



ICAO SAFETY

ANS Safety Oversight Seminar

Mexico City, 12-16 May, 2014

Victor Hernandez
RO ATM/SAR



ICAO

SAFETY

ANS SAFETY OVERSIGHT STRATEGY



SAFETY

- Safety is the highest priority in aviation, and ATM plays an important part in ensuring overall aviation safety.
- Uniform safety standards and risk and safety management practices should be applied systematically to the ATM system.
- In implementing elements of the global aviation system, safety needs to be assessed against appropriate criteria and in accordance with appropriate and globally standardized safety management processes and practices.



ICAO USOAP-CMA

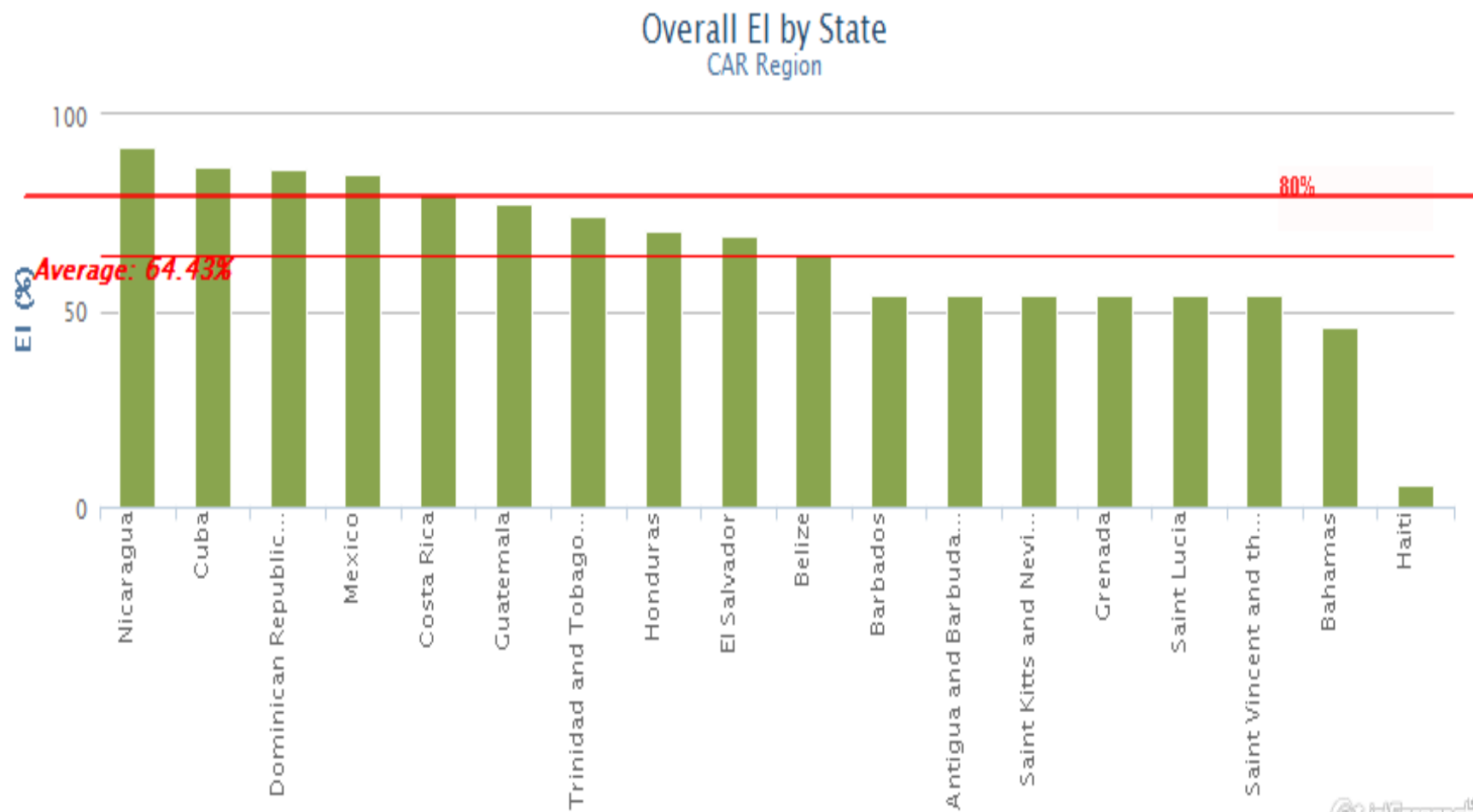
- The USOAP-CMA activity plan has high priority to support national administrations in their preparations for the audits and/or implementation of their corrective action plans.
- Since January 2011, the USOAP-CMA activity plan has completed 24 missions in support of USOAP preparations or follow-up.
- The LEI score of the SEA members resulting from the USOAP audits in comparison with the average of all audits worldwide.
- The NACC/DCA/5 Meeting held in April 2014 in Trinidad and Tobago, endorsed Port of Spain Declaration

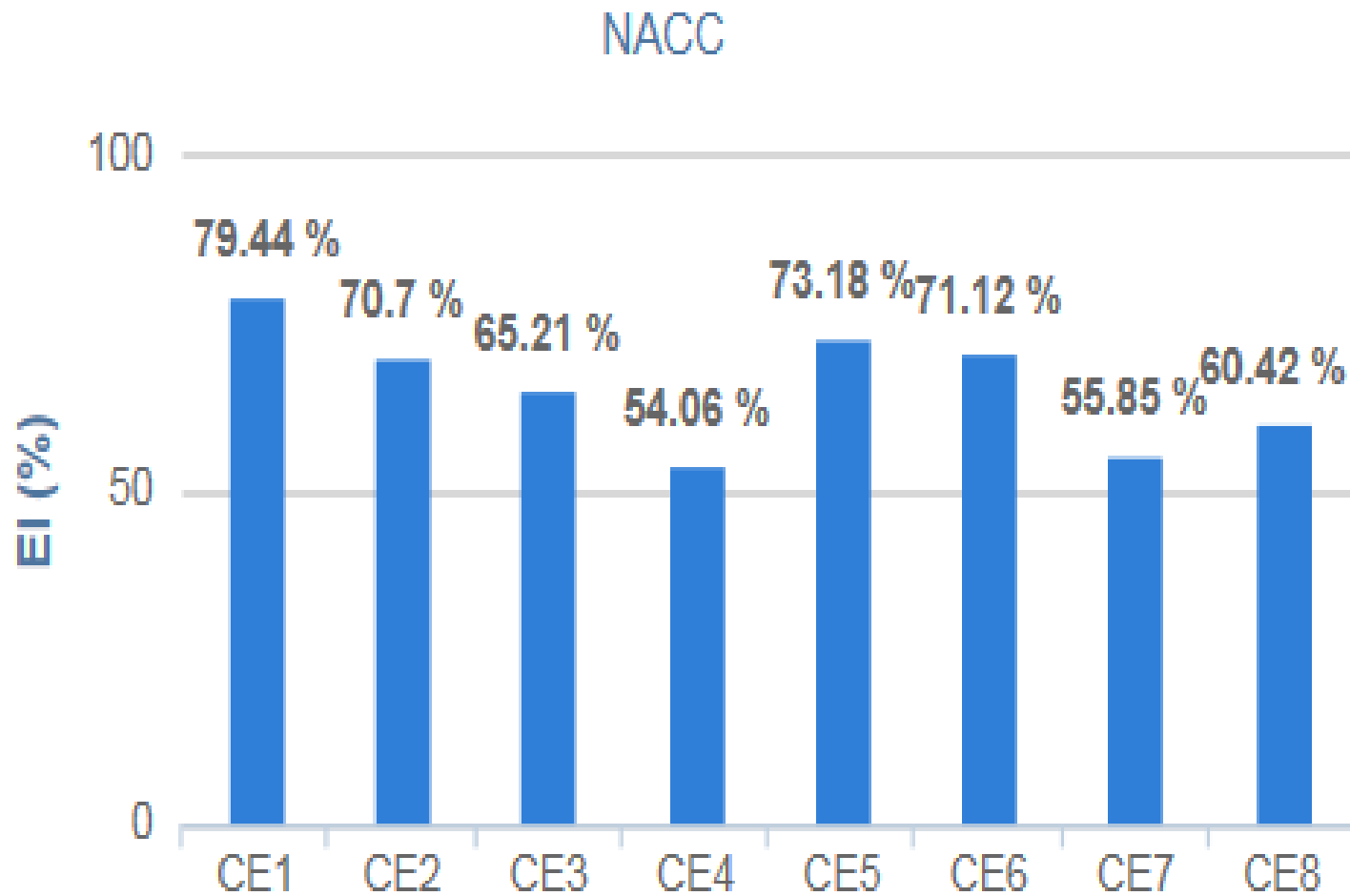


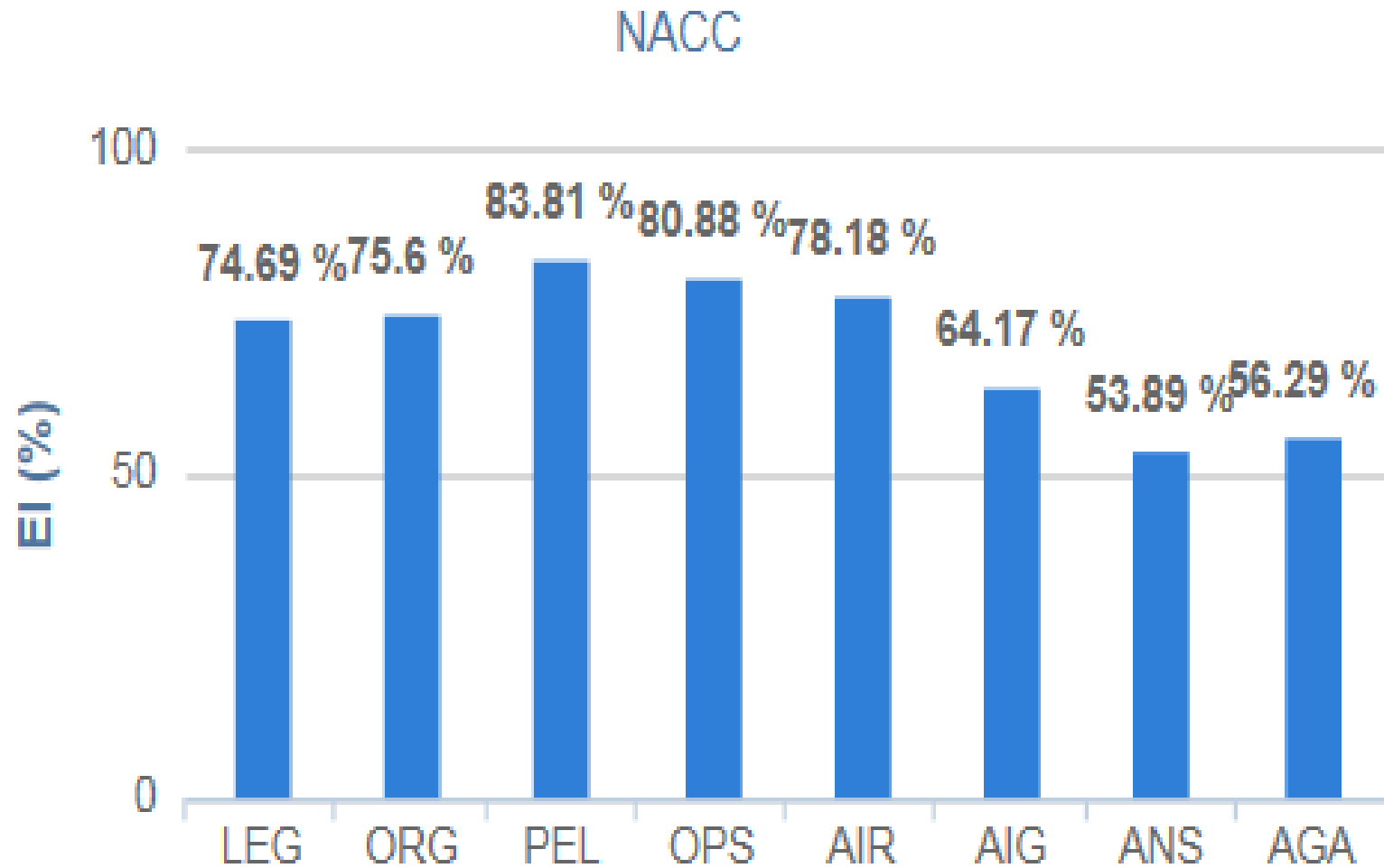
Port of Spain Declaration

SAFETY OVERSIGHT TARGETS

- **80% Effective implementation (EI) regional average by December 2016**
- **No State in the Region to have EI of ICAO USOAP Critical Element 3 (CAA Staff) and Critical Element 4 (Inspector Competency) below 70% by December 2016.**









System safety approach.

- A systematic and explicit approach defining all activities and resources (people, organizations, policies, procedures, time spans, milestones, etc.) devoted to the management of safety. This approach starts before the fact, is documented, planned and explicitly supported by documented organizational policies and procedures endorsed by the highest executive levels.
- The system safety approach uses systems theory, systems engineering and management tools to manage risk formally, in an integrated manner, across all organizational levels, all disciplines and all system life-cycle phases.



ANS

- A key indicator of a State's capability for safety oversight is the effective implementation of the eight critical elements (CE), as established in Annex 19
- Safety oversight encompasses the spectrum of civil aviation activities including ATS, CNS, AIM, MET, SAR and accident/incident investigation



ANS PQs	Scope of subject
7.001 to 7.019	Legislations for ANS which are not addressed in the Legislation (LEG) PQs or require further evidences
7.031 to 7.045	ANS - General aspects such as organization structure of ANS, establishment of a safety oversight system, the manual for ANS *inspectorate, availability of documents and mechanism for the elimination of deficiencies identified within the framework of Regional Planning Groups (PIRGs)
7.051 to 7.073	ATM - CAA oversight – Organization, staffing and training,
7.081 to 7.189	ATM – Operational aspects such as staffing, implementation, requirements for coordination, communications and information, emergency events and contingency planning and safety management
7.201 to 7.255	PANS-OPS (construction of visual and instrument flight procedures) - CAA oversight and operational aspects
7.261 to 7.311	AIS - CAA oversight and operational aspects
7.321 to 7.363	CHARTS- CAA oversight and operational aspects
7.371 to 7.405	CNS - CAA oversight and operational aspects
7.411 to 7.475	MET- CAA oversight and operational aspects
7.481 to 7.545	SAR - CAA oversight and operational aspects.



ANS 7.000 – Legislation and regulations for air navigation services

<p>CC Art. 12</p> <p>STD A2 2.1.1</p>	<p>ANS 7.001 Has the State developed and promulgated legislation/regulations with respect to the applicable provisions of Annex 2 in high seas airspace, without exception?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<ul style="list-style-type: none"> ➤ Review the legislation/regulations which provides for compliance with the Standards of Annex 2 ➤ Review the differences which have been filed with ICAO and verify whether exemptions are authorized with respect to compliance with Annex 2 provisions over the high seas. 	<p><input type="checkbox"/> Satisfactory <input type="checkbox"/> Not satisfactory <input type="checkbox"/> Not applicable</p>		<p>1</p>
<p>CC Art. 28</p>	<p>ANS 7.003 Has the State promulgated legislation to ensure that air navigation services (ANS) called for under Article 28 of the Chicago Convention are provided in accordance with ICAO SARPs or established from time to time, pursuant to the Convention?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<ul style="list-style-type: none"> ➤ Verify the legislation to ensure compliance with Article 28 to the Chicago Convention 	<p><input type="checkbox"/> Satisfactory <input type="checkbox"/> Not satisfactory</p>		<p>1</p>



Safety Oversight Evaluation Criteria

- **States are likely to have different levels of resources and skills.**
- **Successful implementation of a safety oversight system requires a high level of commitment and coordination among all stakeholders.**
- **The programme should be established to promote a partnership between States, enabling them to jointly pursue development objectives aimed at addressing cross border issues that individual States had neither the scale, the resources, nor the authority to act upon.**
- **Regional initiatives pose special challenges in terms of implementation and sustainability.**
- **Factors for poor safety performance could include an inability to prioritize national safety objectives over safety objectives of particular organization and differing initial goals.**



Evaluation Criteria	Key Issues
Effectiveness	How successful the safety oversight system achieve anticipated outcomes (e.g. improved legislation, regional cooperation and institutional structures).
Efficiency	Measuring the amount of resources it took to produce the desired output.
Impact	The degree to which there are tangible improvements in the safety oversight response of State CAA, the successful resolution of safety concerns and a decrease in incidents and accidents.
Sustainability	<p>The assurance of a viable funding. The usage of funds and fund balances may impact negatively on the continued flow of funds from these sources.</p> <p>Some States may provide assistance to other States through bilateral agreements.</p> <p>RSOO assistance may be considered as option for States and could be available for other States upon request.</p>



CRITICAL ELEMENT ADDRESSED	MATURITY INDICATORS			
	LEVEL 1 Infrastructure and Basis for Cooperation	LEVEL 2 Regionalization and Effective Delivery	LEVEL 3 Integration and Sustainability	LEVEL 4 Optimization
C-1 & C-2 Legislation and Specific Operating Regulations	ICAO provides framework for developing coordinated legislative and regulatory framework.	CAA focuses on developing Institutional Framework and Procedural Manuals). Coordinate with other CAAs.	Regional harmonization of legislation and operating procedures to reduce duplication of effort.	Harmonized legislation and regulations are integrated within national and/or regional institutions
CE-3 State system and functions CE-4 Qualified technical personnel	Resources from States CAAs and funding partners are mobilized to recruit experts, arrange logistical support, ensure sound technical and financial reporting and provide programme monitoring and review.	International coordination between regional and national experts. Regional coordination through a network of national coordinators. Guidance material and tools adopted by CAAs for institutional use.	Qualified technical staff developed and retained at regional or national levels	Safety-critical information openly shared at regional level
CE-5 Technical guidance, tools and provision of safety-critical information	CAA produces and delivers training and guidance material to address challenges in safety oversight system. CAAs use technical guidelines and tools	CAAs incorporates guidance material within their institutional framework	CAAs develop safety performance metrics to assess effectiveness of technical guidance material.	Stakeholder networks & policy dialogue, sustainable funding and effective monitoring mechanism.
CE-8 Resolution of safety issues	Technical experts address identified safety issues and collaborate on the rectification of deficiencies in relation to the ICAO SARPs.	CAAs implement corrective action plan for identified safety issues. Responsibility shared with aviation community to implementing safety oversight critical elements.	CAA is key change agency to strengthen response to safety issues.	Effective safety oversight mechanism is established within the CAA.



North American
Central American
and Caribbean
(NACC) Office
Mexico City

South American
(SAM) Office
Lima

ICAO
Headquarters
Montreal

Western and
Central African
(WACAF) Office
Dakar

European and
North Atlantic
(EUR/NAT) Office
Paris

Middle East
(MID) Office
Cairo

Eastern and
Southern African
(ESAF) Office
Nairobi

Asia and Pacific
(APAC) Office
Bangkok

Thank You