

ICAO USOAP REQUIREMENTS FOR FLIGHT INSPECTIONS



NAM/CAR/SAM Workshop on Radio Navigation

Mexico City, Mexico, 02 to 04 September 2025

ICAO NACC REGIONAL OFFICE

What is the Universal Safety Oversight Audit Programme (USOAP)?

- ✈ The Universal Safety Oversight Audit Programme (USOAP) is a programme through which ICAO monitors the fulfillment of the safety oversight obligations by its Member States.*
- ✈ ICAO carries out audits and other monitoring activities to determine the safety oversight capabilities of its Member States.*

What is audited?

Compliance with:

- ☎ Chicago Convention
- ☎ State Regulations

Conformance with:

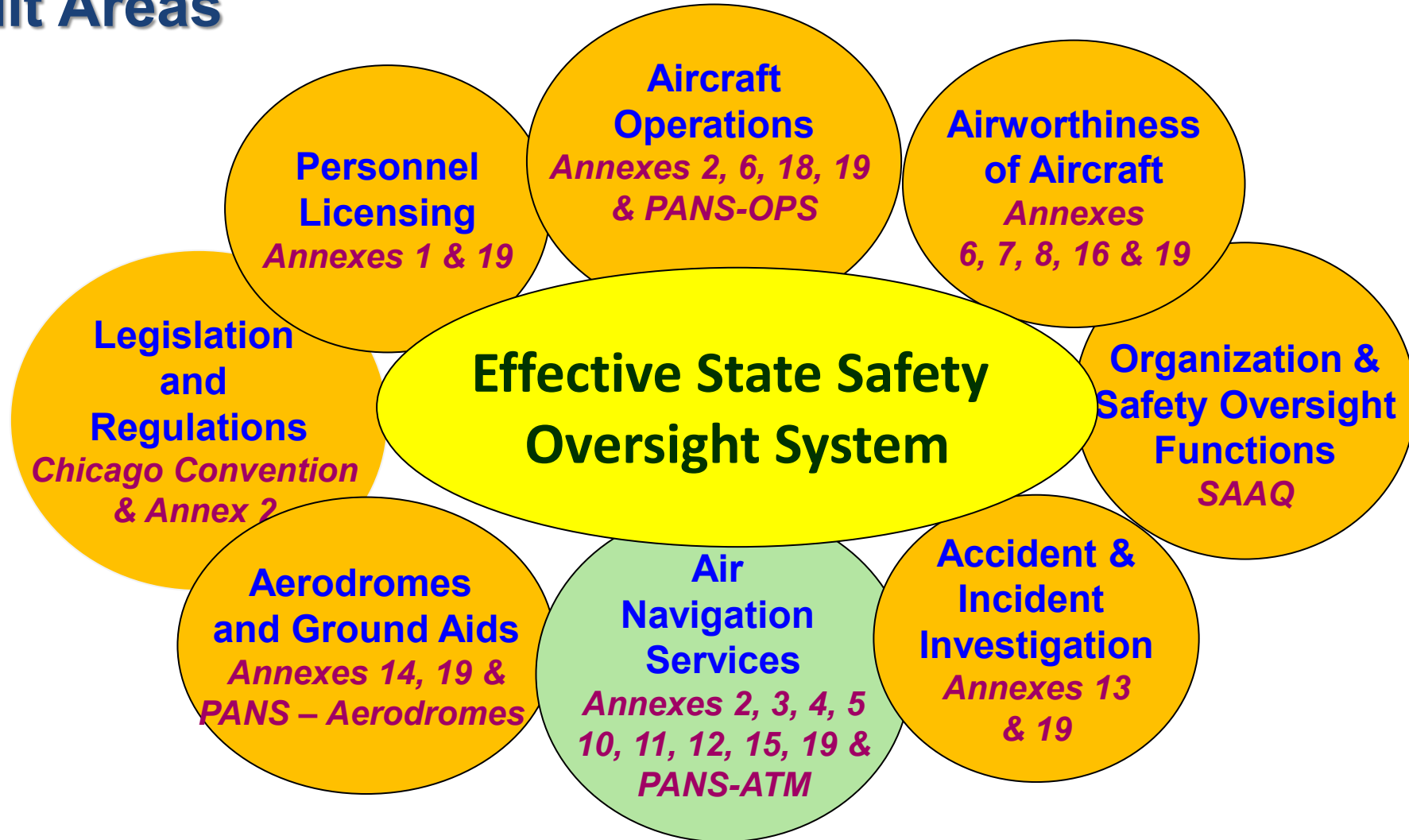
- ☎ ICAO Standards

Adherence to:

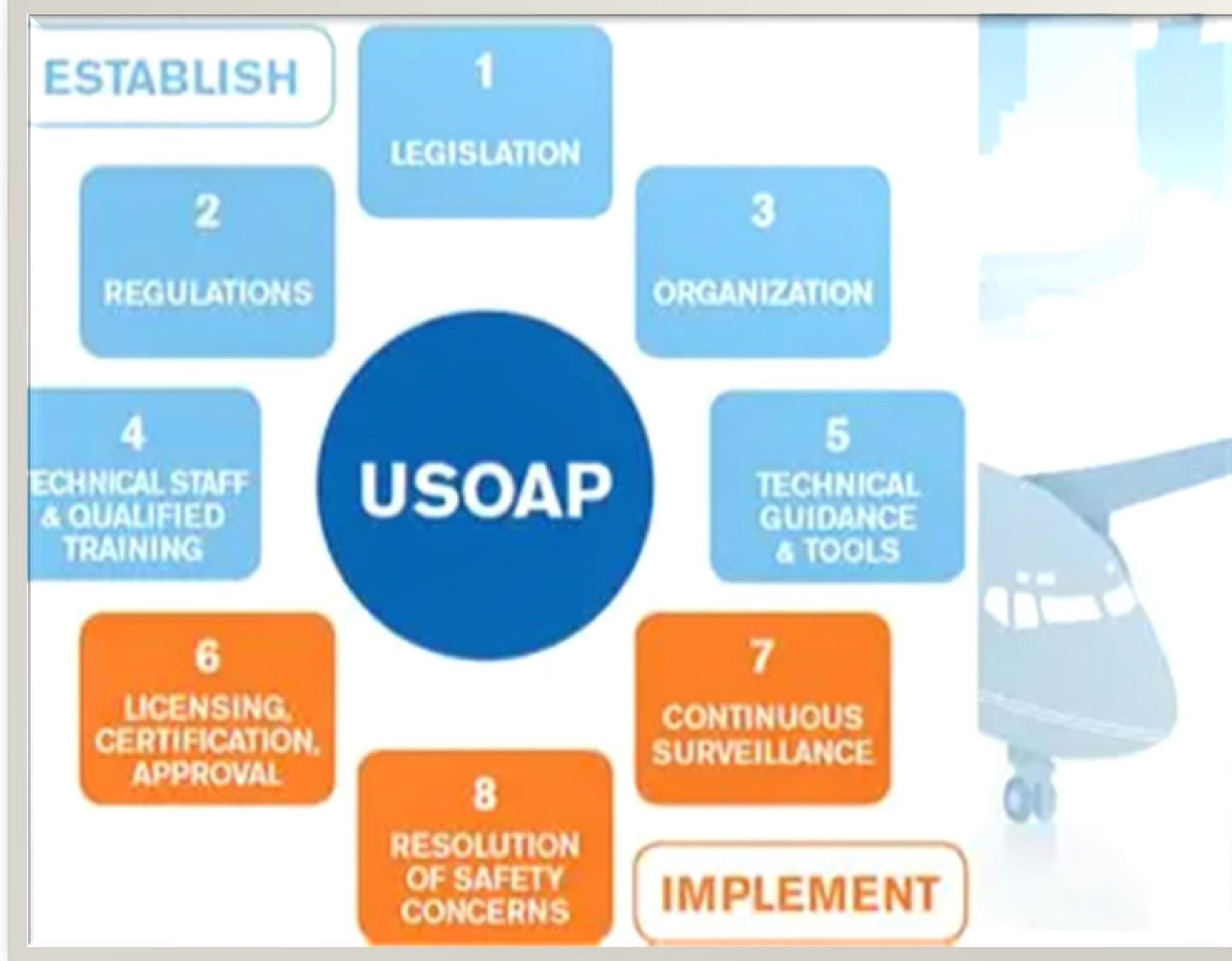
- ☎ Recommended practices
- ☎ Related procedures
- ☎ Guidance material
- ☎ Relevant industry practices in general use



Audit Areas



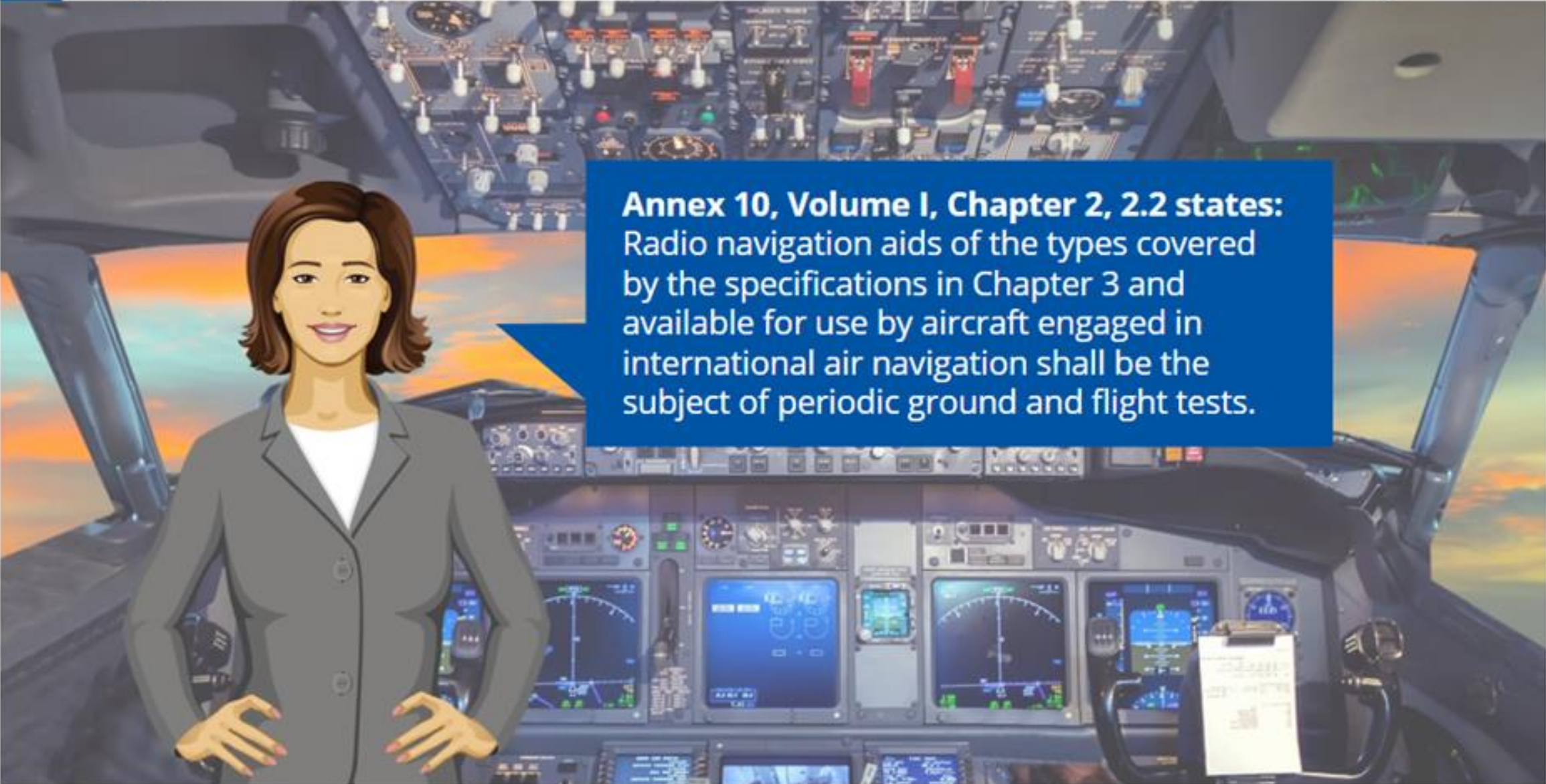
Critical Elements (CEs)



Protocol Questions (PQs)

- ✈ *Primary tool used to assess States' safety oversight capabilities, for each CE.*
- ✈ *Enable standardization in the conduct of USOAP CMA activities.*
- ✈ *Percentage of "Satisfactory" PQs is reflected in the EI.*
- ✈ *Evidence-based approach:*
 - *Show me.*
 - *Lack of evidence or lack of sufficient evidence = PQ status becomes or remains N/S.*
- ✈ *N/S PQ generates a finding.*





Annex 10, Volume I, Chapter 2, 2.2 states:
Radio navigation aids of the types covered by the specifications in Chapter 3 and available for use by aircraft engaged in international air navigation shall be the subject of periodic ground and flight tests.

PQ No.	Protocol Question	Guidance for Review of Evidence	ICAO References	PPQ	CE
7.393	Does the State ensure that requirements for flight inspection are established and periodical flight inspections are provided for radio navigation aids?	<ol style="list-style-type: none"> 1) Review the mechanism established to ensure effective implementation. 2) Review flight inspection regulations and procedures. 3) Verify flight inspection reports. 	STD A10 Vol. I, 2.2 & C3 GM Doc 8071 Vol. I, C1 to C7	Yes	CE-7

Priority Protocol Question (PPQ). A subset of Protocol Questions (PQ) that, if found not satisfactory, may indicate a lack of capability by a State to identify and/or resolve operational safety and fundamental accident investigation deficiencies effectively, and consequently, its inability to conduct safety oversight or a proper accident investigation. **Findings related to PPQs can potentially result in an elevated risk of Significant Safety Concerns.**

ICAO USOAP Questions for Flight Inspections

Audit Preparation – ANS / CNS / PANS-OPS

Based on ICAO Annex 10 & Doc 8071

1. Regulatory Framework

A person wearing a headset and a high-visibility vest is holding a clipboard and looking at it. In the background, there is an aircraft on a tarmac.

- ✈ *Does the CAA have legislation/regulations requiring periodic flight inspection of NAVAIDs (Annex 10, Doc 8071)?*
- ✈ *Is there a regulation prescribing frequency intervals (initial, periodic, special)?*
- ✈ *Has the State defined responsibilities and oversight functions for flight inspection providers?*



2. Organizational Structure & Responsibilities

- *Which authority conducts flight inspections (CAA, ANSP, contracted)?*
- *Does the CAA maintain a qualified inspectorate for FI oversight?*
- *Are there MOUs/agreements when using another State's FI services?*

3. Procedures & Guidance Material

- *Are Flight Inspection Manuals (Doc 8071) available, updated, and approved by the CAA?*
- *Does the ANSP maintain **SOPs (Standard Operating Procedures)** for flight inspections?*
- *Are procedures established for special inspections (post-incident, GNSS interference)?*



A large commercial airplane is shown from a low-angle perspective, flying directly towards the viewer over a runway. The aircraft is white with two engines mounted on the wings. The runway is paved and has white markings. The background shows a clear blue sky with some light clouds and a distant horizon.

4. Personnel Licensing & Training

- *Are flight inspectors and crew trained and certified (including recurrent training)?*
- *Does the State ensure competency assessments for FI personnel?*
- *Is training consistent with ICAO Doc 8071 and operator's training programme?*



5. Aircraft & Equipment



- ✈ *Are aircraft and inspection systems approved and calibrated?*
- ✈ *Is there regular calibration and maintenance of FI equipment?*
- ✈ *Does the State verify contracted FI providers meet ICAO standards?*

Doc 10047

Aviation Security Oversight Manual
The Establishment and Management of a
State Aviation Security Oversight System

Second Edition, 2021



ICAO Doc 10047 - Aviation Security Oversight Manual - Second Edition, 2021

6. Safety Oversight & Monitoring

- *Does the CAA conduct oversight audits of FI operations?*
- *Is there a quality assurance programme to validate inspection results?*
- *Are inspection records maintained (data, reports, corrective actions)?*



7. Reporting & Corrective Actions

- *How are inspection results communicated to ANSP/CAA/operators?*
- *Is there a corrective action process when deficiencies are identified?*
- *Are NOTAMs issued promptly when services are restricted/suspended?*

8. Coordination & International Obligations

- *Does the State submit operational NAVAID status to ICAO regional office/AIS?*
- *How is coordination managed with adjacent FIRs for unserviceable NAVAIDs?*
- *Are foreign FI service providers approved under bilateral/regional agreements?*



Summary & Next Steps

- *USOAP audit will assess FI compliance with Annex 10 & Doc 8071*
- *Ensure regulations, manuals, training, and oversight are effective*
- *Prepare evidence of audits, corrective actions, and agreements*
- *Develop readiness checklist aligned with ICAO Critical Elements*



Theory into Practice: Frequent Shortcomings



The related PQs are “not satisfactory” if:

Even though surveillance activities carried out by a State to proactively verify that service providers meet the established requirements include the revision of documents submitted by the service providers.

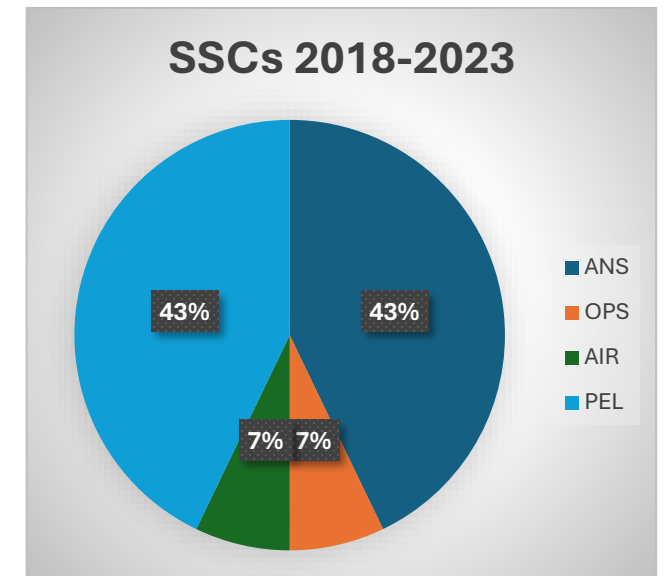
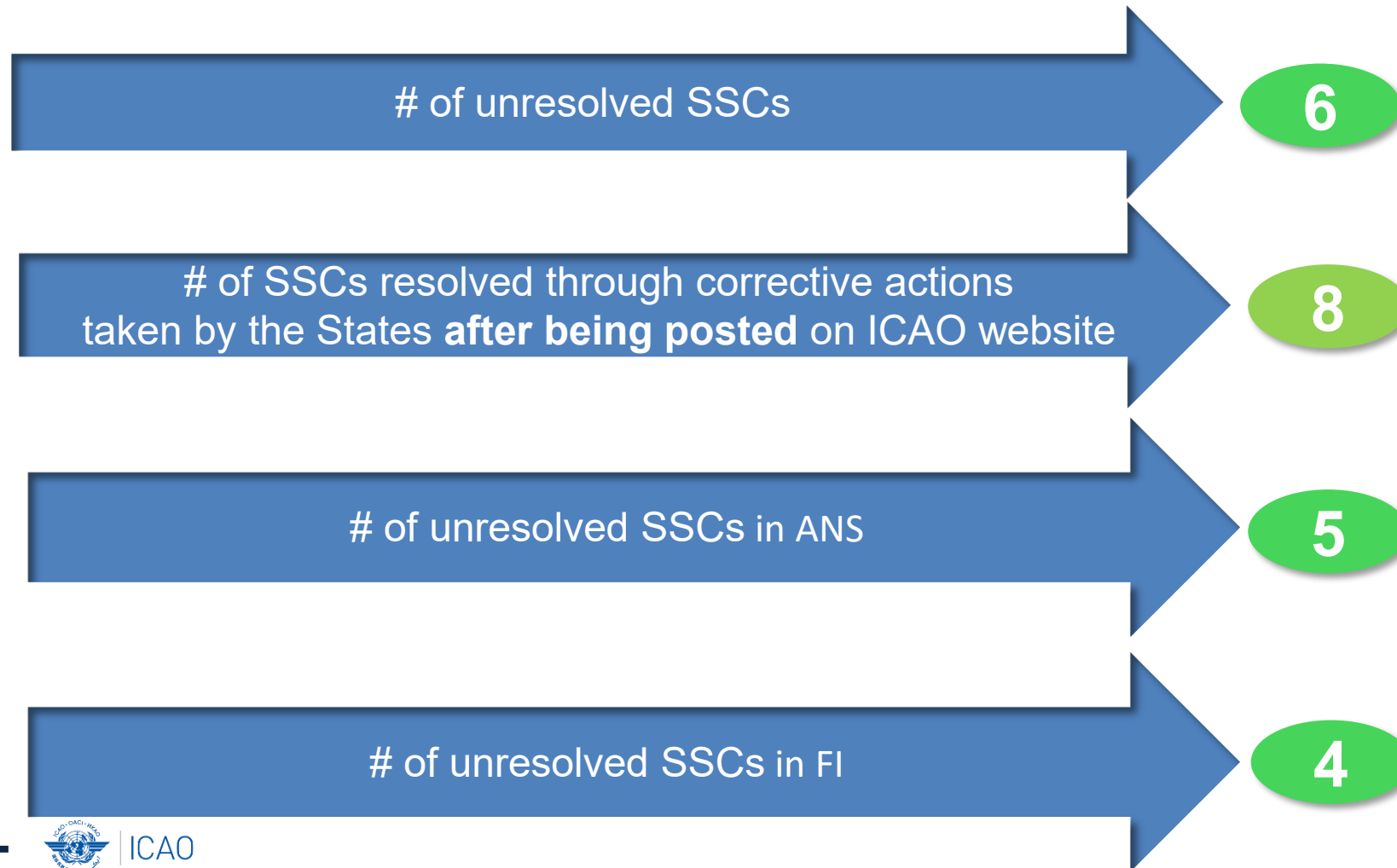
In many places the service providers share results of the flight inspections to the authorities, however, some States do not perform an assessment of the information shared.

Significant Safety Concerns (SSCs)

“An SSC occurs when the audited State allows the holder of an authorization or approval to exercise the privileges attached to it, although the minimum requirements established by the State and by the Standards set forth in the Annexes to the Chicago Convention are not met, resulting in an immediate safety risk to international civil aviation.”

Reference: *EB 2010/7* dated 19 February 2010

Status of SSCs



Recommendations for Flight Inspections

- ✈ *Establish Clear Regulations & Oversight– Ensure CAA enforces ICAO-compliant rules, roles, and audits for flight inspection services.*
- ✈ *Plan and Prioritize Inspections– Maintain a master schedule (initial, periodic, special) with risk-based focus on critical NAVAIDs and PBN procedures.*
- ✈ *Standardize Procedures & Equipment– Apply ICAO Doc 8071 SOPs, use certified aircraft/equipment, and maintain calibration and automation tools.*
- ✈ *Ensure Qualified Personnel & Training– Maintain recurrent training for inspectors and crews, including PBN, GNSS vulnerabilities, and new CNS technologies.*
- ✈ *Strengthen Reporting & Cooperation– Use standardized reports, issue timely NOTAMs, close corrective actions, and share best practices through ICAO regional cooperation.*





Thank You!