

COVER SHEET TO AMENDMENT 14

**INTERNATIONAL STANDARDS
AND RECOMMENDED PRACTICES**

SECURITY

**ANNEX 17
TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION**

NINTH EDITION — MARCH 2011

INTERNATIONAL CIVIL AVIATION ORGANIZATION

Checklist of Amendments to Annex 17

	<i>Effective date</i>	<i>Date of applicability</i>
Ninth Edition (incorporates Amendments 1 to 12)	26 March 2011	1 July 2011
Amendment 13 (adopted by the Council on 13 November 2012)	15 March 2013	15 July 2013
Amendment 14 (adopted by the Council on 26 February 2014) Replacement pages (xii), 1-3, 2-2, 3-1, 3-3, 4-3 to 4-5	14 July 2014	14 November 2014



Transmittal note

Amendment 14

to the

International Standards and
Recommended Practices

SECURITY

(Annex 17 to the Convention on International Civil Aviation)

1. Insert the following replacement pages in Annex 17 (Ninth Edition) to incorporate Amendment 14 which becomes applicable on 14 November 2014:
 - a) Page (xii) — Foreword
 - b) Page 1-3 — Chapter 1
 - c) Page 2-2 — Chapter 2
 - d) Pages 3-1 and 3-3 — Chapter 3
 - e) Pages 4-3, 4-4 and 4-5 — Chapter 4
 2. Record the entry of this amendment on page (iii).
-

<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

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 inspection. An examination of the implementation of relevant national civil aviation security programme requirements by an airline, airport, or other entity involved in security.

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. Such areas will normally include, *inter alia*, all commercial aviation passenger departure areas between the screening checkpoint and the aircraft, the ramp, baggage make-up areas, including those where aircraft are being brought into service and screened baggage and cargo are present, cargo sheds, mail centres, airside catering and aircraft cleaning premises.

Security survey. An evaluation of security needs including the identification of vulnerabilities which could be exploited to carry out an act of unlawful interference, and the recommendation of corrective actions.

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 **Recommendation.**— *Each Contracting State should ensure appropriate protection of aviation security information.*

Note 1.— Guidance material on achieving civil aviation security objectives through application of the Standards and Recommended Practices in the following chapters can be found in the Aviation Security Manual (Doc 8973 — Restricted).

Note 2.— The 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).

2.2 Applicability

2.2.1 Each Contracting State shall apply the Standards and shall endeavour to apply the Recommended Practices contained in Annex 17 to international civil aviation operations.

2.2.2 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 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. The requesting State shall give consideration to alternative measures of the other State that are equivalent to those requested.

2.4.2 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.

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

2.4.4 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.

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

2.4.6 **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.*

2.4.7 **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.*

2.4.8 **Recommendation.**— *Each Contracting State should notify ICAO where it has shared information under 2.4.5.*

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 Equipment, 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.*

Note.— *Guidance material regarding Human Factors principles can be found in the manual on Human Factors in Civil Aviation Security Operations (Doc 9808) and in Part 1, Chapter 4, of the Human Factors Training Manual (Doc 9683).*

2.5.3 **Recommendation.**— *Each Contracting State should employ security equipment, where appropriate, to the extent operationally, technically and financially practicable, 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 of threat to civil aviation within its territory, 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.

Note.— Guidance material regarding threat assessment and risk management methodologies can be found in the Aviation Security Manual (Doc 8973 — Restricted).

3.1.4 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.

3.1.5 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.

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

3.1.7 From 1 July 2013, each Contracting State shall ensure the development and implementation of training programmes and an instructor certification system in accordance with the national civil aviation security programme.

3.1.8 Each Contracting State shall ensure that the appropriate authority arranges for the supporting resources and facilities required by the aviation security services to be 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.

3.1.10 **Recommendation.**— *Each Contracting State should ensure that personnel of all entities 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 periodic security awareness training.*

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 shall ensure that commercial air transport operators providing service from that State have established, implemented and maintained a written operator security programme that meets the requirements of the national civil aviation security programme of that State.

3.3.2 **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.*

3.3.3 **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.*

3.3.4 **Recommendation.**— *Each Contracting State should take into account the ICAO model as a basis for operators' or entities' security programmes under 3.3.1, 3.3.2 and 3.3.3.*

3.3.5 **Recommendation.**— *Each Contracting State should require operators providing service from that State and participating in code-sharing or other collaborative arrangements with other operators to notify the appropriate authority of the nature of these arrangements, including the identity of the other operators.*

3.4 Quality control

3.4.1 Each Contracting State shall ensure that the persons implementing security controls are subject to background checks and selection procedures.

3.4.2 Each Contracting State shall ensure that the persons implementing security controls possess all competencies required to perform their duties and are appropriately trained according to the requirements of the national civil aviation security programme and that appropriate records are maintained up to date. Relevant standards of performance shall be established and initial and periodic assessments shall be introduced to maintain those standards.

3.4.3 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.

3.4.4 Each Contracting State shall require the appropriate authority to develop, implement and maintain a national civil aviation security quality control programme to determine compliance with and validate the effectiveness of its national civil aviation security programme.

3.4.5 Each Contracting State shall ensure that the implementation of security measures is regularly subjected to verification of compliance with the national civil aviation security programme. The priorities and frequency of monitoring shall be determined on the basis of risk assessment carried out by the relevant authorities.

3.4.6 Each Contracting State shall arrange for security audits, tests, surveys and inspections to be conducted on a regular basis, to verify compliance with the national civil aviation security programme and to provide for the rapid and effective rectification of any deficiencies.

3.4.7 Each Contracting State shall ensure that the management, setting of priorities and organization of the national civil aviation security quality control programme shall be undertaken independently from the entities and persons responsible for the implementation of the measures taken under the national civil aviation security programme. Each Contracting State shall also:

- a) ensure that the personnel carrying out security audits, tests, surveys and inspections are trained to appropriate standards for these tasks in accordance with the national civil aviation security programme;
- b) ensure that the personnel carrying out security audits, tests, surveys and inspections are afforded the necessary authority to obtain information to carry out these tasks and to enforce corrective actions;
- c) supplement the national civil aviation security quality control programme by establishing a confidential reporting system for analysing security information provided by sources such as passengers, crew and ground personnel; and
- d) establish a process to record and analyse the results of the national civil aviation security quality control programme, 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.

3.4.8 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. These actions shall be shared with ICAO.

3.4.9 **Recommendation.**— *Each Contracting State should 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.*

3.5 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.

4.5.2 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.

4.5.3 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.

4.5.4 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.

Note.— Guidance material on this issue can be found in the Aviation Security Manual (Doc 8973 — Restricted).

4.5.5 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.

4.5.6 **Recommendation.**— *Each Contracting State should establish procedures to deal with unidentified baggage in accordance with a security risk assessment carried out by the relevant national authorities.*

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, or an entity that is approved by an appropriate authority. Cargo and mail which cannot be confirmed and accounted for by a regulated agent 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 passenger commercial flights are subjected to appropriate security controls 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 subject to appropriate security controls, which may include 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.*

Note.— *Guidance material on this issue can be found in the Aviation Security Manual (Doc 8973 — Restricted).*

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.

Note.— *Guidance material on this issue can be found in the Aviation Security Manual (Doc 8973 — Restricted).*

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 **Recommendation.**— *Each Contracting State should ensure that security measures in landside areas are established to mitigate the risk of and to prevent possible acts of unlawful interference in accordance with national and local risk assessments carried out by the relevant authorities.*

4.8.2 **Recommendation.**— *Each Contracting State should ensure coordination of landside security measures between relevant departments, agencies, other organizations of the State, and other entities, and identify appropriate responsibilities in its national civil aviation security programme.*

4.9 Measures relating to cyber threats

4.9.1 **Recommendation.**— *Each Contracting State should, in accordance with the risk assessment carried out by its relevant national authorities, ensure that measures are developed in order to protect critical information and communications technology systems used for civil aviation purposes from interference that may jeopardize the safety of civil aviation.*

4.9.2 **Recommendation.**— *Each Contracting State should encourage entities involved with or responsible for the implementation of various aspects of the national civil aviation security programme to identify their critical information and communications technology systems, including threats and vulnerabilities thereto, and develop protective measures to include, inter alia, security by design, supply chain security, network separation, and remote access control, as appropriate.*

