USOAP Perspective on IFPs

(16-20/November/2026)

Bangkok, Thailand



Outline

1) USOAP
   - ➢ overview
   - ➢ Audits areas and CEs
2) Evidence by CEs –
3) General PQs
4) IFPD PQs
5) Interactive session on PQs

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.



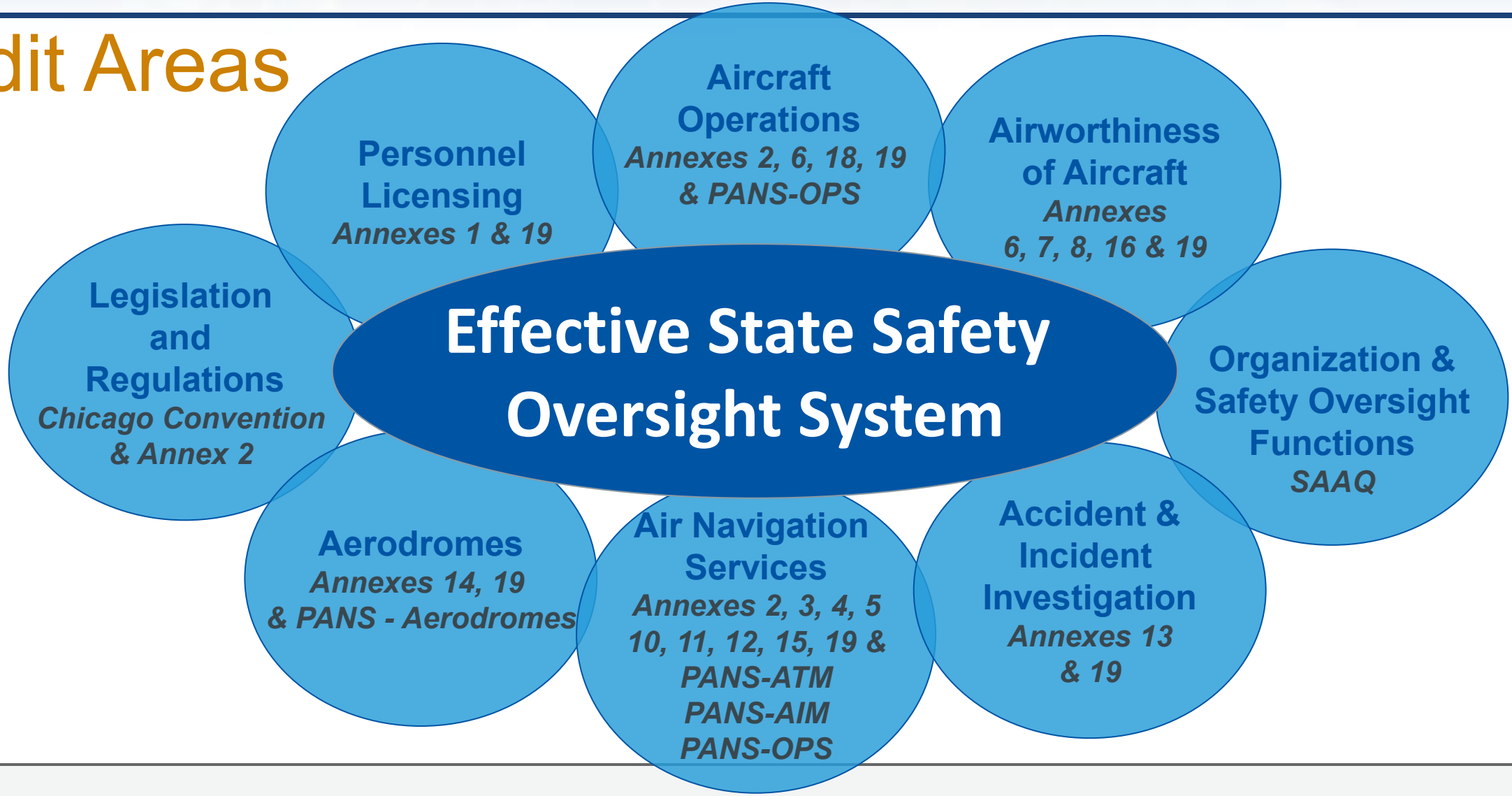
USOAP Audits

The approach for USOAP audits is based on:

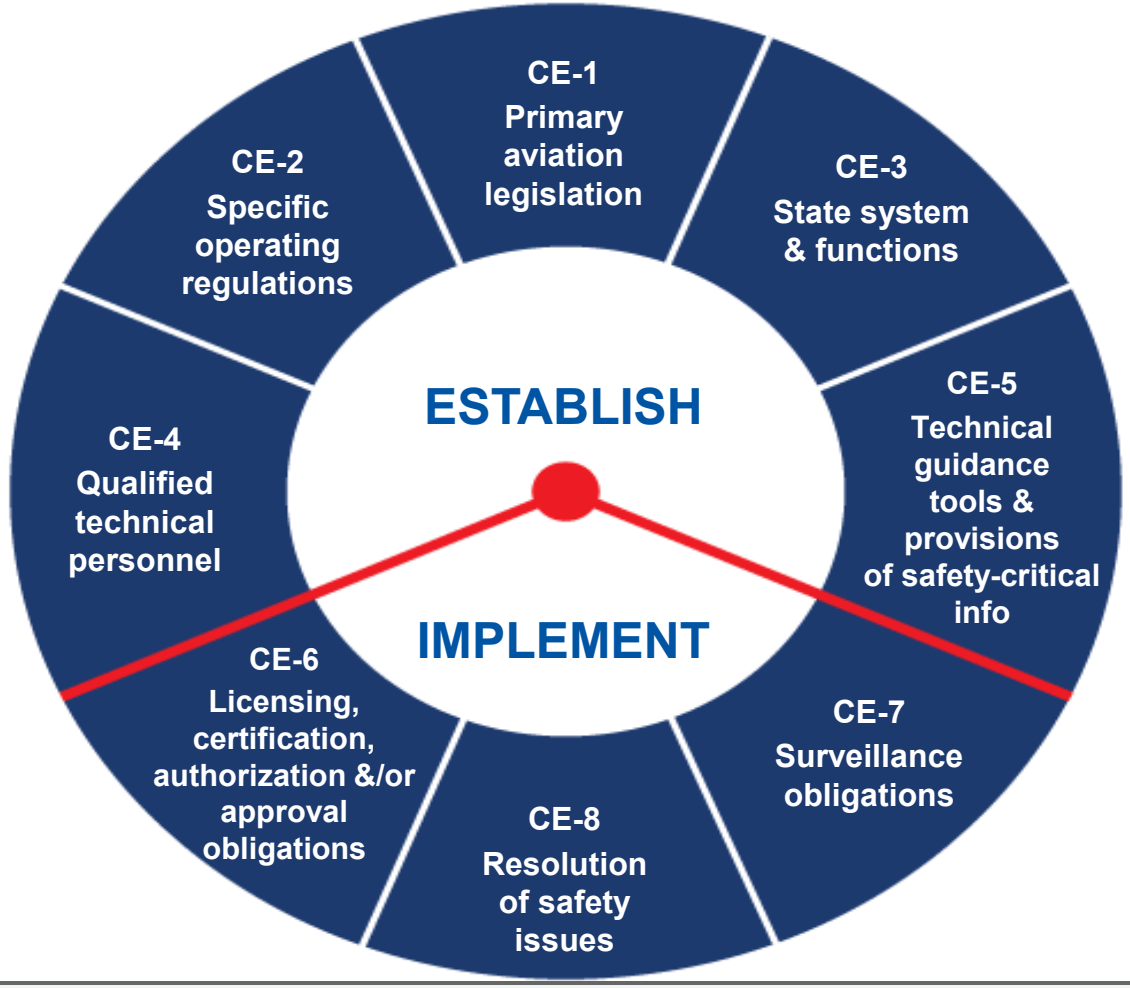
"…the implementation of a *structured process and methodology* for the planning, preparation, conduct, reporting, follow-up and evaluation of ICAO safety oversight audits, in order to determine States' capability for safety oversight."

ICAO Doc 9735 and MOU signed between the State and ICAO.

Audit Areas


Personnel Licensing
Annexes 1 & 19
Aircraft Operations
Annexes 2, 6, 18, 19 & PANS-OPS
Airworthiness of Aircraft
Annexes 6, 7, 8, 16 & 19
Legislation and Regulations
Chicago Convention & Annex 2
Effective State Safety Oversight System
Organization & Safety Oversight Functions
SAAQ
Aerodromes
Annexes 14, 19 & PANS - Aerodromes
Air Navigation Services
Annexes 2, 3, 4, 5 10, 11, 12, 15, 19 & PANS-ATM PANS-AIM PANS-OPS
Accident & Incident Investigation
Annexes 13 & 19

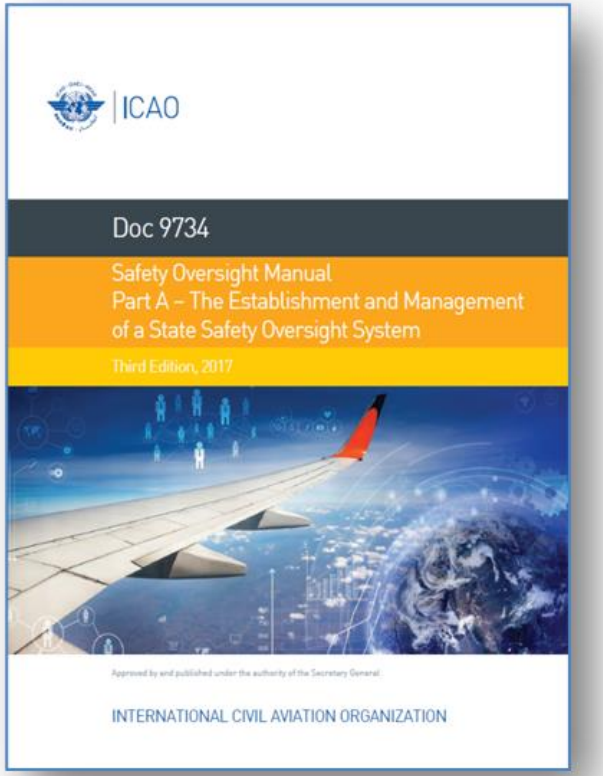
Critical Elements (CEs) of a Safety Oversight System



Eight CEs of a State safety oversight system

- **Definitions of CEs**: in Annex 19 — *Safety Management*, Appendix 1 (2nd edition, July 2016)

- **Guidance for CEs:**
  Doc 9734 — *Safety Oversight Manual*, Part A — *The Establishment and Management of a State Safety Oversight System* (3rd edition, 2017)*.
- ** Available on ICAO-Net and CMA Library of the CMA OLF.*



USOAP CMA Protocol Questions

The primary tool used in USOAP for assessing the level of effective implementation of a State's safety oversight system based on the critical elements, the Convention on International Aviation, ICAO Standards and Recommended Practices (SARPs), Procedures for Air Navigation Services (PANS) and related guidance material.

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 and since 2014, each finding is PQ-specific.

Give me your evidence



Evidence by CEs - Examples

CE-1

- Legislative instruments related to civil aviation activities and established entities (laws, treaties, etc.), promulgated and published versions;
- bilateral agreements on Article 83 bis of the Chicago Convention or other equivalent topics.
- Legislation is collective term combining
  - Primary air law, binding for all citizens
  - Specific operating regulations, binding for actors and participants in aviation activity only

CE-2

- Regulatory instruments (regulations; directives); promulgated and published versions;
- procedures for the amendment of regulations;
- procedures for identifying and notifying differences, if any, to ICAO;
- copy of list of differences published in the AIP;
- (policy on the granting of exemptions and examples of granted exemptions)

Evidence by CEs - Examples

CE-3

- Documents related to nomination, delegation, cooperation, etc. (MOU, letters, etc.);
- organizational charts;
- documents describing functions and responsibilities;
- sample of job descriptions;
- sample of credentials.
- documents on the authorities funding and approved budget;
- documents on the process to determine staffing needs;
- procedure for the delegation of tasks to other entities or individuals;
- letters of nomination or designation with respect to the delegation of tasks

CE-4

- Document defining the minimum qualification and experience requirements;
- document on the recruitment process;
- training policy;
- training programmes;
- training plans;
- completed OJT forms;
- documents on the system for keeping training records (copies of training records are not required).

Evidence by CEs - Examples

CE-5

- Process or procedure for making necessary documents available to technical staff (annexes to the CC, regulations, etc.), document control and/or system for maintaining the documents up-to-date;
- handbooks, procedures, checklists and other guidance material;
- guidance provided to the industry;
- link to the electronic version of the AIP;
- Ensure that procedures provide sufficient detail on WHO does WHAT, WHEN, HOW and in coordination with WHOM

Evidence by CEs - Examples

CE-5

- Procedures should provide sufficient details on WHO does WHAT, HOW, WHEN, and in coordination with WHOM:
- WHO: Define the entities in charge of each task, who has the authority to decide, particularly with respect to enforcement aspects, who has the authority to approve the results, reports, etc. or to sign licences, certificates, etc.
- WHAT: Define each step of the process, indicate the expected result and the template/format to be used; Establish the link with other procedures, if any.
- HOW: Indicate sequence of actions, equipment/tools to used, reference to applicable checklists; Describe the means of traceability of the activity.
- WHEN: If the procedure is part of a process, the step of the process at which the said procedure takes place; indicate the periodicity and the maximum interval between two actions and the deadline for completion of each step.
- with WHOM: Identify external entities participating in the activity, if any.

Evidence by CEs - Examples

CE-6

- Completed check-lists used for licensing/ certification/ approval and/or authorization processes
- Issued licences, certificates, approvals and/or authorizations;
- Copies of exchange of letters with the industry

CE-7

- Surveillance policy;
- surveillance programme and plans
- Copies of inspection or audit reports and/or monitoring activities.

Evidence by CEs - Examples

CE-8

- Processes, procedures, checklists
- Exchange letters with the industry regarding deficiencies and corrective actions
- Enforcement procedures
- Evidence of actual enforcement actions (imposed fines or restriction/limitations, suspended or revoked licences/certificates/ approvals/authorizations)

CE-1	• Laws, treaties • Bilateral agreements on Article 83 bis of the Chicago Convention
CE-2	• Regulations, directives • Procedures for the amendment of regulations; • Procedures for identifying and notifying differences, if any, to ICAO
CE-3	• Documents related to nomination, delegation, cooperation, etc. (MOU, letters, etc.); • Organizational charts; • Documents describing functions and responsibilities; • Sample of job descriptions; Sample of credentials; • Budget decisions • Documents on the process to determine staffing needs
CE-4	• Document defining the minimum qualification and experience requirements • Training policy, programmes, training plans; • Completed OJT forms, Training records

CE-5	• Manuals, Handbooks • Procedures • Checklists
CE-6	• Completed check-lists used for licensing/ certification/ approval and/or authorization processes • Issued licences, certificates, approvals and/or authorizations; • Copies of exchange of letters with the industry
CE-7	• Surveillance policy; • surveillance programme and plans • Copies of inspection or audit reports and/or monitoring activities;
CE-8	• Exchange letters with the industry regarding deficiencies and corrective actions • Enforcement procedures • Evidence of actual enforcement actions (imposed fines or restriction/limitations, suspended or revoked licences/certificates/ approvals/authorizations;


PLEASE
TELL ME MORE

General

PQ No.	Protocol Question	Guidance for Review of Evidence	ICAO References	PPQ	CE
7.031	Has the State established an organizational structure with functions related to the safety oversight of ANS providers?	1) Confirm current approved organizational structure for CAA and ANS safety oversight, including clear functions and responsibilities and reporting lines. 2) Note names and acronyms of the established authorities and each section dealing with ANS safety oversight activities.	STD A19 3.2.3 GM Doc 9734 Part A, 3.3		CE-3

Frequent shortcomings		
Some States CAA' s are dependent on the the ANS provider, for ensuring both some regulatory and service provision responsibilities.	States does not establish a structure addressing all the technical areas applicable, with respect to functions related to safety oversight.	States fulfil their responsibilities through arrangements with other States or an RSOO. The responsibilities, functions and duties of each party are not clearly defined.

PQ No.	Protocol Question	Guidance for Review of Evidence	ICAO References	PPQ	CE
7.037	Has the State developed procedures to assist ANS inspectors in carrying out their safety oversight functions in a standardized and effective manner?	Verify that inspector's procedures and checklists are detailed and based on the State's requirements. Note to the auditor: Procedures may be compiled into an inspector's handbook or manual.	STD A19 3.2.3 App.1, 5 GM Doc 9734 Part A, 3.5		CE-5

Frequent shortcomings		
Some States have not developed procedures for the ANS Safety inspectorate staff to effectively carry out their safety oversight duties and responsibilities.	The checklist was found to be inadequately detailed and did not align with regulatory requirements.	Procedures for a specific task or activity do not address the following: Who does what, how, when and in coordination with whom

PQ No.	Protocol Question	Guidance for Review of Evidence	ICAO References	PPQ	CE
7.039	Are the relevant ICAO documents and other technical and regulatory publications readily available to all ANS inspectorate personnel?	1) Verify accessibility of the following documents: a) Primary aviation legislation and ANS specific operating regulations; b) Annexes 1, 2, 3, 4, 5, 10, 11, 12 and 15; c) PANS, guidance material and other ANS-related publications; d) World Meteorological Organization (WMO) documentation; and e) Other technical/regulatory publications. 2) Review the document control system and method to determine currency of documents. Note to the auditor: Check for field/regional offices as well as Headquarters.	STD A19 3.2.5 App.1, 5 GM Doc 9734 Part A, 3.5		CE-5

Frequent shortcomings		
Documents and other technical and regulatory publications are not available to all ANS inspectorate personnel	The states have not developed document control system and method to determine currency of documents.	Essential documents were unavailable, and the electronic library utilized by the organization was outdated.

PQ No.	Protocol Question	Guidance for Review of Evidence	ICAO References	PPQ	CE
7.042	Have ANS inspectors been issued credentials to facilitate access to ANS facilities in the State and access to service providers' documentation for the purpose of inspections and enforcement?	Review credentials to ensure: 1) reference to empowering legislation; 2) method established to control currency of credential; and 3) inspector's photo.	STD A19 3.2.3 GM Doc 9734 Part A, 3.3.2.2		CE-3

Frequent shortcomings		
Some States technical personnel do not possess appropriate credentials (with the empowering legislation indicated) identifying them as technical experts employed by the State authorities,	Some credentials with no indication of the right to unlimited and unrestricted access to aircraft, aviation-related documents, aerodromes, ATS and other relevant facilities and the associated inspection powers.	Lack or deficiencies in the method established to control the currency of credentials,.

PQ No.	Protocol Question	Guidance for Review of Evidence	ICAO References	PPQ	CE
7.051	If the State is involved in the provision of ANS, is there a distinct separation between the regulatory and the service provision functions for all fields in ANS?	Review the organizational structure and confirm effective separation of regulatory function from service provision functions for: 1) air traffic services; 2) aeronautical information services (including the production of charts); 3) flight procedures design service; 4) CNS services; 5) meteorological service; and 6) search and rescue services.	STD A19 3.2.3 GM Doc 9734 Part A, 3.3.4		CE-3

Frequent shortcomings		
In some States, there is no distinct separation between the regulatory and the service provision for all fields in ANS.	Absence of clear delineation that could potentially compromise the impartiality and objectivity of regulatory oversight, leading to conflicts of interest.	The regulatory authority and service provider report to the same higher level management, without demonstrating that a “functional” separation does exist.

PQ No.	Protocol Question	Guidance for Review of Evidence	ICAO References	PPQ	CE
7.109	If the State has initiated the implementation of performance-based navigation (PBN), are the prescribed navigation specifications appropriate to the level of communications, navigation and air traffic services?	1) Review if the navigation specifications have been prescribed. 2) Review the mechanism to ensure effective implementation of safety-assessments and post-implementation reviews. 3) review documented evidence of procedure design capabilities.	STD A11 2.7 GM Doc 9613 Vol II Part A, C1, 1.2.2; C3 Part B, and Part C Doc 9992 2.5.5		CE-7

Frequent shortcomings		
Some States have not prescribed NAVSPECs	NAVSPECs are not verified to be appropriate to the level of communications, navigation and air traffic services	Safety assessments are not conducted before and after implementation.

PQ No.	Protocol Question	Guidance for Review of Evidence	ICAO References	PPQ	CE
7.110	Does the State ensure that ATS routes and significant points are established and designated in accordance with the requirements of Annex 11?	1) Review mechanism to ensure implementation of principles set forth in Annex 11. 2) Verify the process implemented for coordination with ICAO Regional Offices (including the elimination of five-letter name-code (5LNC) duplicates). Note to the auditor: The list of name-code designators for significant points can be found in AIP ENR 4.4.	STD A11 2.13 & 2.15 App. 1, App. 2 & App. 3		CE-6

Frequent shortcomings		
No mechanism established to ensure implementation of principles set forth in Annex 11	Absence of process for coordination with ICAO Regional Offices	No procedures established for the elimination of duplicated five-letter name-code (5LNC).

PANS-OPS -> IFPD

PQ No.	Protocol Question	Guidance for Review of Evidence	ICAO References	PPQ	CE
7.201	Has the State promulgated regulations as bases for instrument flight procedures design?	Verify regulatory requirements.	STD A11 2.34 & App. 7, 3 GM Doc 10068 2.1.3		CE-2

Frequent shortcomings		
Some States have not promulgated regulations as bases for instrument flight procedures design	The states have promulgated specific operating regulations which are not comprehensive, clear, consistent and up to date	Some States use the should in their specific operating regulations. (PANS and Annexes are not written in a manner that supports transposing the SARPs verbatim into a State's regulations).

PQ No.	Protocol Question	Guidance for Review of Evidence	ICAO References	PPQ	CE
7.205	Has the State established for flight procedures inspectors: a) job descriptions; b) appropriate minimum qualifications; and c) experience requirements?	1) Review job descriptions for flight procedures inspectors (including tasks related to the approval process of flight procedures); 2) Verify that qualifications criteria include: a) aeronautical certificates on flight procedure design, and b) work experience on flight procedure design.	STD A19 3.2.3 & 3.2.4 GM Doc 9734 Part A, 3.3.2 & 3.4.1 Doc 10068 2.1.4 & 2.1.5		CE-3

Frequent shortcomings		
Some States have not developed job descriptions and minimum qualification and experience requirements for PANS-OPS Inspectors.	Qualifications criteria for PANS-OPS Inspectors do not include aeronautical certificates commensurate with their job responsibilities, and operational and technical work experience as procedure designer	Job descriptions are generic and do not indicate clearly the responsibility for the oversight of the development, maintenance and approval process for the flight procedures of an IFPDS provider. .

PQ No.	Protocol Question	Guidance for Review of Evidence	ICAO References	PPQ	CE
7.209	Does the flight procedures inspectorate have sufficient human resources to carry out its functions?	1) Review ability to attract new inspectors as well as existing vacancies and level of turnovers in past years. 2) Review methodology established for determining staffing needs to carry out all safety oversight-related tasks including: a) review and revision of regulations, b) training, c) development of guidance material, d) issuance of approvals, e) conducting of surveillance, and f) resolution of identified safety concerns. Note to the auditor: This PQ is linked to ORG PQ 2.053.	STD A19 App. 1, 3.1 RP A19 App. 1, 3.2 & 3.4 GM Doc 9734 Part A, 3.3.2 Doc 10068 2.1.4		CE-3

Frequent shortcomings		
No methodology established for determining staffing needs to carry out all safety oversight-related tasks.	The states have not taken necessary measures, such as remuneration and conditions of service, to ensure that qualified personnel performing safety oversight functions are recruited and retained	Personnel from the service provider are designated by the CAA to carry out fundamental CAA inspection functions.

PQ No.	Protocol Question	Guidance for Review of Evidence	ICAO References	PPQ	CE
7.211	Has the State developed a formal training programme detailing the type of training to be provided to its flight procedures inspectors?	1) Review contents of training programme. 2) Confirm inclusion of initial, on-the-job, recurrent and specialized training, including timelines to be provided, as applicable.	STD A19 App. 1, 4 GM Doc 9734 Part A, 3.4 Doc 10068 2.1.5		CE-4

Frequent shortcomings		
Some States have confused the training programme and training plan.	The states have developed generic programme.	The training programme does not include all the training required for the FPI to acquire and maintain the necessary competencies including initial training, OJT, recurrent training and all the specialized training necessary, with the minimum content for each type of training.

PQ No.	Protocol Question	Guidance for Review of Evidence	ICAO References	PPQ	CE
7.215	Is the training programme appropriately implemented for flight procedures inspectors?	1) Sample recent training plans for different inspectors. 2) Verify that training plans are in accordance with the programme and includes: a) Detailed training types; b) Priorities; and c) Time frames. 3) Verify that each inspector's training is detailed. 4) Verify that the type and frequency of training provided (initial, OJT, recurrent and specialized) is sufficient to acquire/maintain the required level of knowledge, skills, competence and qualifications in accordance with the duties and responsibilities assigned. 5) Verify that OJT is provided by an experienced senior inspector.	GM Doc 9734 Part A, 3.4 Doc 10068 2.1.5		CE-4

Frequent shortcomings		
Training programme is not implemented for FPI.	Training plans are not aligned with the programme.	Training plans do not include detailed training types; priorities and time frames.

PQ No.	Protocol Question	Guidance for Review of Evidence	ICAO References	PPQ	CE
7.229	Does the State ensure that the requirements for the flight procedures designer service providers are met?	Review the mechanism established to ensure effective implementation.	STD A11 App 7, 4 GM Doc 10068 2.1.7		CE-6

Frequent shortcomings		
No mechanism established to ensure effective implementation	Requirements for the flight procedures design service providers are not met	No requirements for the flight procedures design service providers

PQ No.	Protocol Question	Guidance for Review of Evidence	ICAO References	PPQ	CE
7.231	Has the State established and implemented a formal surveillance programme for the continuing supervision of the instrument flight procedure design service (IFPDS) provider?	1) Review that surveillance programme includes: a) types of surveillance activities (audits, inspections, safety events analyses, etc.), b) time frames or frequency of the activities, and c) scope of the activities. 2) Confirm if plan is in compliance with surveillance programme, including unannounced and follow-up inspections (Implementation may be adapted using a risk-based method). 3) Sample checklists and audits/inspections reports of previous and current years.	STD A19 3.4.1 GM Doc 9734 Part A, 3.8		CE-7

Frequent shortcomings		
Some States have confused the surveillance programme and surveillance plan	Surveillance plan is not in compliance with surveillance programme.	lack of effective oversight and proactive monitoring of FPDSP activities.

PQ No.	Protocol Question	Guidance for Review of Evidence	ICAO References	PPQ	CE
7.233	Has the State established and implemented a mechanism/system with time frame for elimination of deficiencies identified by flight procedures inspectors?	1) Review the list of deficiencies that have been identified through surveillance and the remedial actions planned or taken. 2) Review mechanism to advise, establish deadlines, review and accept, and follow up on actions to verify effective implementation of corrective action plans (CAPs). 3) Review effective resolution of safety issues or appropriate enforcement (commensurate with the safety risk).	STD A19 3.3.5 GM Doc 9734 Part A, 3.8		CE-8

Frequent shortcomings		
State has not established and implemented a mechanism/system with time frame for elimination of deficiencies identified by flight procedures inspectors	The states have not developed of a documented process to take appropriate actions, up to and including enforcement measures, to resolve identified safety issues.	No established deadlines, and follow up on actions to verify effective implementation of corrective action plans (CAPs)

PQ No.	Protocol Question	Guidance for Review of Evidence	ICAO References	PPQ	CE
7.234	Does the State ensure that instrument flight procedures (IFPs) are reviewed periodically (including validation) to ensure that they continue to comply with changing criteria and meet user requirements?	1) Review mechanism established to ensure effective implementation. 2) Sample documentation regarding periodic reviews done and verify that they are still valid in terms of minimum obstacle clearances. 3) Confirm that maximum interval for review is five years. Note to the auditor: The flight validation of the periodic reviews is not the same as the one done for the initial certification.	STD A11 App. 7, 6 PANS Doc 8168 (OPS) Vol. II, Part 1, Section 2, C4 4.4.3	Yes	CE-7

Frequent shortcomings		
IAPs, SID and STARs charts maintenance are taken, as if they were IFPs review.	Lack of mechanism established to ensure effective implementation	IFPs published are due to review

PQ No.	Protocol Question	Guidance for Review of Evidence	ICAO References	PPQ	CE
7.243	Does the State ensure that the flight procedure designers have acquired and maintained the competency level through training?	1) Review mechanism established to ensure effective implementation. 2) Review the documented training programme and verify if it includes, initial, OJT and recurrent training.	PANS Doc 8168 (OPS) Vol. II, Part I, Section 2, C4, 4.7 GM Doc 9906 Vol. 1 6.4.1.2 Vol. 2 Doc 10068 2.1.7.4		CE-7

Frequent shortcomings		
No mechanism established to ensure effective implementation.	The states have not conducted or inappropriate surveillance and monitoring activities of IFPDSP training and qualification's (generic checklist).	Industry visit revealed that training records are not maintained or does not exist.

PQ No.	Protocol Question	Guidance for Review of Evidence	ICAO References	PPQ	CE
7.247	Does the State ensure that the quality management system is utilized at each stage of the instrument flight procedure design process (including flight validations)?	1) Review the mechanism established to ensure effective implementation of: a) initial certification; and b) periodic reviews of existing IFPs. 2) Verify reports and results of flight validations (including assurance that adequate obstacle clearance has been provided). 3) Review how the State ensures that IFP packages also include a list of relevant obstacles and identification and description of controlling obstacles.	STD A11 App. 7, 5 PANS Doc 8168 (OPS) Vol. II, Part I, Section 2, C4, Doc 9906 Vol. 1 & Vol. 5	Yes	CE-6

Frequent shortcomings		
Some States have confused the flight validation with flight inspections for NAVAIDs	The states have not developed an approval process of the IFP, including guidance for the industry	Some States easily dispense or omit the need to perform flight validations without requesting alternative means to ensure the accuracy and completeness of all obstacles.

PQ No.	Protocol Question	Guidance for Review of Evidence	ICAO References	PPQ	CE
7.249	Does the State ensure that the IFPDS provider publishes obstacle clearance altitude/height (OCA/H)?	1) Review mechanism established to ensure effective implementation. 2) Review AIP AD 2.24 to see if published.	STD A4 11.10.7.2 A11 2.23 PANS Doc 8168 (OPS) Vol. II, Part I, Section 4, C5, 5.5.5 & C9, 9.4.3.1	Yes	CE-6

Frequent shortcomings		
No mechanism established to ensure effective implementation.	No checks conducted as part of the approval process.	AOM are not published.

PQ No.	Protocol Question	Guidance for Review of Evidence	ICAO References	PPQ	CE
7.253	Does the State ensure that flight procedures are in accordance with the criteria promulgated by the State?	1) Review the established and implemented approval process to ensure effective implementation. 2) Verify that procedures are approved before their publication in the AIP. 3) Sample approval records of flight procedures published in the AIP.	STD A11 2.34 & App. 7 GM Doc 9906 Vol. 1, 7.10, 7.13	Yes	CE-6

Frequent shortcomings		
No criteria established to ensure effective implementation	Published IFPs in the State AIP have not been approved.	Lack of an effective approval process.

PQ No.	Protocol Question	Guidance for Review of Evidence	ICAO References	PPQ	CE
7.255	Does the State ensure that IFPDS providers retain all procedure design documentation, so as to allow any data anomalies or errors found during the production, maintenance or operational use of the procedure to be corrected?	1) Review mechanism established to ensure effective implementation. 2) Review procedures, working files, documentation and data.	PANS Doc 8168 (OPS) Vol. II, Part I, Section 2, C4, 4.5.2		CE-7

Frequent shortcomings		
No mechanism established to ensure effective implementation.	Lack of oversight to ensure that IFPDS providers retain all procedure design documentation.	Industry visit revealed that IFPs documentation are not maintained or does not exist



Let's Focus/Propose/Plan Together

Interactive session on PQs related to IFPs

