

# ANS – Effectiveness of ANS implementation mechanism

*ICAO-NACC Regional Office*

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# Description - Objectives

- Discuss the current regional Air Navigation Implementation mechanism, including the NCLB targets accomplishment and the RPBANIP progress
- Explore the need to improve international civil aviation planning and implementation in a more integrated manner at the Global, Regional and State levels

# Port of Spain (PoS) Declaration

- The follow-up of the PoS targets will continue and the alignment of its progress will be made through each State Action Plan under the NACC NCLB Strategy
- To include the use of the performance-based approach method as indicated in the GANP 5<sup>th</sup>. Ed.
- Periodic reporting on the targets by each State is key for the accurate presentation of the reports and the identification of the operational benefits accompanying the progress (Ref. NACCWG/5 — WP/28 Attachment to WP Pag. 4-5)

Regional Air Navigation Targets (Port of Spain Declaration)		Achievements by December 2016
1	Approach - Performance-Based Navigation (PBN)	
<ul style="list-style-type: none"> <li>•80% of instrument approach runways to have Approach Procedures with Vertical Guidance (APV) with Barometric Vertical Navigation (Baro-VNAV) implemented by service providers and users by December 2016</li> </ul>		65.2%
2	Air Traffic Flow Management (ATFM)	
<ul style="list-style-type: none"> <li>•100% of Flight Information Regions (FIRs) within which all Area Control Centres (ACCs) to have ATFM measures available by December 2018</li> </ul>		60%
3	Aeronautical Information Management Transition (AIM)	
<ul style="list-style-type: none"> <li>•100% of Aeronautical Information Services (AIS) to implement AIM Roadmap - Phase I required elements by December 2016</li> </ul>		79.49%
4	Ground-Ground Digital Coordination/Transfer	
<ul style="list-style-type: none"> <li>•50% of FIRs within which all applicable ACCs to have implemented at least one interface to use Air Traffic Services Inter-Facility Data Communication (AIDC)/On-Line Data Interchange (OLDI) with neighboring ACCs by December 2016</li> </ul>		84,09% (NAM/CAR) 42.86% (CAR)
5	Environmental Benefit	
<ul style="list-style-type: none"> <li>•Reduce regional CO2 emissions by 40,000 tons per year through PBN implementation by December 2016</li> </ul>		Not available- under review in PBN implementation



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## Air Navigation Target

**Follow-up on RPBANIP Air Navigation Targets at:  
<http://www.icao.int/NACC/Pages/Implementation-Targets.aspx>.**

**Several  
targets (PBN  
Planning,  
AIDC,  
CPDLC,  
MEVA  
Network,  
and MET)  
have been  
achieved**

**Some  
targets are  
still  
ongoing:  
ATFM, ADS-  
C, AIM  
Phase 1**

**Some  
targets have  
not been  
achieved:  
AMHS,  
AMAN,  
DMAN, ...**

**Several  
targets need  
to be  
completed  
in their  
definition as  
for ex.  
“selection”  
required**



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# ATM

## **Enhance ANS Safety Oversight:**

- Support ANS Legislation and Regulation.
- Enhance ANS Oversight Organizational Structure.
- Support ANS Inspectorate Staffing and Training.
- Develop SOPs for ANS Oversight.

**UPDATE ATFM  
CAR/SAM  
IMPLEMENTATION  
STRATEGY**

**REVIEW PBN  
CONCEPT AND  
IMPLEMENTATION  
METHODOLOGY**



# AIM

**Implement AIM  
at all Phases for  
transition due to  
the new  
technological  
emerging  
requirements**

**SWIM  
implementation  
project (Initial  
Phases)**

**Improve AIM and IM  
programmes, such as:**

- AIM Basic and recurrent TRAIN
- D-NOTAM
- AIM integrated e-documentation
- AIM-QMS
- AIXM ver. 5.1
- Electronic aeronautical charts
- e-TOD
- Data processes
- Etc.





# CNS

**Need to improve coordination efficiency - harmonize the Air Navigation infrastructure implementation**

**Need for a performance-based planning culture / engage on ASBU methodology**

**Regional implementation Groups- need for effective participation**

**Improvements to Air-Ground communications with new technologies (data link applications)**

**Regional enhancement of ATS situational awareness, including regional solution (ADS-B deployment) and ACAS II implementation**

**System automation available but not fully used and/or interoperability concerns**

**Diversity of Systems and Aviation infrastructure**

**Reduced number of Qualified Technical Staff**

**Keep the staff updated for their performance and for new technologies**





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# MET

Implementation  
of Quality  
Management  
Systems – QMS

Implementation of  
ICAO/WMO competency and  
qualification standards

Maintain and improve the technological  
infrastructure to build meteorological  
networks capable to support the provision  
of MET service - ICAO Meteorological  
Information Exchange Model IWXXM

Aeronautical  
Meteorological  
Observers  
Satisfy  
competence  
requirements  
by Dec 2013.

Aeronautical  
Meteorological  
Forecasts  
Satisfy  
competence  
requirements  
by Dec 2013  
and Satisfy the  
qualification  
requirements  
by Dec 2016.

SIGMET for  
Volcanic Ash,  
Tropical  
Cyclone,  
other  
en-route  
weather  
phenomena

METAR,  
SPECI, TAF,  
Aerodrome  
warnings

Space  
Weather

Sustainability  
and  
competitiveness  
of  
meteorological  
service  
provision

# AGA

Several events during 2017 and to continue in 2018

Joint efforts with partners (FAA/ACI/CASSOS) in the Caribbean towards airport certification, runway safety team implementation, and safety improvements

Under NCLB - ICAO/ACI TEAM follow up missions to Bahamas (April 2017), Cuba (May 2017), ECCAA (June 2017) on aerodrome certification implementation

ICAO/FAA/ACI Workshop for Aerodrome Certification Inspector, 16-20 October 2017, Panamá.

ICAO/FAA Workshop in RST implementation held in Aruba, 14-16 June 2017

ICAO/FAA Workshop on Best Practices for the Development of Aerodrome Manuals and the Use of Procedures for Air Navigation Services — Aerodromes (PANS-AGA) for the CAR Region, Port of Spain, Trinidad and Tobago, 3-6 October 2017



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# AGA

The approved SARPs can be difficult to implement at certain aerodromes and some States having significant non-compliance with the standards

There is scarce participation of States in the approval of new ICAO SARPs that affect the aerodromes area

Non-compliance issues:

The core functions of the Aerodrome regulatory authority do not include:

Aerodrome regulations development, design specification and certification and operation standards

Aerodrome certification, aerodrome surveillance and aerodrome safety data collection, as well as aerodrome construction projects review and approval not complied with



# SAR

## **INCREASE SAR COMPLIANCE REQUIREMENTS AT A REGIONAL LEVEL :**

- Support SAR Legislation, Regulation and Agreements.
- Support SAR System Implementation.
- Support SAR Inspectorate Staffing and Training.

## **UPDATE SAR NAM/CAR IMPLEMENTATION STRATEGY**

## **SUPPORT THE ESTABLISHMENT OF THE ANI/WG SAR IMPLEMENTATION TASK FORCE**

# Points for discussion

1. • The process to follow in the Planning for the ANS implementation
2. • Identification of the infrastructure to be provided in support of PBN implementation
3. • Definition of the need and nature of a national or regional SWIM authority
4. • Identification of the need for national regulatory policies and standards



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THANK YOU

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