also includes new/revised provisions on information sharing, measures relating to passengers and cabin baggage, measures relating to cargo, mail and other goods, and cyber threats.	14 March 2018 16 July 2018 16 November 2018
17 (11th Edition)	Proposals of the Thirtieth Meeting of the Aviation Security Panel (AVSECP/30) with the assistance of the Working Group on Annex 17 (WGA17).	This amendment includes revised definitions; it also includes new and/or revised provisions on: vulnerability assessments; information sharing between States and stakeholders; training programmes and certification systems; access control; staff screening; and other editorial amendments.	25 November 2019 30 March 2020 30 July 2020

<i>Amendment</i>	<i>Source(s)</i>	<i>Subject(s)</i>	<i>Adopted Effective Applicable</i>
18 (12th Edition)	Proposals of the Thirty-second Meeting of the Aviation Security Panel (AVSECP/32) with the assistance of the Working Group on Annex 17 (WGA17).	This amendment includes new and/or revised provisions on: a new Recommended Practice on security culture; a new Standard on aircraft operator security programmes; a new Standard on methods to detect explosives in hold baggage; and a new Standard outlining essential elements of a national civil aviation security quality control programme.	28 February 2022 18 July 2022 18 November 2022

CHAPTER 1. DEFINITIONS

Acts of unlawful interference. These are acts or attempted acts such as to jeopardize the safety of civil aviation, including but not limited to:

- unlawful seizure of aircraft,
- destruction of an aircraft in service,
- hostage-taking on board aircraft or on aerodromes,
- forcible intrusion on board an aircraft, at an airport or on the premises of an aeronautical facility,
- introduction on board an aircraft or at an airport of a weapon or hazardous device or material intended for criminal purposes,
- use of an aircraft in service for the purpose of causing death, serious bodily injury, or serious damage to property or the environment,
- communication of false information such as to jeopardize the safety of an aircraft in flight or on the ground, of passengers, crew, ground personnel or the general public, at an airport or on the premises of a civil aviation facility.

Aerial work. An aircraft operation in which an aircraft is used for specialized services such as agriculture, construction, photography, surveying, observation and patrol, search and rescue, aerial advertisement, etc.

Aircraft security check. An inspection of the interior of an aircraft to which passengers may have had access and an inspection of the hold for the purposes of discovering suspicious objects, weapons, explosives or other dangerous devices, articles and substances.

Aircraft security search. A thorough inspection of the interior and exterior of the aircraft for the purpose of discovering suspicious objects, weapons, explosives or other dangerous devices, articles or substances.

Airside. The movement area of an airport, adjacent terrain and buildings or portions thereof, access to which is controlled.

Aviation security. Safeguarding civil aviation against acts of unlawful interference. This objective is achieved by a combination of measures and human and material resources.

Background check. A check of a person's identity and previous experience, including criminal history and any other security related information relevant for assessing the person's suitability, in accordance with national legislation.

Behaviour detection. Within an aviation security environment, the application of techniques involving the recognition of behavioural characteristics, including but not limited to physiological or gestural signs indicative of anomalous behaviour, to identify persons who may pose a threat to civil aviation.

Cargo. Any property carried on an aircraft other than mail, stores and accompanied or mishandled baggage.

Certification. A formal evaluation and confirmation by or on behalf of the appropriate authority for aviation security that a person possesses the necessary competencies to perform assigned functions to an acceptable level as defined by the appropriate authority.

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

Corporate aviation. The non-commercial operation or use of aircraft by a company for the carriage of passengers or goods as an aid to the conduct of company business, flown by a professional pilot employed to fly the aircraft. (Note that corporate aviation is a subset of general aviation.)

Disruptive passenger. A passenger who fails to respect the rules of conduct at an airport or on board an aircraft or to follow the instructions of the airport staff or crew members and thereby disturbs the good order and discipline at an airport or on board the aircraft.

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

High-risk cargo or mail. Cargo or mail which is deemed to pose a threat to civil aviation as a result of specific intelligence; or shows anomalies or signs of tampering which give rise to suspicion.

Human Factors principles. Principles which apply to 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.

In-flight security officer. A person who is authorized by the government of the State of the Operator and the government of the State of Registration to be deployed on an aircraft with the purpose of protecting that aircraft and its occupants against acts of unlawful interference. This excludes persons employed to provide exclusive personal protection for one or more specific people travelling on the aircraft, such as personal bodyguards.

Known consignor. A consignor who originates cargo or mail for its own account and whose procedures meet common security rules and standards sufficient to allow the carriage of cargo or mail on any aircraft.

Regulated agent. An agent, freight forwarder or any other entity who conducts business with an operator and provides security controls that are accepted or required by the appropriate authority in respect of cargo or mail.

Screening. The application of technical or other means which are intended to identify and/or detect weapons, explosives or other dangerous devices, articles or substances which may be used to commit an act of unlawful interference.

Note.— Certain dangerous articles or substances are classified as dangerous goods by Annex 18 and the associated Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284) and must be transported in accordance with those instructions. In addition, the Aviation Security Manual (Doc 8973 — Restricted) provides a list of prohibited items that must never be carried in the cabin of an aircraft.

Security audit. An in-depth compliance examination of all aspects of the implementation of the national civil aviation security programme.

Security control. A means by which the introduction of weapons, explosives or other dangerous devices, articles or substances which may be used to commit an act of unlawful interference can be prevented.

Security culture. A set of security-related norms, values, attitudes and assumptions that are inherent in the daily operation of an organization and are reflected by the actions and behaviours of all entities and personnel within the organization.

Security inspection. An announced or unannounced examination of the effectiveness of the implementation of specific security measures.

Security restricted area. Those areas of the airside of an airport which are identified as priority risk areas where in addition to access control, other security controls are applied.

Security test. A covert or overt trial of an aviation security measure which simulates an attempt to commit an unlawful act.

Transfer cargo and mail. Cargo and mail departing on an aircraft other than that on which it arrived.

Unidentified baggage. Baggage at an airport, with or without a baggage tag, which is not picked up by or identified with a passenger.

Unpredictability. The implementation of security measures in order to increase their deterrent effect and their efficiency, by applying them at irregular frequencies, different locations and/or with varying means, in accordance with a defined framework.

CHAPTER 2. GENERAL PRINCIPLES

2.1 Objectives

2.1.1 Each Contracting State shall have as its primary objective the safety of passengers, crew, ground personnel and the general public in all matters related to safeguarding against acts of unlawful interference with civil aviation.

2.1.2 Each Contracting State shall establish an organization and develop and implement regulations, practices and procedures to safeguard civil aviation against acts of unlawful interference taking into account the safety, regularity and efficiency of flights.

2.1.3 Each Contracting State shall ensure that such an organization and such regulations, practices and procedures:

- a) protect the safety of passengers, crew, ground personnel and the general public in all matters related to safeguarding against acts of unlawful interference with civil aviation; and
- b) are capable of responding rapidly to meet any increased security threat.

2.1.4 Each Contracting State shall ensure appropriate protection of sensitive aviation security information.

2.2 Applicability

Each Contracting State shall ensure that measures designed to safeguard against acts of unlawful interference are applied to domestic operations to the extent practicable, based upon a security risk assessment carried out by the relevant national authorities.

2.3 Security and facilitation

Recommendation.— *Each Contracting State should whenever possible arrange for the security controls and procedures to cause a minimum of interference with, or delay to the activities of, civil aviation provided the effectiveness of these controls and procedures is not compromised.*

2.4 International cooperation

2.4.1 Each Contracting State requesting additional security measures for a specific flight(s) shall ensure appropriate consultation and give consideration to alternative measures of the other State that are equivalent to those requested.

2.4.2 Each Contracting State shall ensure that requests from other Contracting States for additional security measures in respect of a specific flight(s) by operators of such other States are met, as far as may be practicable.

2.4.3 Each Contracting State shall cooperate with other States in the development and exchange of information concerning national civil aviation security programmes, training programmes and quality control programmes, as necessary.

2.4.4 Each Contracting State shall establish and implement procedures to share with other Contracting States, in a timely manner, threat information that applies to the aviation security interests of those States, to the extent practicable.

2.4.5 Each Contracting State shall establish and implement suitable protection and handling procedures for security information shared by other Contracting States, or security information that affects the security interests of other Contracting States, in order to ensure that inappropriate use or disclosure of such information is avoided.

2.4.6 **Recommendation.**— *Each Contracting State should share, at the request of another Contracting State, the results of the audit carried out by ICAO and the corrective actions taken by the audited State, as appropriate and consistent with its sovereignty.*

2.4.7 **Recommendation.**— *Each Contracting State should include in each of its bilateral agreements on air transport a clause related to aviation security, taking into account the model clause developed by ICAO.*

2.4.8 **Recommendation.**— *Each Contracting State should make available to other Contracting States on request a written version of the appropriate parts of its national civil aviation security programme.*

2.4.9 **Recommendation.**— *Each Contracting State should consider entering into collaborative arrangements in order to increase the sustainability of the aviation security system by avoiding unnecessary duplication of security controls. The arrangement should be based on verification of equivalence of the security outcome ensured by the application of effective security controls at origin.*

2.5 Innovation, research and development

2.5.1 **Recommendation.**— *Each Contracting State should promote research and development of new security equipment, processes and procedures which will better achieve civil aviation security objectives and should cooperate with other Contracting States in this matter.*

2.5.2 **Recommendation.**— *Each Contracting State should ensure that the development of new security equipment takes into consideration Human Factors principles.*

2.5.3 **Recommendation.**— *Each Contracting State should consider implementing innovative processes and procedures to allow operational differentiation of screening and security controls based on clearly defined criteria.*

2.5.4 **Recommendation.**— *Each Contracting State should consider the use of advanced security equipment when investing in new equipment, to achieve civil aviation security objectives.*

CHAPTER 3. ORGANIZATION

3.1 National organization and appropriate authority

3.1.1 Each Contracting State shall establish and implement a written national civil aviation security programme to safeguard civil aviation operations against acts of unlawful interference, through regulations, practices and procedures which take into account the safety, regularity and efficiency of flights.

3.1.2 Each Contracting State shall designate and specify to ICAO an appropriate authority within its administration to be responsible for the development, implementation and maintenance of the national civil aviation security programme.

3.1.3 Each Contracting State shall keep under constant review the level and nature of threat to civil aviation within its territory and airspace above it, and establish and implement policies and procedures to adjust relevant elements of its national civil aviation security programme accordingly, based upon a security risk assessment carried out by the relevant national authorities.

3.1.4 **Recommendation.**— *Each Contracting State should ensure that periodic vulnerability assessments are conducted at its airports engaged in international operations, ensuring coordination among relevant departments, agencies, including appropriate law enforcement and intelligence authorities, and other entities. Such vulnerability assessments should be used to inform risk assessments and security improvements.*

3.1.5 Each Contracting State shall establish and implement procedures to share, as appropriate, with relevant airport operators, aircraft operators, air traffic service providers or other entities concerned, in a practical and timely manner, relevant information to assist them to conduct effective security risk assessments relating to their operations.

Note 1.— Guidance on security risk assessment can be found in the Aviation Security Manual (Doc 8973) and the Aviation Security Global Risk Context Statement (Doc 10108).

Note 2.— Guidance on safety risk management can be found in the Safety Management Manual (SMM) (Doc 9859).

Note 3.— Guidance on assessing risk over or near conflict zones can be found in the Risk Assessment Manual for Civil Aircraft Operations Over or Near Conflict Zones (Doc 10084).

Note 4.— Refer to Annex 6, Part I, Chapter 4, Standard 4.1.2 and Annex 11, Chapter 2, Standards 2.19.3 and 2.19.3.1.

3.1.6 Each Contracting State shall require the appropriate authority to define and allocate tasks and coordinate activities between the departments, agencies and other organizations of the State, airport and aircraft operators, air traffic service providers and other entities concerned with or responsible for the implementation of various aspects of the national civil aviation security programme.

3.1.7 Each Contracting State shall establish a national aviation security committee or similar arrangements for the purpose of coordinating security activities between the departments, agencies and other organizations of the State, airport and aircraft operators, air traffic service providers and other entities concerned with or responsible for the implementation of various aspects of the national civil aviation security programme.

3.1.8 Each Contracting State shall ensure that supporting resources and facilities required by the aviation security services are made available at each airport serving civil aviation.

3.1.9 Each Contracting State shall make available to its airport and aircraft operators and air traffic service providers operating in its territory and other entities concerned, a written version of the appropriate parts of its national civil aviation security programme and/or relevant information or guidelines enabling them to meet the requirements of the national civil aviation security programme.

3.2 Airport operations

3.2.1 Each Contracting State shall require each airport serving civil aviation to establish, implement and maintain a written airport security programme appropriate to meet the requirements of the national civil aviation security programme.

3.2.2 Each Contracting State shall ensure that an authority at each airport serving civil aviation is responsible for coordinating the implementation of security controls.

3.2.3 Each Contracting State shall ensure that an airport security committee at each airport serving civil aviation is established to assist the authority mentioned under 3.2.2 in its role of coordinating the implementation of security controls and procedures as specified in the airport security programme.

3.2.4 Each Contracting State shall ensure that airport design requirements, including architectural and infrastructure-related requirements necessary for the implementation of the security measures in the national civil aviation security programme, are integrated into the design and construction of new facilities and alterations to existing facilities at airports.

3.3 Aircraft operators

3.3.1 Each Contracting State, as the State of the Operator, shall ensure that its commercial air transport operators have established, implemented and maintained a written aircraft operator security programme that meets the requirements of the national civil aviation security programme of the State of the Operator.

3.3.2 Each Contracting State shall require foreign commercial air transport operators providing service to and from that State to establish, implement and maintain written supplementary station procedures that meet the requirements of the national civil aviation security programme of that State.

3.3.3 **Recommendation.**— *Each Contracting State should ensure that each entity conducting general aviation operations, including corporate aviation operations, using aircraft with a maximum take-off mass greater than 5 700 kg, has established, implemented and maintained a written operator security programme that meets the requirements of the national civil aviation security programme of that State.*

3.3.4 **Recommendation.**— *Each Contracting State should ensure that each entity conducting aerial work operations has established, implemented and maintained a written operator security programme that meets the requirements of the national civil aviation security programme of that State. The programme shall contain operations features specific to the type of operations conducted.*

3.4 Training, qualifications and security culture

3.4.1 Each Contracting State shall require the appropriate authority to ensure the development and implementation of a national training policy for all personnel involved with or responsible for the implementation of various aspects of the national civil aviation security programme. This training policy shall be designed to ensure the effectiveness of the national civil aviation security programme.

3.4.2 Each Contracting State shall ensure that all aviation security training programmes for personnel with responsibilities under the national civil aviation security programme include an assessment of competencies to be acquired and maintained for initial and recurrent training.

3.4.3 Each Contracting State shall ensure the development and implementation of a certification system that ensures that instructors are qualified in the applicable subject matters in accordance with the national civil aviation security programme.

3.4.4 Each Contracting State shall ensure that the persons carrying out screening operations are certified according to the requirements of the national civil aviation security programme to ensure that performance standards are consistently and reliably achieved.

3.4.5 Each Contracting State shall ensure that the personnel carrying out security audits, tests and inspections are trained to appropriate standards for these tasks in accordance with the national civil aviation security programme.

3.4.6 Each Contracting State shall ensure that all personnel involved with or responsible for the implementation of various aspects of the national civil aviation security programme and those authorized to have unescorted access to airside areas receive initial and recurrent security awareness training.

3.4.7 **Recommendation.**— *Each Contracting State should require entities involved with or responsible for the implementation of various aspects of the national civil aviation security programme to promote, develop and implement measures and mechanisms that contribute to establishing a strong and effective security culture.*

3.5 Quality control

3.5.1 Each Contracting State shall require the appropriate authority to develop, implement and maintain a national civil aviation security quality control programme to regularly determine compliance with and validate the effectiveness of its national civil aviation security programme. The priorities and frequency of oversight activities shall be determined on the basis of risk assessments carried out by the relevant authorities, and include security audits, inspections and tests to provide for the rapid and effective rectification of any deficiencies. The national civil aviation security quality control programme shall include the following elements:

- a) independence of those conducting oversight from those applying measures implemented under the national civil aviation security programme;
- b) the personnel conducting oversight are trained to appropriate standards;
- c) the personnel conducting oversight have the necessary authority to obtain all relevant information to carry out these tasks and to enforce corrective actions;
- d) a confidential reporting system for analyzing security information provided by sources such as passengers, crew and ground personnel; and

- e) a process to record and analyze the results of the national civil aviation security quality control programme, in order to contribute to the effective development and implementation of the national civil aviation security programme, including identifying the causes and patterns of non-compliance and verifying that corrective actions have been implemented and sustained.

3.5.2 Each Contracting State shall ensure that:

- a) background checks are completed in respect of persons implementing security controls, persons with unescorted access to security restricted areas, and persons with access to sensitive aviation security information prior to their taking up these duties or accessing such areas or information;
- b) recurrent background checks are applied to such persons at intervals defined by the appropriate authority; and
- c) persons found unsuitable by any background check are immediately denied the ability to implement security controls, unescorted access to security restricted areas, and access to sensitive aviation security information.

3.5.3 Each Contracting State shall ensure that each entity responsible for the implementation of relevant elements of the national civil aviation security programme periodically verifies that the implementation of security measures outsourced to external service providers is in compliance with the entity's security programme.

3.6 Air traffic service providers

Each Contracting State shall require air traffic service providers operating in that State to establish and implement appropriate security provisions to meet the requirements of the national civil aviation security programme of that State.

CHAPTER 4. PREVENTIVE SECURITY MEASURES

4.1 Objective

4.1.1 Each Contracting State shall establish measures to prevent weapons, explosives or any other dangerous devices, articles or substances, which may be used to commit an act of unlawful interference, the carriage or bearing of which is not authorized, from being introduced, by any means whatsoever, on board an aircraft engaged in civil aviation.

4.1.2 Each Contracting State shall ensure the use of randomness and unpredictability in the implementation of security measures, as appropriate.

4.1.3 Each Contracting State shall ensure procedures are established to deal with unidentified baggage and suspicious objects in accordance with a security risk assessment carried out by the relevant national authorities.

4.1.4 **Recommendation.**— *Each Contracting State should consider integrating behaviour detection into its aviation security practices and procedures.*

4.2 Measures relating to access control

4.2.1 Each Contracting State shall ensure that the access to airside areas at airports serving civil aviation is controlled in order to prevent unauthorized entry.

4.2.2 Each Contracting State shall ensure that security restricted areas are established at each airport serving civil aviation designated by the State based upon a security risk assessment carried out by the relevant national authorities.

4.2.3 Each Contracting State shall ensure that identification systems are established and implemented in respect of persons and vehicles in order to prevent unauthorized access to airside areas and security restricted areas. Access shall be granted only to those with an operational need or other legitimate reason to be there. Identity and authorization shall be verified at designated checkpoints before access is allowed to airside areas and security restricted areas.

4.2.4 Each Contracting State shall ensure that the movement of persons and vehicles to and from the aircraft is supervised in security restricted areas in order to prevent unauthorized access to aircraft.

4.2.5 Each Contracting State shall establish measures to ensure that persons other than passengers, together with items carried, are screened prior to entry into airport security restricted areas.

4.2.6 Each Contracting State shall ensure the use of appropriate screening methods that are capable of detecting the presence of explosives and explosive devices carried by persons other than passengers on their persons or in their items carried. Where these methods are not applied continuously, they shall be used in an unpredictable manner.

4.2.7 Each Contracting State shall ensure that vehicles being granted access to security restricted areas, together with items contained within them, are subject to screening or other appropriate security controls in accordance with a risk assessment carried out by the relevant national authorities.

4.3 Measures relating to aircraft

4.3.1 Each Contracting State shall ensure that aircraft security checks of originating aircraft engaged in commercial air transport movements are performed or an aircraft security search is carried out. The determination of whether it is an aircraft security check or a search that is appropriate shall be based upon a security risk assessment carried out by the relevant national authorities.

4.3.2 Each Contracting State shall ensure that measures are taken to ensure that any items left behind by passengers disembarking from transit flights are removed from the aircraft or otherwise dealt with appropriately before departure of an aircraft engaged in commercial flights.

4.3.3 Each Contracting State shall require its commercial air transport operators to take measures as appropriate to ensure that during flight unauthorized persons are prevented from entering the flight crew compartment.

Note.— Provisions for security of the flight crew compartment of aircraft engaged in commercial air transportation are contained in Annex 6, Part I, Chapter 13, Section 13.2.

4.3.4 Each Contracting State shall ensure that an aircraft subject to 4.3.1 is protected from unauthorized interference from the time the aircraft search or check has commenced until the aircraft departs.

4.3.5 **Recommendation.**— *Each Contracting State should ensure that security controls are established to prevent acts of unlawful interference with aircraft when they are not in security restricted areas.*

4.3.6 Each Contracting State, in accordance with the risk assessment carried out by its relevant national or local authorities, shall ensure that appropriate measures on the ground or operational procedures are established to mitigate possible attacks against aircraft using Man-Portable Air Defence Systems (MANPADS) and other weapons representing a similar threat to aircraft at or near an airport.

4.4 Measures relating to passengers and their cabin baggage

4.4.1 Each Contracting State shall establish measures to ensure that originating passengers of commercial air transport operations and their cabin baggage are screened prior to boarding an aircraft departing from a security restricted area.

4.4.2 Each Contracting State shall ensure the use of appropriate screening methods that are capable of detecting the presence of explosives and explosive devices carried by passengers on their persons or in cabin baggage. Where these methods are not applied continuously, they shall be used in an unpredictable manner.

4.4.3 Each Contracting State shall ensure that transfer passengers of commercial air transport operations and their cabin baggage are screened prior to boarding an aircraft, unless it has established a validation process and continuously implements procedures, in collaboration with the other Contracting State where appropriate, to ensure that such passengers and their cabin baggage have been screened to an appropriate level at the point of origin and subsequently protected from unauthorized interference from the point of screening at the originating airport to the departing aircraft at the transfer airport.

4.4.4 Each Contracting State shall ensure that passengers and their cabin baggage which have been screened are protected from unauthorized interference from the point of screening until they board their aircraft. If mixing or contact does take place, the passengers concerned and their cabin baggage shall be re-screened before boarding an aircraft.

4.4.5 Each Contracting State shall establish at an airport measures for transit operations to protect transit passengers and their cabin baggage from unauthorized interference and protect the integrity of the security of the airport of transit.

4.4.6 **Recommendation.**— *Each Contracting State should ensure that practices are established at airports and on board aircraft to assist in the identification and resolution of suspicious activity that may pose a threat to civil aviation.*

4.5 Measures relating to hold baggage

4.5.1 Each Contracting State shall establish measures to ensure that originating hold baggage is screened prior to being loaded onto an aircraft engaged in commercial air transport operations departing from a security restricted area.

4.5.2 Each Contracting State shall ensure the use of appropriate screening methods that are capable of detecting the presence of explosives and explosive devices in hold baggage. The appropriate standards for screening in the context of 4.5 shall be defined by the appropriate authority.

4.5.3 Each Contracting State shall ensure that all hold baggage to be carried on a commercial aircraft is protected from unauthorized interference from the point it is screened or accepted into the care of the carrier, whichever is earlier, until departure of the aircraft on which it is to be carried. If the integrity of hold baggage is jeopardized, the hold baggage shall be re-screened before being placed on board an aircraft.

4.5.4 Each Contracting State shall ensure that commercial air transport operators do not transport the baggage of persons who are not on board the aircraft unless that baggage is identified as unaccompanied and subjected to appropriate screening.

4.5.5 Each Contracting State shall ensure that transfer hold baggage is screened prior to being loaded onto an aircraft engaged in commercial air transport operations, unless it has established a validation process and continuously implements procedures, in collaboration with the other Contracting State where appropriate, to ensure that such hold baggage has been screened at the point of origin and subsequently protected from unauthorized interference from the originating airport to the departing aircraft at the transfer airport.

4.5.6 Each Contracting State shall ensure that commercial air transport operators transport only items of hold baggage which have been individually identified as accompanied or unaccompanied, screened to the appropriate standard and accepted for carriage on that flight by the air carrier. All such baggage should be recorded as meeting these criteria and authorized for carriage on that flight.

4.6 Measures relating to cargo, mail and other goods

4.6.1 Each Contracting State shall ensure that appropriate security controls, including screening where practicable, are applied to cargo and mail, prior to their being loaded onto an aircraft engaged in commercial air transport operations.

4.6.2 Each Contracting State shall establish a supply chain security process, which includes the approval of regulated agents and/or known consignors, if such entities are involved in implementing screening or other security controls of cargo and mail.

4.6.3 Each Contracting State shall ensure that cargo and mail to be carried on a commercial aircraft are protected from unauthorized interference from the point screening or other security controls are applied until departure of the aircraft.

4.6.4 Each Contracting State shall ensure that enhanced security measures apply to high-risk cargo and mail to appropriately mitigate the threats associated with it.

4.6.5 Each Contracting State shall ensure that operators do not accept cargo or mail for carriage on an aircraft engaged in commercial air transport operations unless the application of screening or other security controls is confirmed and accounted for by a regulated agent, a known consignor, or an entity that is approved by an appropriate authority. Cargo and mail which cannot be confirmed and accounted for by a regulated agent, a known consignor, or an entity that is approved by an appropriate authority shall be subjected to screening.

4.6.6 Each Contracting State shall ensure that catering, stores and supplies intended for carriage on commercial flights are subjected to appropriate security controls, which may include a supply chain security process or screening, and thereafter protected until loaded onto the aircraft.

4.6.7 Each Contracting State shall ensure that merchandise and supplies introduced into security restricted areas are subjected to appropriate security controls, which may include a supply chain security process or screening.

4.6.8 Each Contracting State shall ensure that cargo and mail that has been confirmed and accounted for shall then be issued with a security status which shall accompany, either in an electronic format or in writing, the cargo and mail throughout the secure supply chain.

4.6.9 Each Contracting State shall ensure that transfer cargo and mail has been subjected to appropriate security controls prior to being loaded on an aircraft engaged in commercial air transport operations departing from its territory.

4.6.10 Each Contracting State shall ensure that, where screening of cargo and mail is conducted, screening is carried out using an appropriate method or methods, taking into account the nature of the consignment.

4.6.11 **Recommendation.**— *Each Contracting State should establish appropriate mechanisms to confirm that transfer cargo and mail entering its territory has been subjected to appropriate security controls.*

4.7 Measures relating to special categories of passengers

4.7.1 Each Contracting State shall develop requirements for air carriers for the carriage of potentially disruptive passengers who are obliged to travel because they have been the subject of judicial or administrative proceedings.

4.7.2 Each Contracting State shall ensure that operators providing service from that State include in their security programmes, measures and procedures to ensure safety on board their aircraft when passengers are to be carried who are obliged to travel because they have been the subject of judicial or administrative proceedings.

4.7.3 Each Contracting State shall ensure that the aircraft operator and the pilot-in-command are informed when passengers are obliged to travel because they have been the subject of judicial or administrative proceedings, in order that appropriate security controls can be applied.

4.7.4 Each Contracting State shall ensure that the carriage of weapons on board aircraft, by law enforcement officers and other authorized persons, acting in the performance of their duties, requires special authorization in accordance with the laws of the States involved.

4.7.5 Each Contracting State shall consider requests by any other State to allow the travel of armed personnel, including in-flight security officers, on board aircraft of operators of the requesting State. Only after agreement by all States involved shall such travel be allowed.

4.7.6 Each Contracting State shall ensure that the carriage of weapons in other cases is allowed only when an authorized and duly qualified person has determined that they are not loaded, if applicable, and then only if stowed in a place inaccessible to any person during flight time.

4.7.7 Each Contracting State that decides to deploy in-flight security officers shall ensure that they are government personnel who are specially selected and trained, taking into account the safety and security aspects on board an aircraft and deployed according to the threat assessment of the competent authority. The deployment of such officers shall be coordinated with concerned States and kept strictly confidential.

4.7.8 Each Contracting State shall ensure that the pilot-in-command is notified as to the number of armed persons and their seat location.

4.8 Measures relating to the landside

4.8.1 Each Contracting State shall ensure that landside areas are identified.

4.8.2 Each Contracting State shall ensure that security measures are established for landside areas to mitigate the risk of and to prevent possible acts of unlawful interference in accordance with risk assessments carried out by the relevant authorities or entities.

4.8.3 Each Contracting State shall ensure coordination of landside security measures in accordance with Standards 3.1.7, 3.2.2 and 3.2.3 between relevant departments, agencies, other organizations of the State, and other entities, and identify appropriate responsibilities for landside security in its national civil aviation security programme.

4.9 Measures relating to cyber threats

4.9.1 Each Contracting State shall ensure that operators or entities as defined in the national civil aviation security programme or other relevant national documentation identify their critical information and communications technology systems and data used for civil aviation purposes and, in accordance with a risk assessment, develop and implement, as appropriate, measures to protect them from unlawful interference.

4.9.2 **Recommendation.**— *Each Contracting State should ensure that the measures implemented protect, as appropriate, the confidentiality, integrity and availability of the identified critical systems and/or data. The measures should include, inter alia, security by design, supply chain security, network separation, and the protection and/or limitation of any remote access capabilities, as appropriate and in accordance with the risk assessment carried out by its relevant national authorities.*

CHAPTER 5. MANAGEMENT OF RESPONSE TO ACTS OF UNLAWFUL INTERFERENCE

5.1 Prevention

5.1.1 Each Contracting State shall establish measures, when reliable information exists that an aircraft may be subjected to an act of unlawful interference, to safeguard the aircraft if it is still on the ground and to provide as much prior notification as possible of the arrival of such aircraft to relevant airport authorities and air traffic services of the States concerned if the aircraft has already departed.

5.1.2 Each Contracting State shall ensure, when reliable information exists that an aircraft may be subjected to an act of unlawful interference, that the aircraft is searched for concealed weapons, explosives or other dangerous devices, articles or substances. Prior notification of the search shall be provided to the operator concerned.

5.1.3 Each Contracting State shall ensure that arrangements are made to investigate, render safe and/or dispose of, if necessary, suspected dangerous devices or other potential hazards at airports.

5.1.4 Each Contracting State shall ensure that contingency plans are developed and resources made available to safeguard civil aviation against acts of unlawful interference. The contingency plans shall be tested on a regular basis.

5.1.5 Each Contracting State shall ensure that authorized and suitably trained personnel are readily available for deployment at its airports serving civil aviation to assist in dealing with suspected, or actual, cases of unlawful interference with civil aviation.

5.1.6 Each Contracting State shall ensure that its national civil aviation security programme defines processes for the reporting of information concerning incidents of acts of unlawful interference and preparatory acts thereto, by any entity responsible for the implementation of the national civil aviation security programme in a practical and timely manner to the relevant authorities, as appropriate, taking into account 2.1.4.

5.2 Response

5.2.1 Each Contracting State shall take appropriate measures for the safety of passengers and crew of an aircraft, which is subjected to an act of unlawful interference, while on the ground in the territory of the Contracting State, until their journey can be continued.

5.2.2 Each Contracting State responsible for providing air traffic services for an aircraft, which is the subject of an act of unlawful interference, shall collect all pertinent information on the flight of that aircraft and transmit that information to all other States responsible for the air traffic services units concerned, including those at the airport of known or presumed destination, so that timely and appropriate safeguarding action may be taken en route and at the aircraft's known, likely or possible destination.

5.2.3 Each Contracting State shall provide assistance to an aircraft subjected to an act of unlawful seizure, including the provision of navigation aids, air traffic services and permission to land as may be necessitated by the circumstances.

5.2.4 Each Contracting State shall take measures, as it may find practicable, to ensure that an aircraft subjected to an act of unlawful seizure which has landed in its territory is detained on the ground unless its departure is necessitated by the overriding duty to protect human life. However, these measures need to recognize the grave hazard attending further flight. States shall also recognize the importance of consultations, wherever practicable, between the State where that aircraft has landed and the State of the Operator of the aircraft, and notification by the State where the aircraft has landed to the States of assumed or stated destination.

5.2.5 Each Contracting State in which an aircraft subjected to an act of unlawful interference has landed shall notify by the most expeditious means the State of Registry of the aircraft and the State of the Operator of the landing and shall similarly transmit by the most expeditious means all other relevant information to:

- a) the two above-mentioned States;
- b) each State whose citizens suffered fatalities or injuries;
- c) each State whose citizens were detained as hostages;
- d) each State whose citizens are known to be on board the aircraft; and
- e) the International Civil Aviation Organization.

5.2.6 **Recommendation.**— *Each Contracting State should ensure that information received as a consequence of action taken in accordance with 5.2.2 is distributed locally to the air traffic services units concerned, the appropriate airport administrations, the operator and others concerned as soon as practicable.*

5.2.7 **Recommendation.**— *Each Contracting State should cooperate with other States for the purpose of providing a joint response in connection with an act of unlawful interference. When taking measures in their territory to free passengers and crew members of an aircraft subjected to an act of unlawful interference, each Contracting State should use, as necessary, the experience and capability of the State of the Operator, the State of manufacture and the State of Registry of that aircraft.*

5.3 Exchange of information and reporting

5.3.1 Each Contracting State concerned with an act of unlawful interference shall provide ICAO with all pertinent information concerning the security aspects of the act of unlawful interference as soon as practicable after the act is resolved.

5.3.2 Each Contracting State concerned with an act of unlawful interference shall require its appropriate authority to re-evaluate security controls and procedures, and in a timely fashion, take action necessary to remedy weaknesses so as to prevent recurrence.

5.3.3 **Recommendation.**— *Each Contracting State should exchange information with other Contracting States as considered appropriate on the management of response to an act of unlawful interference, at the same time supplying such information to ICAO.*

ATTACHMENT TO ANNEX 17

Note. — This Attachment provides a list of references for information purposes, updated as of 18 July 2022.

EXTRACTS FROM ANNEX 2 — *RULES OF THE AIR*

CHAPTER 3. GENERAL RULES

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3.7 Unlawful interference

3.7.1 An aircraft which is being subjected to unlawful interference shall endeavour to notify the appropriate ATS unit of this fact, any significant circumstances associated therewith and any deviation from the current flight plan necessitated by the circumstances, in order to enable the ATS unit to give priority to the aircraft and to minimize conflict with other aircraft.

Note 1.— Responsibility of ATS units in situations of unlawful interference is contained in Annex 11.

Note 2.— Guidance material for use when unlawful interference occurs and the aircraft is unable to notify an ATS unit of this fact is contained in Attachment B to this Annex.

Note 3.— Action to be taken by SSR-, ADS-B- and ADS-C-equipped aircraft which are being subjected to unlawful interference is contained in Annex 11, the PANS-ATM (Doc 4444) and the PANS-OPS (Doc 8168).

Note 4.— Action to be taken by CPDLC-equipped aircraft which are being subjected to unlawful interference is contained in Annex 11, the PANS-ATM (Doc 4444), and guidance material on the subject is contained in the Manual of Air Traffic Services Data Link Applications (Doc 9694).

3.7.2 If an aircraft is subjected to unlawful interference, the pilot-in-command shall attempt to land as soon as practicable at the nearest suitable aerodrome or at a dedicated aerodrome assigned by the appropriate authority unless considerations aboard the aircraft dictate otherwise.

Note 1.— Requirements for State authorities with respect to aircraft on the ground that are subject to unlawful interference are contained in Annex 17, Chapter 5, 5.2.4.

Note 2.— See 2.4 regarding the authority of the pilot-in-command of an aircraft.

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ATTACHMENT B. UNLAWFUL INTERFERENCE**1. General**

The following procedures are intended as guidance for use by aircraft when unlawful interference occurs and the aircraft is unable to notify an ATS unit of this fact.

2. Procedures

2.1 If the pilot-in-command cannot proceed to an aerodrome in accordance with the rules in Chapter 3, 3.7.2, he/she should attempt to continue flying on the assigned track and at the assigned cruising level at least until able to notify an ATS unit or until within radar or ADS-B coverage.

2.2 When an aircraft subjected to an act of unlawful interference must depart from its assigned track or its assigned cruising level without being able to make radiotelephony contact with ATS, the pilot-in-command should, whenever possible:

- a) attempt to broadcast warnings on the VHF channel in use or the VHF emergency frequency, and other appropriate channels, unless considerations aboard the aircraft dictate otherwise. Other equipment such as on-board transponders and data links should also be used when it is advantageous to do so and circumstances permit; and
- b) proceed in accordance with applicable special procedures for in-flight contingencies, where such procedures have been established and promulgated in the *Regional Supplementary Procedures* (Doc 7030); or
- c) if no applicable regional procedures have been established, proceed at a level which differs from the cruising levels normally used for IFR flight by:
 - 1) 150 m (500 ft) in an area where a vertical separation minimum of 300 m (1 000 ft) is applied; or
 - 2) 300 m (1 000 ft) in an area where a vertical separation minimum of 600 m (2 000 ft) is applied.

Note.— Action to be taken by an aircraft which is intercepted while being subject to an act of unlawful interference is prescribed in 3.8 of this Annex.

**EXTRACTS FROM ANNEX 6 — OPERATION OF AIRCRAFT
PART I — INTERNATIONAL COMMERCIAL AIR TRANSPORT — AEROPLANES****CHAPTER 13. SECURITY^{††}****13.1 Domestic commercial operations**

Recommendation.— *International Standards and Recommended Practices set forth in this chapter should be applied by all Contracting States also in case of domestic commercial operations (air services).*

^{††} In the context of this chapter, the word “security” is used in the sense of prevention of illicit acts against civil aviation.

13.2 Security of the flight crew compartment

13.2.1 In all aeroplanes which are equipped with a flight crew compartment door, this door shall be capable of being locked, and means shall be provided by which cabin crew can discreetly notify the flight crew in the event of suspicious activity or security breaches in the cabin.

13.2.2 All passenger-carrying aeroplanes:

- a) of a maximum certificated take-off mass in excess of 54 500 kg; or
- b) of a maximum certificated take-off mass in excess of 45 500 kg with a passenger seating capacity greater than 19; or
- c) with a passenger seating capacity greater than 60

shall be equipped with an approved flight crew compartment door that is designed to resist penetration by small arms fire and grenade shrapnel, and to resist forcible intrusions by unauthorized persons. This door shall be capable of being locked and unlocked from either pilot's station.

13.2.3 In all aeroplanes which are equipped with a flight crew compartment door in accordance with 13.2.2:

- a) this door shall be closed and locked from the time all external doors are closed following embarkation until any such door is opened for disembarkation, except when necessary to permit access and egress by authorized persons; and
- b) means shall be provided for monitoring from either pilot's station the entire door area outside the flight crew compartment to identify persons requesting entry and to detect suspicious behaviour or potential threat.

13.2.4 **Recommendation.**— *All passenger-carrying aeroplanes should be equipped with an approved flight crew compartment door, where practicable, that is designed to resist penetration by small arms fire and grenade shrapnel, and to resist forcible intrusions by unauthorized persons. This door should be capable of being locked and unlocked from either pilot's station.*

13.2.5 **Recommendation.**— *In all aeroplanes which are equipped with a flight crew compartment door in accordance with 13.2.4:*

- a) *the door should be closed and locked from the time all external doors are closed following embarkation until any such door is opened for disembarkation, except when necessary to permit access and egress by authorized persons; and*
- b) *means should be provided for monitoring from either pilot's station the entire door area outside the flight crew compartment to identify persons requesting entry and to detect suspicious behaviour or potential threat.*

13.3 Aeroplane search procedure checklist

The operator shall ensure that there is on board a checklist of the procedures to be followed in searching for a bomb in case of suspected sabotage and for inspecting aeroplanes for concealed weapons, explosives or other dangerous devices when a well-founded suspicion exists that the aeroplane may be the object of an act of unlawful interference. The checklist shall be supported by guidance on the appropriate course of action to be taken should a bomb or suspicious object be found and information on the least-risk bomb location specific to the aeroplane.

13.4 Training programmes

13.4.1 The operator shall establish and maintain an approved security training programme which ensures crew members act in the most appropriate manner to minimize the consequences of acts of unlawful interference. As a minimum, this programme shall include the following elements:

- a) determination of the seriousness of any occurrence;
- b) crew communication and coordination;
- c) appropriate self-defence responses;
- d) use of non-lethal protective devices assigned to crew members whose use is authorized by the State of the Operator;
- e) understanding of behaviour of terrorists so as to facilitate the ability of crew members to cope with hijacker behaviour and passenger responses;
- f) live situational training exercises regarding various threat conditions;
- g) flight crew compartment procedures to protect the aeroplane; and
- h) aeroplane search procedures and guidance on least-risk bomb locations where practicable.

13.4.2 The operator shall also establish and maintain a training programme to acquaint appropriate employees with preventive measures and techniques in relation to passengers, baggage, cargo, mail, equipment, stores and supplies intended for carriage on an aeroplane so that they contribute to the prevention of acts of sabotage or other forms of unlawful interference.

13.5 Reporting acts of unlawful interference

Following an act of unlawful interference, the pilot-in-command shall submit, without delay, a report of such an act to the designated local authority.

13.6 Miscellaneous

13.6.1 **Recommendation.**— *Specialized means of attenuating and directing the blast should be provided for use at the least-risk bomb location.*

13.6.2 **Recommendation.**— *Where the operator accepts the carriage of weapons removed from passengers, the aeroplane should have provision for stowing such weapons in a place so that they are inaccessible to any person during flight time.*

EXTRACTS FROM ANNEX 8 — *AIRWORTHINESS OF AIRCRAFT*

PART III. LARGE AEROPLANES**PART IIIA. AEROPLANES OVER 5 700 KG FOR WHICH APPLICATION FOR CERTIFICATION
WAS SUBMITTED ON OR AFTER 13 JUNE 1960, BUT BEFORE 2 MARCH 2004**

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CHAPTER 11. SECURITY

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11.2 Least-risk bomb location

For aeroplanes of a maximum certificated take-off mass in excess of 45 500 kg or with a passenger seating capacity greater than 60 and for which the application for certification was submitted on or after 12 March 2000, consideration shall be given during the design of the aeroplane to the provision of a least-risk bomb location so as to minimize the effects of a bomb on the aeroplane and its occupants.

11.3 Protection of the flight crew compartment

Recommendation.— *In all aeroplanes, which are required by Annex 6, Part I, Chapter 13 to have an approved flight crew compartment door and for which an application for amending the Type Certificate to include a derivative type design was submitted to the appropriate national authority, consideration should be given to reinforcing the flight crew compartment bulkheads, floors and ceilings so as to resist penetration by small arms fire and grenade shrapnel and to resist forcible intrusions, if these areas are accessible in flight to passengers and cabin crew.*

Note.— *Standards and Recommended Practices concerning the requirements for the flight crew compartment door in all commercial passenger-carrying aeroplanes are contained in Annex 6, Part I, Chapter 13.*

11.4 Interior design

For aeroplanes of a maximum certificated take-off mass in excess of 45 500 kg or with a passenger seating capacity greater than 60 and for which the application for certification was submitted on or after 12 March 2000, consideration shall be given to design features that will deter the easy concealment of weapons, explosives or other dangerous objects on board aircraft and that will facilitate search procedures for such objects.

**PART IIIB. AEROPLANES OVER 5 700 KG FOR WHICH APPLICATION FOR
CERTIFICATION WAS SUBMITTED ON OR AFTER 2 MARCH 2004**

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CHAPTER 10. SECURITY

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10.2 Least-risk bomb location

For aeroplanes of a maximum certificated take-off mass in excess of 45 500 kg or with a passenger seating capacity greater than 60, consideration shall be given during the design of the aeroplane to the provision of a least-risk bomb location so as to minimize the effects of a bomb on the aeroplane and its occupants.

10.3 Protection of the flight crew compartment

10.3.1 In all aeroplanes, which are required by Annex 6, Part I, Chapter 13 to have an approved flight crew compartment door, and for which an application for the issue of a Type Certificate was submitted to the appropriate national authority on or after 20 May 2006, the flight crew compartment bulkheads, floors and ceilings shall be designed to resist penetration by small arms fire and grenade shrapnel and to resist forcible intrusions, if these areas are accessible in flight to passengers and cabin crew.

10.3.2 **Recommendation.**— *In all aeroplanes, which are required by Annex 6, Part I, Chapter 13 to have an approved flight crew compartment door, and for which an application for amending the Type Certificate to include a derivative type design was submitted to the appropriate national authority on or after 20 May 2006, consideration should be given to reinforcing the flight crew compartment bulkheads, floors and ceilings so as to resist penetration by small arms fire and grenade shrapnel and to resist forcible intrusions, if these areas are accessible in flight to passengers and cabin crew.*

Note.— *Standards and Recommended Practices concerning the requirements for the flight crew compartment door in all commercial passenger-carrying aeroplanes are contained in Annex 6, Part I, Chapter 13.*

10.4 Interior design

For aeroplanes of a maximum certificated take-off mass in excess of 45 500 kg or with a passenger seating capacity greater than 60, consideration shall be given to design features that will deter the easy concealment of weapons, explosives or other dangerous objects on board aircraft and that will facilitate search procedures for such objects.

EXTRACTS FROM ANNEX 9 — *FACILITATION***CHAPTER 2. ENTRY AND DEPARTURE
OF AIRCRAFT****A. General**

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2.2 In developing procedures aimed at the efficient clearance of entering or departing aircraft, Contracting States shall take into account the application of aviation security and narcotics control measures, where appropriate.

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**CHAPTER 3. ENTRY AND DEPARTURE
OF PERSONS AND THEIR BAGGAGE****A. General**

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3.2 In developing procedures aimed at the efficient application of border controls on passengers and crew, Contracting States shall take into account the application of aviation security, border integrity, narcotics control and immigration control measures, where appropriate.

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3.4 Contracting States shall not extend the validity of their machine readable travel documents.

Note.— Specifications for machine readable travel documents (Doc 9303) do not permit alteration of the expiration date and other data in the machine readable zone.

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C. Security of travel documents

3.7 Contracting States shall regularly update security features in new versions of their travel documents, to guard against their misuse and to facilitate detection of cases where such documents have been unlawfully altered, replicated or issued.

3.8 Contracting States shall establish controls to safeguard against the theft of their blank travel documents and the misappropriation of newly issued travel documents.

3.8.1 Contracting States shall establish appropriate controls over the entire travel document application, adjudication and issuance processes to ensure a high level of integrity and security.

3.9 When a Contracting State issues an electronic Machine Readable Travel Document (eMRTD), it shall do so in accordance with the specifications in Doc 9303, *Machine Readable Travel Documents*.

Note.— The specifications for eMRTDs are found in Doc 9303, Parts 9, 10, 11 and 12.

3.9.1 **Recommended Practice.**— *Contracting States issuing or intending to issue eMRTDs should join the ICAO Public Key Directory (PKD).*

3.9.2 Contracting States that participate in the ICAO PKD shall upload the public key data necessary for authentication of all electronic passports that they issue to the PKD.

Note.—*The provision of the Contracting State's Country-Signing Public Key Certificate Authority Certificates (CCSCA) at the time of first use is considered the minimum level of data provision sufficient to fulfil this Standard. Upload of certificate revocation lists (CRLs) is highly recommended.*

3.9.3 **Recommended Practice.**— *Contracting States implementing checks on eMRTDs at border controls should join the ICAO PKD and use the information available from the PKD to validate eMRTDs at border controls.*

3.10 Contracting States shall promptly report accurate information about stolen, lost, and revoked travel documents, issued by their State, to INTERPOL for inclusion in the Stolen and Lost Travel Documents (SLTD) database.

3.10.1 **Recommended Practice.**— *Each Contracting State should, as far as practicable, query, at entry and departure border control points, the travel documents of individuals travelling internationally against the INTERPOL Stolen and Lost Travel Documents (SLTD) database.*

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H. Inspection of travel documents

3.31 Contracting States shall assist aircraft operators in the evaluation of travel documents presented by passengers, in order to deter fraud and abuse.

3.32 **Recommended Practice.**— *Contracting States should consider making arrangements with other Contracting States to permit the positioning of liaison officers at airports in order to assist aircraft operators to establish the validity and authenticity of the travel documents of embarking persons.*

3.33 Aircraft operators shall take necessary precautions at the point of embarkation to ensure that persons are in possession of the documents prescribed by the States of transit and destination for control purposes as described in this chapter.

3.33.1 The public authorities of each Contracting State shall seize fraudulent, falsified or counterfeit travel documents. The public authorities shall also seize the travel documents of a person impersonating the rightful holder of the travel document. Such documents shall be removed from circulation immediately and returned to the appropriate authorities of the State named as issuer or to the resident Diplomatic Mission of that State, except in cases where public authorities retain documents for law enforcement purposes. The appropriate authorities of the State named as issuer or the Diplomatic Mission of that State shall be notified of such retention by the public authorities that seize the travel documents in question.

3.33.2 Contracting States shall not require aircraft operators to seize documents referred to in Standard 3.33.1.

3.33.3 Contracting States shall not require an aircraft operator to carry a passenger from a point of departure or transit, to the intended final destination, when the travel document presented by that passenger is determined by the State to be fraudulent, falsified or counterfeit, or is held by a person other than to whom the document was legitimately issued.

Note.— *Nothing in this provision is to be construed so as to prevent the return of inadmissible passengers whose travel document(s) are fraudulent, falsified or counterfeit or held by an imposter, and have been seized by a Contracting State, in accordance with Standard 3.33.1 and who are travelling under a covering letter issued in accordance with Standard 5.7.*

3.33.4 **Recommended Practice.**— *Each Contracting State should consider the introduction of Automated Border Control (ABC) systems in order to facilitate and expedite the clearance of persons entering or departing by air.*

3.33.5 **Recommended Practice.**— *Contracting States utilizing ABC systems should, pursuant to 3.9.2 and 3.10.1, use the information available from the PKD to validate eMRTDs, perform biometric matching to establish that the passenger is the rightful holder of the document, and query INTERPOL's Stolen and Lost Travel Documents (SLTD) database, as well as other border control records, to determine eligibility for border crossing.*

3.33.6 **Recommended Practice.**— *Contracting States utilizing ABC systems should ensure that gates are adequately staffed while operational to ensure a smooth passenger flow and respond rapidly to safety and integrity concerns in the event of a system malfunction.*

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M. Identification and entry of crew and other aircraft operators' personnel

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3.62 If Contracting States issue Crew Member Certificates, then these shall be issued only in the form of machine readable cards in accordance with the specifications of Doc 9303, Part 5.

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3.64 CMCs and crew identity cards shall be issued only after a background check has been carried out by or on behalf of the relevant public authority. In addition, adequate controls such as a certification of employment status of an applicant prior to issuance, controls on blank card stock, and accountability requirements for issuing personnel, shall be placed on the issuance of CMCs and crew identity cards.

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CHAPTER 4. ENTRY AND DEPARTURE OF CARGO AND OTHER ARTICLES

A. General

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4.6 Contracting States shall not normally require the physical examination of cargo to be imported or exported and shall use risk management to determine which goods shall be examined and the extent of that examination.

4.7 Where practicable, in order to improve efficiency, modern screening or examination techniques shall be used to facilitate the physical examination of goods to be imported or exported.

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CHAPTER 5. INADMISSIBLE PERSONS AND DEPORTEES

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B. Inadmissible persons

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5.8 Contracting States that have reason to believe that an inadmissible person might offer resistance to removal shall inform the aircraft operator concerned as far in advance as possible of scheduled departure so that the aircraft operator can take precautions to ensure the security of the flight.

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C. Deportees

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5.19 Contracting States, when making arrangements with an aircraft operator for the removal of a deportee, shall make available the following information as soon as possible, but in any case not later than 24 hours before the scheduled time of departure of the flight:

- a) a copy of the deportation order, if legislation of the Contracting State allows for it;
- b) a risk assessment by the State determining the deportee's suitability for escorted or unescorted removal, including the deportee's medical condition and mental and physical fitness for carriage, willingness or unwillingness to travel, behavioural patterns and any history of violence, and/or any other pertinent information that would help the aircraft operator assess the risk to the security of the flight; and
- c) the names and nationalities of any escorts.

Note.— In order to ensure coordination of facilitation and security standards, attention is drawn to the applicable provisions of Annex 17, Chapter 4.

5.19.1 The aircraft operator and/or the pilot-in-command shall have the option to refuse to transport a deportee on a specific flight when reasonable concerns relating to the safety and security of the flight in question exist.

Note.— Reference is made to the ICAO Aviation Security Manual (Doc 8973 — Restricted), paragraphs 12.2.1.3 and 12.2.1.6.

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CHAPTER 6. INTERNATIONAL AIRPORTS — FACILITIES AND SERVICES FOR TRAFFIC

A. General

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6.1.4 Each Contracting State, in consultation with airport operators, shall ensure that facilities and services provided at international airports are, where possible, flexible and capable of expansion to meet traffic growth, an increase in security requirements arising from increased threat, or other changes to support border integrity measures.

*Note.— With respect to aviation security requirements, attention is drawn to the relevant specification in Annex 17, Chapter 2, 2.3.**

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B. Airport traffic flow arrangements

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III. Outbound passengers, crew and baggage

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6.16 Recommended Practice.— *Each Contracting State should allow airport and aircraft operators to provide off-airport check-in facilities, so long as all necessary security measures and other control requirements are met.*

6.17 Recommended Practice.— *Each Contracting State should ensure that security and/or border control personnel use efficient screening and examination techniques in examinations of passengers and their baggage, in order to facilitate aircraft departure.*

Note.— Privacy for the passenger should be assured during any physical searches required. Private rooms are preferable; however portable screens may be used. Physical searches should be conducted by an officer of the same sex as the passenger.

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E. Unruly passengers

6.45 Each Contracting State shall, to deter and prevent unruly behaviour, promote passenger awareness of the unacceptability and possible legal consequences of unruly or disruptive behaviour in aviation facilities and on board aircraft.

6.46 Each Contracting State shall take measures to ensure that relevant personnel are provided training to identify and manage unruly passenger situations.

Note.— Guidance material on the legal aspects of unruly/disruptive passengers can be found in the Manual on the Legal Aspects of Unruly and Disruptive Passengers (Doc 10117).

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CHAPTER 9. PASSENGER DATA EXCHANGE SYSTEMS

A. General

9.1 Contracting States requiring the exchange of Advance Passenger Information (API)/interactive API (iAPI) and/or Passenger Name Record (PNR) data from aircraft operators shall create a Passenger Data Single Window facility for each data category, or both data categories combined, that allows parties involved to lodge standardized information with a common data transmission entry point to fulfil all related passenger and crew data requirements for that jurisdiction.

* The specification reads as follows:

Recommendation.— *Each Contracting State should whenever possible arrange for the security controls and procedures to cause a minimum of interference with, or delay to the activities of, civil aviation provided the effectiveness of these controls and procedures is not compromised.*

9.1.1 **Recommended Practice.**— *Contracting States requiring the exchange of passenger and crew data from aircraft operators should consider creating a Passenger Data Single Window facility for both data categories combined.*

9.2 **Recommended Practice.**— *Contracting States and aircraft operators should provide the appropriate level, on a 24/7 (continuous) basis, of operational and technical support to analyse and respond to any system outage or failure in order to return to standard operations as soon as practicable.*

9.3 **Recommended Practice.**— *Contracting States and aircraft operators should establish and implement appropriate notification and recovery procedures for both scheduled maintenance of information systems and non-scheduled system outages or failures.*

9.4 **Recommended Practice.**— *Contracting States and aircraft operators should provide the appropriate level (where practicable, a 24/7 arrangement) of contact support.*

9.5 Contracting States shall not require aircraft operators to provide non-standard data elements as part of API, iAPI and/or PNR provisions.

9.6 Contracting States shall, when considering requiring elements that deviate from the standard, submit a request to the WCO/IATA/ICAO Contact Committee in conjunction with the WCO's Data Maintenance Request (DMR) process via a review and endorsement process for inclusion of the data element in the guidelines.

B. Advance Passenger Information (API)

9.7 Each Contracting State shall establish an Advance Passenger Information (API) system.

Note.— The United Nations Security Council, in Resolution 2178 (2014), at paragraph 9, “[c]alls upon Member States to require that airlines operating in their territories provide advance passenger information to the appropriate national authorities in order to detect the departure from their territories, or attempted entry into or transit through their territories, by means of civil aircraft, of individuals designated by the Committee established pursuant to resolutions 1267 (1999) and 1989 (2011) (“the Committee”), and further calls upon Member States to report any such departure from their territories, or such attempted entry into or transit through their territories, of such individuals to the Committee, as well as sharing this information with the State of residence or nationality, as appropriate and in accordance with domestic law and international obligations”.

9.8 The API system of each Contracting State shall be supported by appropriate legal authority (such as, inter alia, legislation, regulation or decree) and be consistent with internationally recognized standards for API.

Note 1.— API involves the capture of a passenger's or crew member's biographic data and flight details by the aircraft operator prior to departure. This information is electronically transmitted to the border control agencies in the destination or departure country. Thus, passenger and/or crew details are received in advance of the departure or arrival of the flight.

Note 2.— The UN/EDIFACT PAXLST message is a standard electronic message developed specifically, as a subset of UN/EDIFACT, to handle passenger manifest (electronic) transmissions. UN/EDIFACT stands for “United Nations rules for Electronic Data Interchange For Administration, Commerce and Transport.” The rules comprise a set of internationally agreed standards, directories and guidelines for the electronic interchange of structured data, and in particular that related to trade in goods and services between independent, computerized information systems. The WCO, IATA and ICAO have jointly agreed on the maximum set of API data that should be incorporated in the PAXLST message to be used for the transmission of such data by aircraft operators to the border control agencies in the destination or departure country. It is to be expected that the UN/EDIFACT standard may be supplemented by modern message techniques, such as international XML standards or web-based applications.

Note 3.— Under its current format structure the UN/EDIFACT PAXLST message will not accommodate general aviation usage.

Note 4.— The UN/EDIFACT PAXLST message is currently defined by the internationally recognized WCO/IATA/ICAO guidelines.

9.9 Recommended Practice.— *Each Contracting State developing legislation for the purpose of implementing an API system should consider developing aligned regulations that meet the needs of all involved agencies, define a common set of API data elements required for that jurisdiction in accordance with message construction standards and appoint one government agency to receive API data on behalf of all other agencies.*

9.10 When specifying the identifying information on passengers to be transmitted, Contracting States shall require only data elements that are available in machine readable form in travel documents conforming to the specifications contained in Doc 9303. All information required shall conform to specifications for UN/EDIFACT PAXLST messages found in the WCO/IATA/ICAO API Guidelines.

9.11 Contracting States shall not penalize, or otherwise hold an aircraft operator responsible, for inconsistencies in passenger data exchanges when the aircraft operator has collected and provided accurate advance passenger information data based on a travel document presented, which is valid for the journey and the passenger presents a second travel document which is valid for the journey on arrival.

9.12 Recommended Practice.— *Contracting States should seek to minimize the number of times API data is transmitted for a specific flight.*

9.13 If a Contracting State requires API data interchange, then it shall seek, to the greatest extent possible, to limit the operational and administrative burdens on aircraft operators, while enhancing passenger facilitation.

9.14 Recommended Practice.— *Contracting States should refrain from imposing fines and penalties on aircraft operators for any errors caused by a systems failure which may have resulted in the transmission of no, or corrupted, data to the public authorities in accordance with API systems.*

9.15 Contracting States requiring that passenger data be transmitted electronically through an API system shall not also require a passenger manifest in paper form.

9.16 Recommended Practice.— *Each Contracting State should consider the introduction of an interactive Advance Passenger Information (iAPI) system.*

9.17 Recommended Practice.— *Contracting States seeking to implement an iAPI system should:*

- a) seek to minimize the impact on existing aircraft operator systems and technical infrastructure by consulting aircraft operators before development and implementation of an iAPI system;*
- b) work together with aircraft operators to develop iAPI systems that integrate into the aircraft operator's departure control interfaces; and*
- c) conform to the Guidelines on Advance Passenger Information (API) adopted by WCO/ICAO/IATA when requiring iAPI.*

9.18 Recommended Practice.— *Contracting States' and aircraft operators' API systems, including iAPI, should be capable of 24/7 operation, with procedures in place to minimize disruption in the event of a system outage or failure.*

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D. Passenger Name Record (PNR) Data

9.24 Each Contracting State shall:

- a) develop a capability to collect, use, process and protect Passenger Name Record (PNR) data for flights to and from its territory supported by an appropriate legal and administrative framework (such as, inter alia, legislation, regulation or decree), and be consistent with all Standards contained in Annex 9, Chapter 9, section D;
- b) align its PNR data requirements and its handling of such data with the guidelines contained in ICAO Doc 9944, *Guidelines on Passenger Name Record (PNR) Data*, and in PNRGOV message implementation guidance materials published and updated by the WCO and endorsed by ICAO and IATA; and
- c) adopt and implement the PNRGOV message for airline-to-government PNR data transferral to ensure global interoperability.

Note 1.— The United Nations Security Council, in Resolution 2396 (2017) at paragraph 12, decided that Member States shall develop the capability to collect, process and analyse, in furtherance of ICAO Standards and Recommended Practices, Passenger Name Record (PNR) data, and to ensure PNR data is used by and shared with all their competent national authorities, with full respect for human rights and fundamental freedoms, for the purpose of preventing, detecting, and investigating terrorist offences and related travel.

Note 2.— The PNRGOV message is a standard electronic message endorsed jointly by WCO/ICAO/IATA. Depending on the specific aircraft operator's Reservation and Departure Control Systems, specific data elements that have been collected and stored by the aircraft operator for their own operational and commercial purposes can be efficiently transmitted via this standardized message structure.

9.25 Contracting States shall, with full respect for human rights and fundamental freedoms:

- a) clearly identify in their legal and administrative framework the PNR data to be used in their operations;
- b) clearly set the purposes for which PNR data may be used by the authorities, which should be no wider than that necessary in view of the aims to be achieved, including in particular border security purposes to fight terrorism and serious crime; and
- c) limit the disclosure of PNR data to other authorities in the same State or in other Contracting States that exercise functions related to the purpose for which PNR data are processed, including in particular border security purposes, and ensure comparable protections as those afforded by the disclosing authority.

9.26 Contracting States shall:

- a) prevent unauthorized access, disclosure and use of PNR data; their legal framework shall provide penalties for misuse, unauthorized access, and unauthorized disclosure;
- b) ensure that the safeguards applied to their collection, use, processing and protection of PNR data apply to all individuals without unlawful differentiation;
- c) take measures to ensure that individuals are informed about the collection, use, processing and protection of PNR data and related privacy standards employed;
- d) take measures to ensure that aircraft operators inform their customers about the transfer of PNR data;

- e) provide for administrative and judicial redress mechanisms to enable individuals to seek a remedy for the unlawful processing of their PNR data by public authorities; and
- f) provide for appropriate mechanisms, established by their legal and administrative framework, for individuals to obtain access to their PNR data and to request, if necessary, corrections, deletions or notations.

9.27 **Recommended Practice.**— *Subject to necessary and proportionate restrictions, Contracting States should notify individuals of the processing of their PNR data and inform them about the rights and means of redress afforded to them, as defined in their legal and administrative framework.*

9.28 Contracting States shall:

- a) base the automated processing of PNR data on objective, precise and reliable criteria that effectively indicate the existence of a risk, without leading to unlawful differentiation; and
- b) not make decisions that produce significant adverse actions affecting the legal interests of individuals based solely on the automated processing of PNR data.

9.29 Contracting States shall designate one (or more) competent domestic authority(ies) as defined in their legal and administrative framework with the power to conduct independent oversight of the protection of PNR data and determine whether PNR data are being collected, used, processed and protected with full respect for human rights and fundamental freedoms.

9.30 Contracting States shall:

- a) not require aircraft operators to collect PNR data that is not required as part of their normal business operating procedures or to filter the data prior to transmission; and
- b) not use PNR data revealing an individual's racial or ethnic origin, political opinions, religious or philosophical beliefs, trade union membership or data concerning their health, sexual life or sexual orientation, other than in exceptional and immediate circumstances to protect the vital interests of the data subject or of another natural person. In circumstances where such information is transferred, Contracting States shall delete such data as soon as practicable.

9.31 Contracting States shall:

- a) retain PNR data for a set period as defined in their legal and administrative framework, which shall be that period necessary and proportionate for the purposes for which the PNR data is used;
- b) depersonalize retained PNR data, which enable direct identification of the data subject, after set periods, which do not exceed what is necessary as defined in their national laws and policies, except when used in connection with an identifiable ongoing case, threat or risk related to the purposes identified in 9.25 b);
- c) only re-personalize or unmask PNR data when used in connection with an identifiable case, threat or risk for the purposes identified in 9.25 b); and
- d) delete or anonymize PNR data at the end of the retention period, except when used in connection with an identifiable ongoing case, threat or risk purposes identified in 9.25 b).

Note 1.— Depersonalization of PNR data is the masking of information which enables direct identification of an individual, without hindering law enforcement use of PNR data, whereas PNR data anonymization is the permanent removal of identity information of a person from the PNR record.

Note 2.— This Standard is not intended to restrict criminal justice proceedings in Contracting States, such as investigation, prosecution and criminal trials, related to the purposes identified in 9.25 b).

9.32 Recommended Practice.— *Contracting States should retain PNR data for a maximum period of five years after the transfer of PNR data, except when required in the course of an investigation, prosecution, or court proceeding.*

9.33 Recommended Practice.— *Contracting States should depersonalize PNR data within six months of and no later than two years after the transfer of PNR data.*

**EXTRACTS FROM ANNEX 10 — AERONAUTICAL TELECOMMUNICATIONS,
VOLUME IV (SURVEILLANCE AND COLLISION AVOIDANCE SYSTEMS)**

CHAPTER 2. GENERAL

2.1 SECONDARY SURVEILLANCE RADAR (SSR)

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2.1.4 Mode A reply codes (information pulses)

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2.1.4.2 The following Mode A codes shall be reserved for special purposes:

2.1.4.2.1 Code 7700 to provide recognition of an aircraft in an emergency.

2.1.4.2.2 Code 7600 to provide recognition of an aircraft with radiocommunication failure.

2.1.4.2.3 Code 7500 to provide recognition of an aircraft which is being subjected to unlawful interference.

2.1.4.3 Appropriate provisions shall be made in ground decoding equipment to ensure immediate recognition of Mode A codes 7500, 7600 and 7700.

EXTRACTS FROM ANNEX 11 — AIR TRAFFIC SERVICES

CHAPTER 2. GENERAL

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2.24 Service to aircraft in the event of an emergency

2.24.1 An aircraft known or believed to be in a state of emergency, including being subjected to unlawful interference, shall be given maximum consideration, assistance and priority over other aircraft as may be necessitated by the circumstances.

Note.— To indicate that it is in a state of emergency, an aircraft equipped with an appropriate data link capability and/or an SSR transponder might operate the equipment as follows:

a) on Mode A, Code 7700; or

- b) on Mode A, Code 7500, to indicate specifically that it is being subjected to unlawful interference; and/or
- c) activate the appropriate emergency and/or urgency capability of ADS-B or ADS-C; and/or
- d) transmit the appropriate emergency message via CPDLC.

2.24.1.1 **Recommendation.**— *In communications between ATS units and aircraft in the event of an emergency, Human Factors principles should be observed.*

Note.— *Guidance material on Human Factors principles can be found in the Human Factors Training Manual (Doc 9683).*

2.24.2 When an occurrence of unlawful interference with an aircraft takes place or is suspected, ATS units shall attend promptly to requests by the aircraft. Information pertinent to the safe conduct of the flight shall continue to be transmitted and necessary action shall be taken to expedite the conduct of all phases of the flight, especially the safe landing of the aircraft.

2.24.3 When an occurrence of unlawful interference with an aircraft takes place or is suspected, ATS units shall, in accordance with locally agreed procedures, immediately inform the appropriate authority designated by the State and exchange necessary information with the operator or its designated representative.

Note 1.— *A strayed or unidentified aircraft may be suspected as being the subject of unlawful interference. See 2.25.1.3.*

Note 2.— *Procedures relating to the handling of strayed or unidentified aircraft are contained in 2.25.1.*

Note 3.— *The PANS-ATM (Doc 4444), Chapter 15, 15.1.3 contains more specific procedures related to unlawful interference.*

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CHAPTER 5. ALERTING SERVICE

5.1 Application

5.1.1 Alerting service shall be provided:

- a) for all aircraft provided with air traffic control service;
- b) in so far as practicable, to all other aircraft having filed a flight plan or otherwise known to the air traffic services; and
- c) to any aircraft known or believed to be the subject of unlawful interference.

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5.2 Notification of rescue coordination centres

5.2.1 Without prejudice to any other circumstances that may render such notification advisable, air traffic services units shall, except as prescribed in 5.5.1, notify rescue coordination centres immediately an aircraft is considered to be in a state of emergency in accordance with the following:

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- b) *Alert phase* when:
 - 1) following the uncertainty phase, subsequent attempts to establish communication with the aircraft or inquiries to other relevant sources have failed to reveal any news of the aircraft, or when

- 2) an aircraft has been cleared to land and fails to land within five minutes of the estimated time of landing and communication has not been re-established with the aircraft, or when
- 3) information has been received which indicates that the operating efficiency of the aircraft has been impaired, but not to the extent that a forced landing is likely,

except when evidence exists that would allay apprehension as to the safety of the aircraft and its occupants, or when

- 4) an aircraft is known or believed to be the subject of unlawful interference.

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5.5 Information to the operator

5.5.1 When an area control or a flight information centre decides that an aircraft is in the uncertainty or the alert phase, it shall, when practicable, advise the operator prior to notifying the rescue coordination centre.

Note.— If an aircraft is in the distress phase, the rescue coordination centre has to be notified immediately in accordance with 5.2.1.

5.5.2 All information notified to the rescue coordination centre by an area control or flight information centre shall, whenever practicable, also be communicated, without delay, to the operator.

5.6 Information to aircraft operating in the vicinity of an aircraft in a state of emergency

5.6.1 When it has been established by an air traffic services unit that an aircraft is in a state of emergency, other aircraft known to be in the vicinity of the aircraft involved shall, except as provided in 5.6.2, be informed of the nature of the emergency as soon as practicable.

5.6.2 When an air traffic services unit knows or believes that an aircraft is being subjected to unlawful interference, no reference shall be made in ATS air-ground communications to the nature of the emergency unless it has first been referred to in communications from the aircraft involved and it is certain that such reference will not aggravate the situation.

EXTRACT FROM ANNEX 13 — AIRCRAFT ACCIDENT AND INCIDENT INVESTIGATION**CHAPTER 5. INVESTIGATION**

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ORGANIZATION AND CONDUCT OF THE INVESTIGATION

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**RESPONSIBILITY OF THE STATE
CONDUCTING THE INVESTIGATION**

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Informing aviation security authorities

5.11 If, in the course of an investigation it becomes known, or it is suspected, that an act of unlawful interference was involved, the investigator-in-charge shall immediately initiate action to ensure that the aviation security authorities of the State(s) concerned are so informed.

**EXTRACTS FROM ANNEX 14 — AERODROMES,
VOLUME I — AERODROME DESIGN AND OPERATIONS****CHAPTER 3. PHYSICAL CHARACTERISTICS**

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3.14 Isolated aircraft parking position

3.14.1 An isolated aircraft parking position shall be designated or the aerodrome control tower shall be advised of an area or areas suitable for the parking of an aircraft which is known or believed to be the subject of unlawful interference, or which for other reasons needs isolation from normal aerodrome activities.

3.14.2 **Recommendation.**— *The isolated aircraft parking position should be located at the maximum distance practicable and in any case never less than 100 m from other parking positions, buildings or public areas, etc. Care should be taken to ensure that the position is not located over underground utilities such as gas and aviation fuel and, to the extent feasible, electrical or communication cables.*

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CHAPTER 5. VISUAL AIDS FOR NAVIGATION

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5.3 Lights

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5.3.24 Apron floodlighting
(see also 5.3.17.1 and 5.3.18.1)

Application

5.3.24.1 **Recommendation.**— *Apron floodlighting should be provided on an apron, on a de-icing/anti-icing facility and on a designated isolated aircraft parking position intended to be used at night.*

Note 1.— Where a de-icing/anti-icing facility is located in close proximity to the runway and permanent floodlighting could be confusing to pilots, other means of illumination of the facility may be required.

Note 2.— The designation of an isolated aircraft parking position is specified in 3.14.

Note 3.— Guidance on apron floodlighting is given in the Aerodrome Design Manual (Doc 9157), Part 4.

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CHAPTER 8. ELECTRICAL SYSTEMS

8.1 Electric power supply systems for air navigation facilities

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Application

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8.1.10 **Recommendation.**— *The following aerodrome facilities should be provided with a secondary power supply capable of supplying power when there is a failure of the primary power supply:*

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e) essential security lighting, if provided in accordance with 9.11;

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CHAPTER 9. AERODROME OPERATIONAL SERVICES, EQUIPMENT AND INSTALLATIONS

9.1 Aerodrome emergency planning

General

Introductory Note.— Aerodrome emergency planning is the process of preparing an aerodrome to cope with an emergency occurring at the aerodrome or in its vicinity. The objective of aerodrome emergency planning is to minimize the effects of an emergency, particularly in respect of saving lives and maintaining aircraft operations. The aerodrome emergency plan sets forth the procedures for coordinating the response of different aerodrome agencies (or services) and of those agencies in the surrounding community that could be of assistance in responding to the emergency. Guidance material to assist the appropriate authority in establishing aerodrome emergency planning is given in the Airport Services Manual (Doc 9137), Part 7.

9.1.1 An aerodrome emergency plan shall be established at an aerodrome, commensurate with the aircraft operations and other activities conducted at the aerodrome.

9.1.2 The aerodrome emergency plan shall provide for the coordination of the actions to be taken in an emergency occurring at an aerodrome or in its vicinity.

Note 1.— Examples of emergencies are: aircraft emergencies, sabotage including bomb threats, unlawfully seized aircraft, dangerous goods occurrences, building fires, natural disaster and public health emergencies.

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9.1.3 The plan shall coordinate the response or participation of all existing agencies which, in the opinion of the appropriate authority, could be of assistance in responding to an emergency.

Note 1.— Examples of agencies are:

- *on the aerodrome: air traffic control units, rescue and firefighting services, aerodrome administration, medical and ambulance services, aircraft operators, security services, and police;*
- *off the aerodrome: fire departments, police, health authorities (including medical, ambulance, hospital and public health services), military, and harbour patrol or coast guard.*

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9.1.4 **Recommendation.**— *The plan should provide for cooperation and coordination with the rescue coordination centre, as necessary.*

9.1.5 **Recommendation.**— *The aerodrome emergency plan document should include at least the following:*

- a) types of emergencies planned for;*
- b) agencies involved in the plan;*
- c) responsibility and role of each agency, the emergency operations centre and the command post, for each type of emergency;*
- d) information on names and telephone numbers of offices or people to be contacted in the case of a particular emergency; and*
- e) a grid map of the aerodrome and its immediate vicinity.*

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Emergency operations centre and command post

9.1.7 **Recommendation.**— *A fixed emergency operations centre and a mobile command post should be available for use during an emergency.*

9.1.8 **Recommendation.**— *The emergency operations centre should be a part of the aerodrome facilities and should be responsible for the overall coordination and general direction of the response to an emergency.*

9.1.9 **Recommendation.**— *The command post should be a facility capable of being moved rapidly to the site of an emergency, when required, and should undertake the local coordination of those agencies responding to the emergency.*

9.1.10 **Recommendation.**— *A person should be assigned to assume control of the emergency operations centre and, when appropriate, another person the command post.*

Communication system

9.1.11 **Recommendation.**— *Adequate communication systems linking the command post and the emergency operations centre with each other and with the participating agencies should be provided in accordance with the plan and consistent with the particular requirements of the aerodrome.*

Aerodrome emergency exercise

9.1.12 The plan shall contain procedures for periodic testing of the adequacy of the plan and for reviewing the results in order to improve its effectiveness.

Note.— *The plan includes all participating agencies and associated equipment.*

9.1.13 The plan shall be tested by conducting:

- a) a full-scale aerodrome emergency exercise at intervals not exceeding two years and partial emergency exercises in the intervening year to ensure that any deficiencies found during the full-scale aerodrome emergency exercise have been corrected; or
- b) a series of modular tests commencing in the first year and concluding in a full-scale aerodrome emergency exercise at intervals not exceeding three years;

and reviewed thereafter, or after an actual emergency, so as to correct any deficiency found during such exercises or actual emergency.

Note 1.— *The purpose of a full-scale exercise is to ensure the adequacy of the plan to cope with different types of emergencies. The purpose of a partial exercise is to ensure the adequacy of the response to individual participating agencies and components of the plan, such as the communications system. The purpose of modular tests is to enable concentrated effort on specific components of established emergency plans.*

Note 2.— *Guidance material on airport emergency planning is available in the Airport Services Manual (Doc 9137), Part 7.*

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9.10 Fencing

Application

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9.10.2 A fence or other suitable barrier shall be provided on an aerodrome to deter the inadvertent or premeditated access of an unauthorized person onto a non-public area of the aerodrome.

Note 1.— This is intended to include the barring of sewers, ducts, tunnels, etc., where necessary to prevent access.

Note 2.— Special measures may be required to prevent the access of an unauthorized person to runways or taxiways which overpass public roads.

9.10.3 Suitable means of protection shall be provided to deter the inadvertent or premeditated access of unauthorized persons into ground installations and facilities essential for the safety of civil aviation located off the aerodrome.

Location

9.10.4 The fence or barrier shall be located so as to separate the movement area and other facilities or zones on the aerodrome vital to the safe operation of aircraft from areas open to public access.

9.10.5 **Recommendation.**— *When greater security is thought necessary, a cleared area should be provided on both sides of the fence or barrier to facilitate the work of patrols and to make trespassing more difficult. Consideration should be given to the provision of a perimeter road inside the aerodrome fencing for the use of both maintenance personnel and security patrols.*

9.11 Security lighting

Recommendation.— *At an aerodrome where it is deemed desirable for security reasons, a fence or other barrier provided for the protection of international civil aviation and its facilities should be illuminated at a minimum essential level. Consideration should be given to locating lights so that the ground area on both sides of the fence or barrier, particularly at access points, is illuminated.*

EXTRACTS FROM ANNEX 18 — THE SAFE TRANSPORT OF DANGEROUS GOODS BY AIR
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CHAPTER 2. APPLICABILITY

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2.2 Dangerous Goods Technical Instructions

2.2.1 Each Contracting State shall take the necessary measures to achieve compliance with the detailed provisions contained in the Technical Instructions. Each Contracting State shall also take the necessary measures to achieve compliance with any amendment to the Technical Instructions which may be published during the specified period of applicability of an edition of the Technical Instructions.

2.2.2 **Recommendation.**— *Each Contracting State should inform ICAO of difficulties encountered in the application of the Technical Instructions and of any amendments which it would be desirable to make to them.*

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CHAPTER 10. TRAINING PROGRAMMES

10.1 Establishment of training programmes

Initial and recurrent dangerous goods training programmes shall be established and maintained in accordance with the Technical Instructions.

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CHAPTER 13. DANGEROUS GOODS SECURITY PROVISIONS

Each Contracting State shall establish dangerous goods security measures, applicable to shippers, operators and other individuals engaged in the transport of dangerous goods by air, to be taken to minimize theft or misuse of dangerous goods that may endanger persons, property or the environment. These measures should be commensurate with security provisions specified in other Annexes and the Technical Instructions.

EXTRACTS FROM DOC 9284 — TECHNICAL INSTRUCTIONS FOR THE SAFE TRANSPORT OF DANGEROUS GOODS BY AIR

Part 1. GENERAL

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CHAPTER 4. DANGEROUS GOODS TRAINING

*Parts of this Chapter are affected by State Variations AE 2, BR 7, CA 11, HK 1, OM 2, VE 5, VE 6;
see Table A-1*

Note.— In cases where the application of specific provisions within this chapter may be different from the previous version of the Technical Instructions (e.g. an assessment instead of a test to verify understanding, or application of aspects of training identified within Table 1-4), the training provisions contained in Part 1;4 of the 2019-2020 Edition of the Instructions are provided in Attachment 4 and may be used until 31 December 2022.

4.1 ESTABLISHMENT OF DANGEROUS GOODS TRAINING PROGRAMMES

Note.— A training programme includes elements such as design methodology, assessment, initial and recurrent training, instructor qualifications and competencies, training records and evaluation of the effectiveness of training.

4.1.1 The employer of personnel that perform functions aimed at ensuring that dangerous goods are transported in accordance with these Instructions must establish and maintain a dangerous goods training programme.

Note 1.— An approach to ensuring personnel are competent to perform any function for which they are responsible is provided in Guidance on a Competency-based Approach to Dangerous Goods Training and Assessment (Doc 10147).

Note 2.— Security personnel who are involved with the screening of passengers and crew and their baggage and cargo or mail are required to be trained irrespective of whether the operator on which the passenger or cargo is to be transported carries dangerous goods as cargo.

4.1.2 All operators must establish a dangerous goods training programme regardless of whether or not they are approved to transport dangerous goods as cargo.

4.1.3 Training courses may be developed and delivered by or for the employer.

EXTRACTS FROM THE PROCEDURES FOR AIR NAVIGATION SERVICES — AIR TRAFFIC MANAGEMENT (DOC 4444)
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CHAPTER 5. SEPARATION METHODS AND MINIMA

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5.2 PROVISIONS FOR THE SEPARATION OF CONTROLLED TRAFFIC

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5.2.1.3 Larger separations than the specified minima should be applied whenever exceptional circumstances such as unlawful interference or navigational difficulties call for extra precautions. This should be done with due regard to all relevant factors so as to avoid impeding the flow of air traffic by the application of excessive separations.

Note.— Unlawful interference with an aircraft constitutes a case of exceptional circumstances which might require the application of separations larger than the specified minima, between the aircraft being subjected to unlawful interference and other aircraft.

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CHAPTER 15. PROCEDURES RELATED TO EMERGENCIES, COMMUNICATION FAILURE AND CONTINGENCIES

15.1 EMERGENCY PROCEDURES

15.1.1 General

15.1.1.1 The various circumstances surrounding each emergency situation preclude the establishment of exact detailed procedures to be followed. The procedures outlined herein are intended as a general guide to air traffic services personnel. Air traffic control units shall maintain full and complete coordination, and personnel shall use their best judgement in handling emergency situations.

Note 1.— Additional procedures to be applied in relation to emergencies and contingencies while using an ATS surveillance system are contained in Chapter 8, 8.8.1.

Note 2.— If the pilot of an aircraft encountering a state of emergency has previously been directed by ATC to select a specific transponder code and/or a specific ADS-B emergency mode, that code and/or mode will normally be maintained unless, in special circumstances, the pilot has decided or has been advised otherwise. Where ATC has not requested a code or emergency mode to be set, the pilot will set the transponder to Mode A Code 7700 and/or the appropriate ADS-B emergency mode.

Note 3.— Some aircraft equipped with first generation ADS-B avionics have the capability to transmit a general emergency alert only, regardless of the code selected by the pilot.

Note 4.— Some aircraft equipped with first generation ADS-B avionics do not have the capability of squawking IDENT while the emergency and/or urgency mode is selected.

15.1.1.2 When an emergency is declared by an aircraft, the ATS unit should take appropriate and relevant action as follows:

- a) unless clearly stated by the flight crew or otherwise known, take all necessary steps to ascertain aircraft identification and type, the type of emergency, the intentions of the flight crew as well as the position and level of the aircraft;
- b) decide upon the most appropriate type of assistance which can be rendered;
- c) enlist the aid of any other ATS unit or other services which may be able to provide assistance to the aircraft;
- d) provide the flight crew with any information requested as well as any additional relevant information, such as details on suitable aerodromes, minimum safe altitudes, weather information;
- e) obtain from the operator or the flight crew such of the following information as may be relevant: number of persons on board, amount of fuel remaining, possible presence of hazardous materials and the nature thereof; and
- f) notify the appropriate ATS units and authorities as specified in local instructions.

15.1.1.3 Changes of radio frequency and SSR code should be avoided if possible and should normally be made only when or if an improved service can be provided to the aircraft concerned. Manoeuvring instructions to an aircraft experiencing engine failure should be limited to a minimum. When appropriate, other aircraft operating in the vicinity of the aircraft in emergency should be advised of the circumstances.

Note.— Requests to the flight crew for the information contained in 15.1.1.2 e) will be made only if the information is not available from the operator or from other sources and will be limited to essential information.

15.1.2 Priority

An aircraft known or believed to be in a state of emergency, including being subjected to unlawful interference, shall be given priority over other aircraft.

15.1.3 Unlawful interference and aircraft bomb threat

15.1.3.1 Air traffic services personnel shall be prepared to recognize any indication of the occurrence of unlawful interference with an aircraft.

15.1.3.2 Whenever unlawful interference with an aircraft is suspected, and where automatic distinct display of SSR Mode A Code 7500 and Code 7700 is not provided, the controller shall attempt to verify any suspicion by setting the SSR decoder to Mode A Code 7500 and thereafter to Code 7700.

Note.— An aircraft equipped with an SSR transponder is expected to operate the transponder on Mode A Code 7500 to indicate specifically that it is the subject of unlawful interference. The aircraft may operate the transponder on Mode A Code 7700, to indicate that it is threatened by grave and imminent danger and requires immediate assistance. An aircraft equipped with other surveillance system transmitters, including ADS-B and ADS-C, might send the emergency and/or urgency signal by all of the available means.

15.1.3.3 Whenever unlawful interference with an aircraft is known or suspected or a bomb threat warning has been received, ATS units shall promptly attend to requests by, or to anticipated needs of, the aircraft, including requests for relevant information relating to air navigation facilities, procedures and services along the route of flight and at any aerodrome of intended landing, and shall take such action as is necessary to expedite the conduct of all phases of the flight.

15.1.3.3.1 ATS units shall also:

- a) transmit, and continue to transmit, information pertinent to the safe conduct of the flight, without expecting a reply from the aircraft;
- b) monitor and plot the progress of the flight with the means available, and coordinate transfer of control with adjacent ATS units without requiring transmissions or other responses from the aircraft, unless communication with the aircraft remains normal;
- c) inform, and continue to keep informed, appropriate ATS units, including those in adjacent FIRs, which may be concerned with the progress of the flight;

Note.— In applying this provision, account must be taken of all the factors which may affect the progress of the flight, including fuel endurance and the possibility of sudden changes in route and destination. The objective is to provide, as far in advance as is practicable in the circumstances, each ATS unit with appropriate information as to the expected or possible penetration of the aircraft into its area of responsibility.

- d) notify:
 - 1) the operator or its designated representative;
 - 2) the appropriate rescue coordination centre in accordance with appropriate alerting procedures;
 - 3) the appropriate authority designated by the State;

Note.— It is assumed that the designated security authority and/or the operator will in turn notify other parties concerned in accordance with pre-established procedures.

- e) relay appropriate messages, relating to the circumstances associated with the unlawful interference, between the aircraft and designated authorities.

Note.— These messages include, but are not limited to: initial messages declaring an incident; update messages on an existing incident; messages containing decisions made by appropriate decision makers; messages on transfer of responsibility; messages on acceptance of responsibility; messages indicating that an entity is no longer involved in an incident; and messages closing an incident.

15.1.3.4 The following additional procedures shall apply if a threat is received indicating that a bomb or other explosive device has been placed on board a known aircraft. The ATS unit receiving the threat information shall:

- a) if in direct communication with the aircraft, advise the flight crew without delay of the threat and the circumstances surrounding the threat; or
- b) if not in direct communication with the aircraft, advise the flight crew by the most expeditious means through other ATS units or other channels.

15.1.3.5 The ATS unit in communication with the aircraft shall ascertain the intentions of the flight crew and report those intentions to other ATS units which may be concerned with the flight.

15.1.3.6 The aircraft shall be handled in the most expeditious manner while ensuring, to the extent possible, the safety of other aircraft and that personnel and ground installations are not put at risk.

15.1.3.7 Aircraft in flight shall be given re-clearance to a requested new destination without delay. Any request by the flight crew to climb or descend for the purpose of equalizing or reducing the differential between the outside air pressure and the cabin air pressure shall be approved as soon as possible.

15.1.3.8 An aircraft on the ground should be advised to remain as far away from other aircraft and installations as possible and, if appropriate, to vacate the runway. The aircraft should be instructed to taxi to a designated or isolated parking area in accordance with local instructions. Should the flight crew disembark passengers and crew immediately, other aircraft, vehicles and personnel should be kept at a safe distance from the threatened aircraft.

15.1.3.9 ATS units shall not provide any advice or suggestions concerning action to be taken by the flight crew in relation to an explosive device.

15.1.3.10 An aircraft known or believed to be the subject of unlawful interference or which for other reasons needs isolation from normal aerodrome activities shall be cleared to the designated isolated parking position. Where such an isolated parking position has not been designated, or if the designated position is not available, the aircraft shall be cleared to a position within the area or areas selected by prior agreement with the aerodrome authority. The taxi clearance shall specify the taxi route to be followed to the parking position. This route shall be selected with a view to minimizing any security risks to the public, other aircraft and installations at the aerodrome.

Note.— See Annex 14, Volume I, Chapter 3.

**EXTRACTS FROM THE PROCEDURES FOR AIR NAVIGATION SERVICES —
AIRCRAFT OPERATIONS (DOC 8168), VOLUME III —
AIRCRAFT OPERATING PROCEDURES**

Section 4

**SECONDARY SURVEILLANCE RADAR (SSR)
TRANSPONDER OPERATING PROCEDURES**

Chapter 1

OPERATION OF TRANSPONDERS

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1.4 EMERGENCY PROCEDURES

The pilot of an aircraft in a state of emergency shall set the transponder to Mode A Code 7700 unless ATC has previously directed the pilot to operate the transponder on a specified code. In the latter case, the pilot shall continue to use the specified code unless otherwise advised by ATC. However, a pilot may select Mode A Code 7700 whenever there is a specific reason to believe that this would be the best course of action.

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1.6 UNLAWFUL INTERFERENCE WITH AIRCRAFT IN FLIGHT

1.6.1 If there is unlawful interference with an aircraft in flight, the pilot-in-command shall attempt to set the transponder to Mode A Code 7500 in order to indicate the situation. If circumstances so warrant, Code 7700 should be used instead.

1.6.2 If a pilot has selected Mode A Code 7500 and has been requested to confirm this code by ATC (in accordance with 1.1.5), the pilot shall, according to circumstances, either confirm this or not reply at all.

Note.— If the pilot does not reply, ATC will take this as confirmation that the use of Code 7500 is not an inadvertent false code selection.

— END —

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