



ICAO

INTERNATIONAL CIVIL AVIATION ORGANIZATION

A UN SPECIALIZED AGENCY

ICAO USAP-CMA SEMINAR

Bangkok, 28 to 31 October 2025

Auditing Annex 17 Standards



Module Objectives

At the end of this module, the participants will be familiar with the interpretation used when auditing certain Annex 17 Standards, as well as different approaches that may be used by States to implement Annex 17 Standards

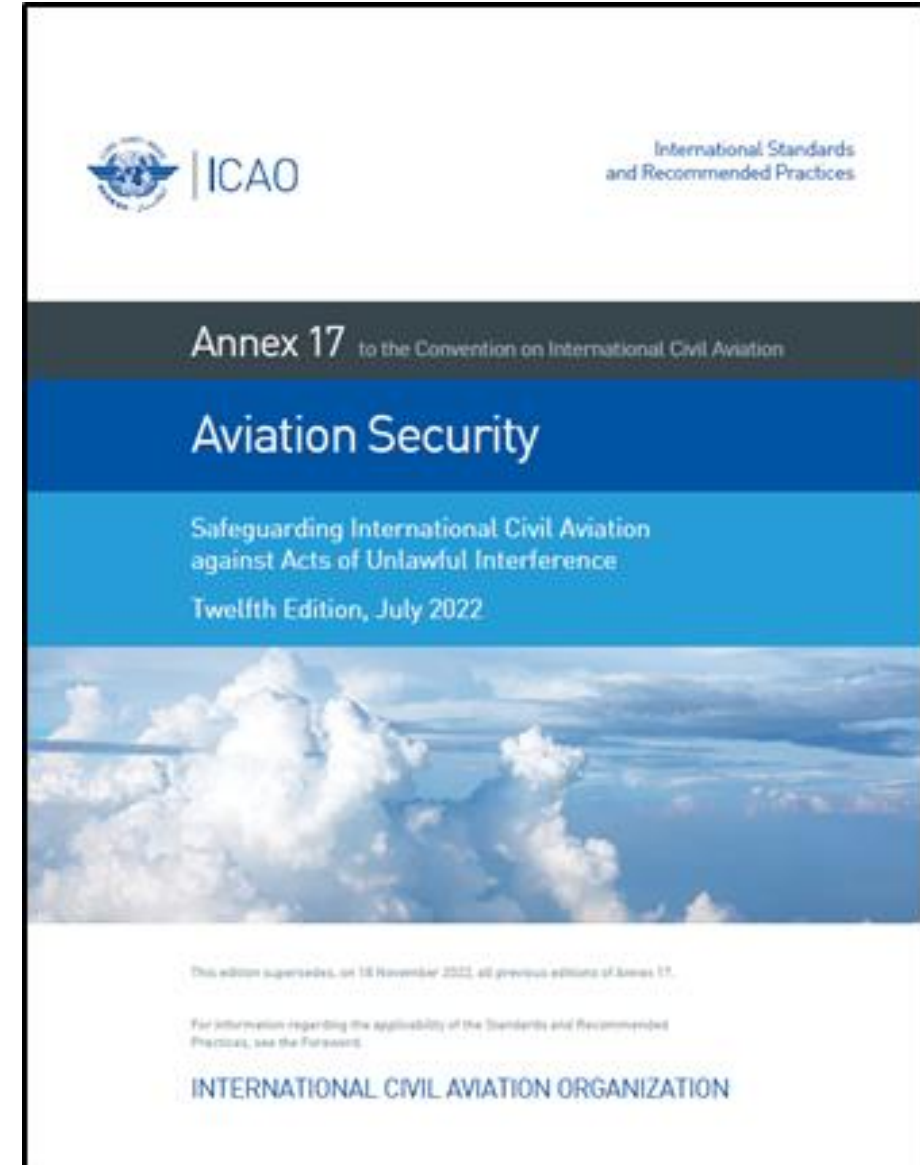


Module Outline

- Annex 17 and the Aviation Security Manual
- Structure of an Annex
- Interpretation of certain Annex 17 Standards
- Different approaches to implementing Annex 17 Standards
- Risk-based Standards

Annex 17

- **1st Edition** – March 1974
- **Twelfth Edition** Amendment 18
 - Applicable 18 November 2022
 - 95 Standards
 - 21 Recommended Practices
 - 30 Definitions



Aviation Security Manual

Thirteenth Edition – 2022

19 Chapters, 45 appendices

- Guidance on compliance with A17
- Generally recognized best practices and procedures
- Not the only means of compliance, other methods of meeting the SARPs may be equally appropriate



Adoption of Standards and international procedures:

Article 37

Each contracting State undertakes to collaborate in securing the **highest practicable degree of uniformity** in regulations, standards, procedures, and organization in relation to aircraft, personnel, airways and auxiliary services in all matters in which such uniformity will facilitate and improve air navigation.

To this end **ICAO shall adopt and amend from time to time, as may be necessary, international standards and recommended practices and procedures** dealing with: a) [...] k) and such other matters concerned with the safety, regularity, and efficiency of air navigation as may from time to time appear appropriate

The Structure of an Annex

- Standard
- Recommended Practice
- Appendices
- Definitions
- Notes
- Attachments

Standard



Any specification for physical characteristics, configuration, material, 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, material, 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.

Definitions



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.

Notes

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.

Attachments



Attachments comprising material supplementary to the Standards and Recommended Practices, or included as **a guide** to their application.

Annex 17

Chapter 1 :
Definitions

Chapter 2 :
General
Principles

Chapter 3 :
Organization

Chapter 4:
Preventive
Security
Measures

Chapter 5 :
Management
of Response
to Acts of
Unlawful
Interference

CHAPTER 1.

Definitions

- Acts of Unlawful Interference
- Background check
- Certification
- High-risk cargo or mail
- Security Inspection
- Security Restricted Area

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.

SECURITY & FACILITATION

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.

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.

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.

Security Inspection



An announced or unannounced examination of the effectiveness of 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.

Missing definitions from Annex 17



Cyber threats



Transfer passenger/hold baggage



Unauthorized interference



Originating aircraft

CHAPTER 2.

General principles

- 2.1 Objectives
- 2.2 Applicability
- 2.3 Security and facilitation
- 2.4 International cooperation
- 2.5 Innovation, research and development

Applicability



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.

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**.

CHAPTER 3. Organization

- 3.1 National organization and appropriate authority
- 3.2 Airport operations
- 3.3 Aircraft operators
- 3.4 Training, qualifications and security culture
- 3.5 Quality Control
- 3.6 Air traffic service providers

NCASP (1/2)



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.

NCASP (2/2)



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.



NCASC

A blue rounded rectangular box with the text 'NCASC' in yellow. A large red arrow points downwards from the bottom center of the box.

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.

Level and nature of threat



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.

Sharing relevant information



3.1.5 Each Contracting State shall establish and **implement procedures to share**, as appropriate, with its 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.**

*Four notes provide additional guidance to States

Supporting Resources and Facilities



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.

3.2.4 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**.



ASP

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.**



ASC

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.

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.

Training and certification (1/4)



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.

Training and certification (3/4)



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.

Training and certification (4/4)



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.

NQCP (1/3)



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.

NQCP (2/3)



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 has the **necessary authority to obtain all relevant information** to carry out these tasks and to **enforce corrective actions**;
- [...]

NQCP (3/3)



- d) a **confidential reporting system** for analysing security information provided by sources such as passengers, crew and ground personnel; and
- e) a process to **record and analyse 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**.

Background checks



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.

Oversight of outsourced security measures



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.

Air Traffic Service Providers



3.6 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
- 4.2 Measures relating to access control
- 4.3 Measures relating to aircraft
- 4.4 Measures relating to passengers and their cabin baggage
- 4.5 Measures relating to hold baggage
- 4.6 Measures relating to cargo, mail and other goods
- 4.7 Measures relating to special categories of passengers
- 4.8 Measures relating to the landside
- 4.9 Measures relating to cyber threats

Objective



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.

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.

Identification systems



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.

Persons other than Passengers



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.**

Vehicles



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.

Aircraft checks/searches



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.

Protection of aircraft



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.

4.3.4 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.

MANPADS



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 MANPADS** and other weapons representing a similar threat to aircraft at or near an airport.

Screening of passengers/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.

4.5.1 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.

Protection of passengers and their baggage



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.

One-stop Security (1/2)



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.

One-stop Security (2/2)



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.

Transit passengers



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.**

Reconciliation/authorization



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.**

4.5.6 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.

Cargo and mail



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**.

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

4.6.10 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**.

Supply chain security



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**.

4.6.5 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**.

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**.

4.6.8 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**.

Transfer cargo and mail



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.

Catering, Stores, Merchandise and Supplies



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, **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**.

Carriage of Weapons



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**.

Landside security



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 3.1.6, 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.

Cybersecurity



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.**

CHAPTER 5.

Management of response to acts of unlawful interference

- 5.1 Prevention
- 5.2 Response
- 5.3 Exchange of information and reporting

Contingency plans



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**.

Different approaches to implementing Annex 17 Standards

Prescriptive approach

Outcome-based approach

Risk-based approach

Prescriptive approach

- National-level programmes and regulations prescribe processes or procedures in detail
- Regulated entities have little or no choice regarding how to comply
- USAP-CMA audit takes into consideration regulated entities' compliance with prescriptive national requirements and procedures

Outcome-based approach (1/2)

- Required outcomes or levels of performance are **clearly established** in national-level programmes or regulations
- Emphasis on **specific and measurable outcomes** versus prescriptive provisions, that enable national inspectors to measure and verify that the required outcomes have been achieved.

Outcome-based approach (2/2)

- The USAP-CMA audit will :
 - Analyze the measurable results contained in the national-level programmes and regulations (PQs linked with CE 5)
 - Verify the oversight and approval process used to ensure airport-level programmes contain sufficiently detailed procedures linked to the measurable outcomes (PQs linked with CE 6)
 - Verify through observations whether the outcomes and required levels of performance are being achieved at the operational level (PQs linked with CE 8)

Risk-based Approach (1/2)

- Several Annex 17 Standards require the establishment of measures based on a risk assessment
- Other Annex 17 Standards establish baseline security measures for States to implement under normal operating conditions. In such cases:
 - a risk assessment may be used to determine whether additional security measures are required to cope with increased levels of threat or mitigate associated risks
 - this risk assessment may not be used to reduce baseline requirements established by the relevant Annex 17 Standard

Risk-based Approach (2/2)

- The USAP-CMA audit will determine whether:
 - a risk assessment has been conducted using established methodology (PQs linked with CE 5)
 - relevant risk-based security measures or outcomes have been clearly defined and implemented (PQs linked with CEs 5, 6, 8)
 - the State oversees the implementation of risk-based security measures or outcomes (PQs linked with CE 7)
- Risk-based approaches may not be used to reduce the minimum requirements established by the Standards

Risk-based Standards

- Several Annex 17 Standards require the establishment of measures based on a risk assessment:

2.2 – domestic operations

3.1.3 – level and nature of threat

3.1.5 – sharing relevant information*

3.5.1 – priorities and frequency of monitoring

4.1.3 – unidentified baggage and suspicious objects

4.2.2 – security restricted areas

4.2.7 – security controls for vehicles

4.3.1 – aircraft security checks/searches

4.3.6 – MANPADS

4.6.4 – high-risk cargo and mail

4.8.2 – security measures for landside areas

4.9.1 – cybersecurity

Module Review

- Annex 17 and the Aviation Security Manual
- Structure of Annex 17
- Interpretation of certain Annex 17 Standards
- Different approaches to implementing Annex 17 Standards
- Risk-based Standards

Questions?

Thank You

