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Analysis of ANS Effective Implementation in the NAM/CAR Regions

Eddian Méndez

*Regional Officer ATM/SAR
ICAO NACC*

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Regions Meeting/Workshop (NCCM/8)

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OBJECTIVES



Provide updated information on the USOAP Effective Implementation for Air Navigation Services in the NAM/CAR Regions



In-depth analysis of the ANS Effective implementation by Critical Element and Audit Area

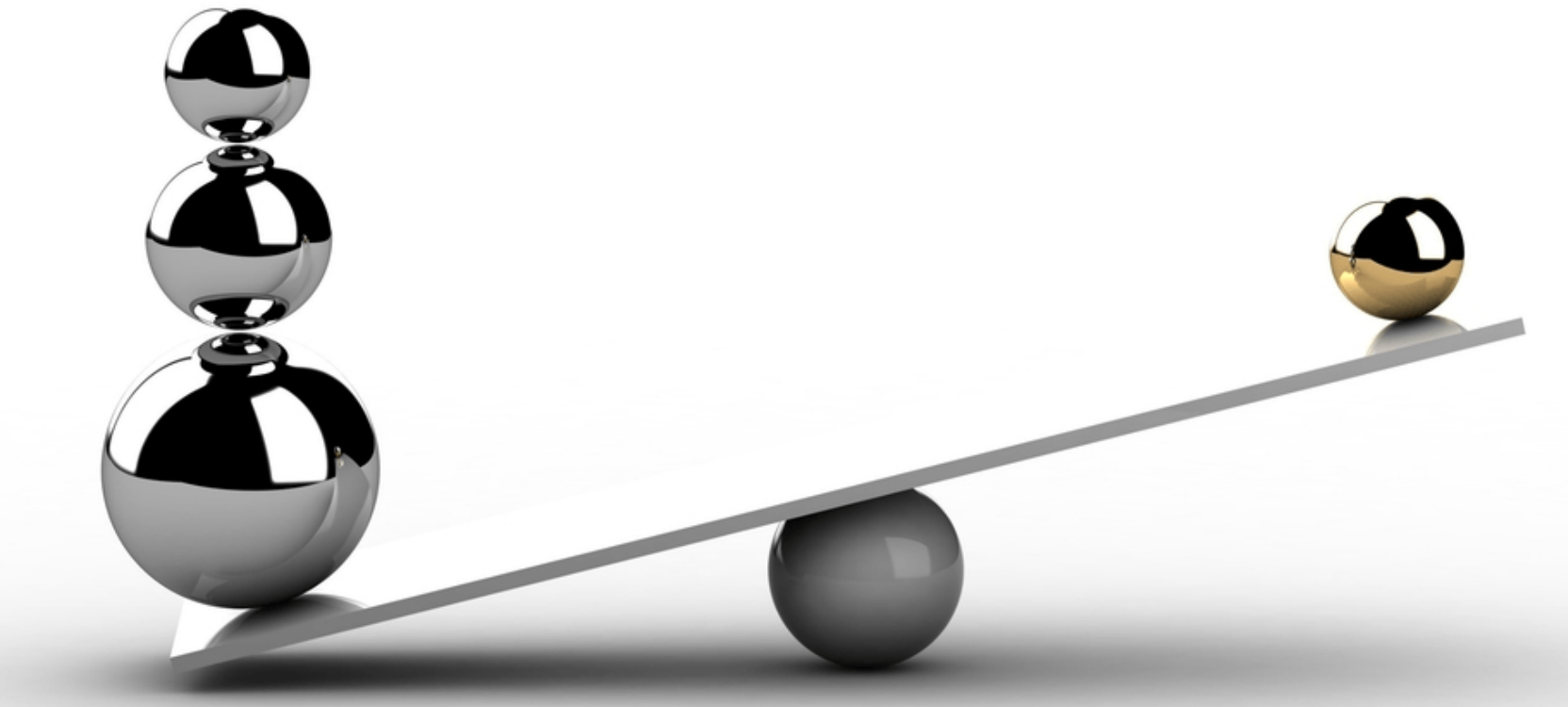


Highlight areas of strength and persistent gaps. Provide insights on regional trends and systemic challenges that impact ANS oversight and service provision



Raise awareness on the importance of collaboration and gather information to tailor regional support activities

Global Overview
of USOAP ANS
Effective
Implementation



Global Overview of USOAP ANS Effective Implementation

**USOAP ANS
2024 Protocol Questions
122 PQs**

**USOAP ANS Global EI
67.15 %**

**USOAP ANS NACC EI
63.06 %
(slightly below global average)**

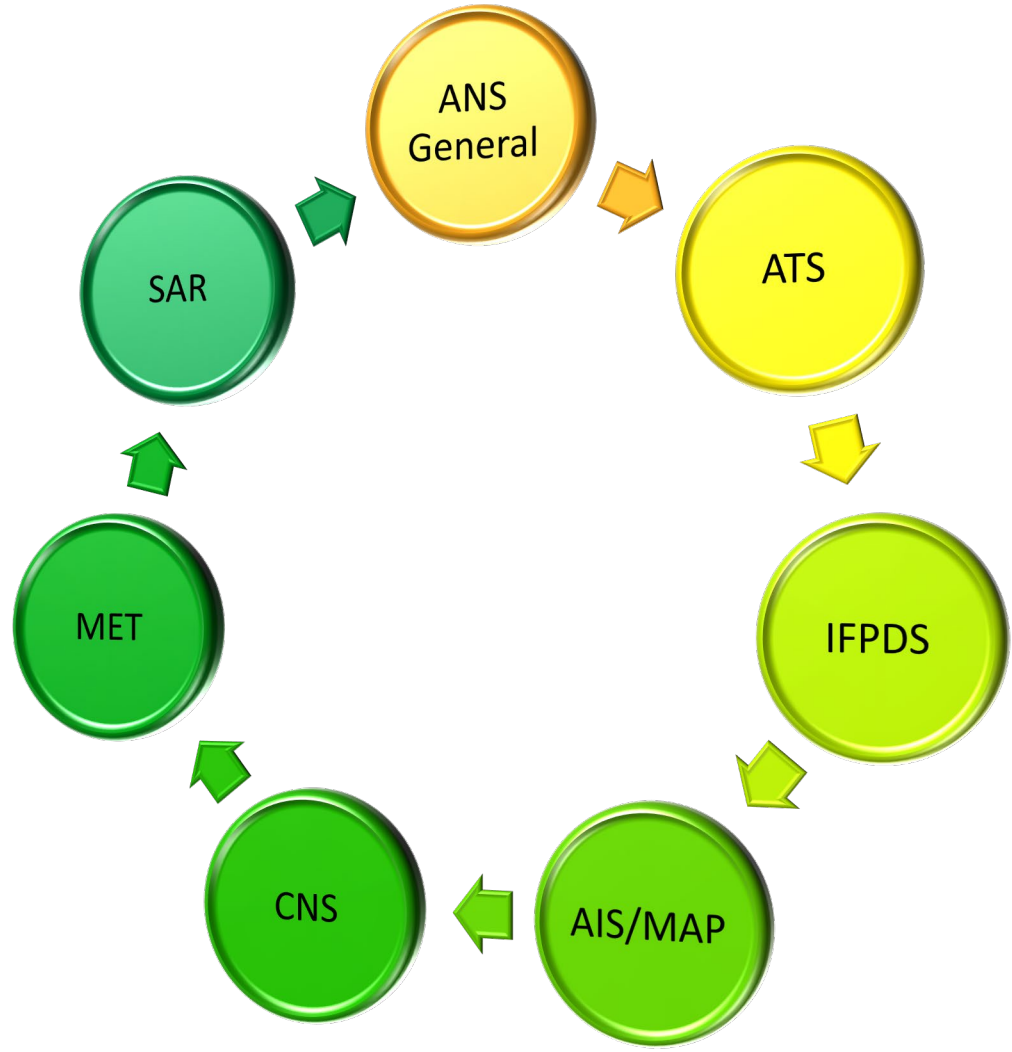
Review of NACC ANS USOAP EI per Critical Element



Review of NACC ANS USOAP EI per Critical Element

Critical Element	No. of PQs	NACC ANS EI/CE	Remarks
CE-1	3	63.49%	86% of States have published legislation to support the establishment of ANS provision and oversight
CE-2	6	49.54%	62% of States have NOT promulgated specific operating regulations to transpose the ANS-related provisions of Annexes 52% of States have not implemented procedures for amending its ANS specific regulations as well as for identifying and notifying differences to ICAO
CE-3	16	79.69%	Very positive results for the establishment of ANS safety oversight system, showing a clear separation of ANS service provision and safety oversight
CE-4	14	66.67%	Positive results for the establishment of ANS inspectorate minimum qualification and experience and training programme Not positive: Lack of compliance with established requirements for competencies and experience for all areas, and implementation of training programme, particularly for IFPD, MET and SAR inspectorate. Review the update of the ANS 2024 PQs for relevant experience. Attention: Revised criteria for adequate qualification and relevant experience
CE-5	2	90.48%	Outstanding results
CE-6	27	66.24%	Outstanding results for the establishment of CNS services and designation of MET service provider. Very positive results for the designation of the COSPAS-SARSAT Point of contact.¿? Very positive results for the establishment of ATS, and introduction of procedures for ANS.
CE-7	47	55.01%	Very poor results for the implementation of oversight mechanisms for critical elements for ATS, QMS and inspection of MET stations.
CE-8	7	56.92%	Challenges for the implementation of mechanisms for the elimination of deficiencies for all areas.

Review of NACC USOAP EI per ANS Audit Area



Review of NACC USOAP EI per ANS Audit Area

ANS General

No. of PQs	NACC ANS EI/Area	Remarks
14	71.01 %	Positive: Legislation for the provision of ANS Establishment of ANS safety oversight Clear separation between ANS provision and oversight Negative: Lack of comprehensive ANS regulation

Review of NACC USOAP EI per ANS Audit Area

Air Traffic Services (ATS)

No. of PQs	NACC ANS EI/Area	Remarks
37	65.23 %	<p>Positive: Establishment of ATS safety oversight requirements, safety oversight system and training programme Establishment of requirements for the provision of ATS</p> <p>Negative: 76% of States do not ensure that the ATS provider declares the ATC capacity 75% of States do not ensure that ATFM 60% of States do not ensure that the PBN specifications are appropriate 52% of States do not ensure that the ATS provider systematically reviews safety-related reports 50% of States do not ensure that the ATS provider has qualified personnel to conduct safety reviews 43% of States do not ensure that contingency plans have been developed and implemented</p>

Review of NACC USOAP EI per ANS Audit Area

Instrument Flight Procedures Design Service (IFPDS)

No. of PQs	NACC ANS EI/Area	Remarks
14	53.52 %	<p>Positive: Establishment of the IFPDS Inspectorate requirements.</p> <p>Negative: 66% of States do not ensure that a training programme appropriately implemented for inspectors. 62% of States have not established and implemented a formal surveillance programme 58% of States do not ensure that IFPs are reviewed periodically (including validation) 52% of States do not ensure that appropriate minimum qualification requirements for flight procedures designers are met. 52% of States do not have sufficient human resources to carry out IFPD inspections</p> <p>Critical: Ensuring that IFPs are reviewed periodically (including validation) to ensure that they continue to comply with changing criteria and meet user requirements</p>

Review of NACC USOAP EI per ANS Audit Area

Aeronautical Information Services /MAP

No. of PQs	NACC ANS EI/Area	Remarks
15	59.43 %	<p>Positive: Establishment of AIM safety oversight system</p> <p>Negative: 76% of States do not ensure that the AIS has implemented and maintained a QMS 53% of States do not ensure that the technical staff of AIS and cartographic service providers' personnel possess the competencies required to perform the assigned functions and tasks 53% of States do not ensure that the charts, which are applicable in the State, are available and went through a validation and verification process</p> <p>Critical: 50% of States do not ensure that formal arrangements are established between the originators of aeronautical data and information and the AIS on the timely and complete provision of aeronautical data and information Implementation of QMS for AIS</p>

Review of NACC USOAP EI per ANS Audit Area

Communications, Navigation and Surveillance (CNS)

No. of PQs	NACC ANS EI/Area	Remarks
9	77.25 %	<p>Positive: Arrangements for the provision of CNS services. Establishment of CNS safety oversight and inspectorate requirements.</p> <p>Negative: 33% of States do not effectively conduct surveillance over the entity responsible for the maintenance and operation of the CNS systems and facilities.</p> <p>Attention: Ensuring that requirements for flight inspection are established and periodical flight inspections are provided for radio navigation aids..</p>

Review of NACC USOAP EI per ANS Audit Area

Aeronautical Meteorology (MET)

No. of PQs	NACC ANS EI/Area	Remarks
17	64.26 %	<p>Positive: Establishment of MET services in accordance with Annex 3 provisions.</p> <p>Negative: 76% of States do not ensure that the designated meteorological authority has established a properly organized quality system. 75% of States do not ensure that the aeronautical meteorological stations are inspected at sufficiently frequent intervals. 47% of States do not ensure that the training programme appropriately implemented for MET inspectors.</p>

Review of USOAP EI per ANS Audit Area

Search and Rescue (SAR)

No. of PQs	NACC ANS EI/Area	Remarks
16	55.29 %	<p>Positive: SAR inspectorate human resources.</p> <p>Negative: SAR open findings for more than 15 years. 67% of States do not ensure that its SAR organization coordinates with neighbouring States. 58% of States do not permit entry into its territory of SAR units of other States. 48% of States have not arranged for the establishment and provision of SAR services on a 24-hour basis in accordance with Annex 12 provisions. 57% of States do not prepare detailed plans of operation for the conduct of SAR operations, do not have staff proficient in English, do not perform SAR exercises. 42% of States do not authorize its rescue coordination centres (RCCs) to provide, when requested, assistance to other RCCs</p>

Analysis of Strengths and Persistent Gaps



USOAP CSA 2005

USOAP expanded to include safety-related provisions contained in all safety-related Annexes

Promoted the implementation of ANS Safety Oversight System, which was (in some cases) previously inexistent.

With limited experience and oversight culture the States worked to implement their ANS safety oversight by preparing for the upcoming USOAP activities.

Audits / ICVMs

After the first cycle of audits, all States received ICVMs. This allowed the successive increase in the ANS EI.

The results of the first cycle of audits points out several contradictions for the sustainable implementation of ANS effective oversight, while some findings remain open until now.

Several States received follow-up ICVMs while the core of their ANS safety oversight system hasn't been revisited.

Latest Results

Significant reduction in ANS EI and Significant Safety Concerns (SSCs)

Some elements of the first cycle of audits are revisited with more rigorous requirements

Suggest reviewing the USOAP CMA 2024 PQ Checklist with track changes

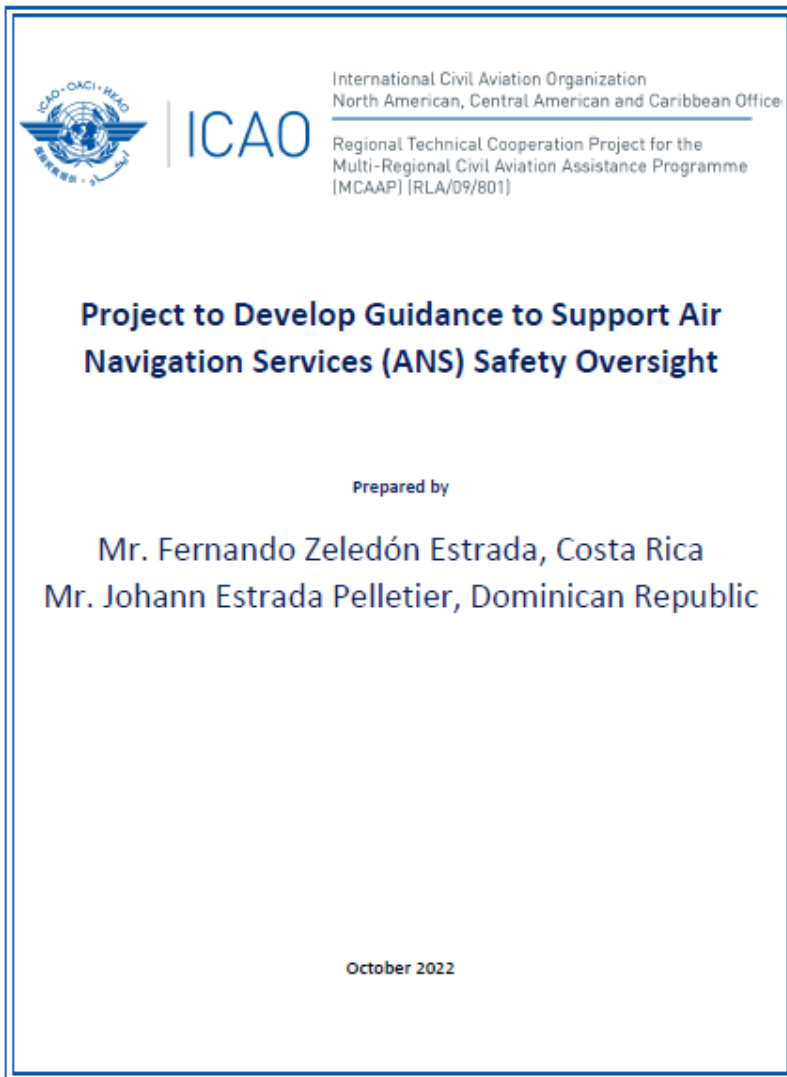
Main Challenges



- ANS safety oversight system based mainly in the USOAP compliance.
 - Compliance with ANS USOAP PQs does not allow a comprehensive ANS safety monitoring.
 - Limited safety oversight culture.
 - Lack of external influence to enhance internal safety monitoring and oversight.
- Limited regulatory framework.
 - CE-2 specific operating regulations results.
- Limited use of USOAP activities data and related information.
 - Rejection of USOAP findings and results.
 - Lack of awareness of decision makers.
- Unresolved findings sometimes opened since the first cycle of audits.
 - CE-8 Resolution of Safety Issues results.
 - Systemic challenges that prevent completion.
 - Standardization of the deviation.
- ANS oversight elements that are extremely difficult to implement by States/CAAs.
 - Caution with the “ANS Inspector” concept.
 - Limited capability to attract service provider personnel.

Current NACC ANS Safety Oversight Support Initiatives





Guidance Material to Support ANS Safety Oversight



Air Navigation Services (ANS) Safety Oversight Inspector Workshop



2026 Instrument Flight Procedures Design Inspector Workshop



Follow-up activities to continue support ANS safety oversight targeting main priorities identified

Suggested Actions

Request the NCMC:

- a) Support the identification of ANS safety oversight critical areas.
- b) Support for determining ANS safety oversight priority areas.
- c) Provide guidance to strengthen the NACC ANS regulatory framework.
- d) Support the development and implementation a regional training programme for ANS safety oversight.



Thank You!