



**Thirtieth Regional Aviation Safety Group — Pan America Executive Steering Committee Meeting
(RASG-PA ESC/30)**

Baltimore, United States, 22 to 23 March 2018

Agenda Item 3: ITEMS/BRIEFINGS OF INTERES TO THE RASGPA ESC

SAFETY IMPROVEMENTS FROM ANS IMPLEMENTATION

(Presented by the Secretariat)

EXECUTIVE SUMMARY	
This working paper presents the activities being developed by the Air Navigation Implementation Working Group (ANI/WG) through the regional Task Forces, and the SAM implementation groups (SAM/IG) responsible for developing activities focused on provide guidance to ensure the correct implementation of the system, facilities and regional programmes aiming to strengthen efficiency, harmonization and safety of air traffic operations in the region.	
Action:	Suggested actions are presented in section 3.
<i>Strategic Objectives:</i>	<ul style="list-style-type: none">• Capacity and Efficiency• Safety
<i>References:</i>	<ul style="list-style-type: none">• Fifth North American, Central American and Caribbean Working Group Meeting (NACC/WG/5) conclusions, May 2017.• First NAM/CAR Air Navigation Implementation Working Group (ANI/WG) Aviation System Block Upgrade (ASBU) Task Force (TF) Meeting (ASBU/TF/1), conclusion, March 2018.• SAM/IG meetings (SAMIG/19, May 2017 , SAM/IG/20, October 2017)

1. Introduction

1.1 During the RASG-PA/ESC 29 Meeting, the Secretariat presented the results of mitigation actions conducted to improve safety following the identification of a safety hot spot noted by the GREPECAS GTE, highlighting:

- ✈ That AIDC implementation in the different ANSPs is one of the most effective ways to reduce errors in flight coordination between ANSPs because it improves the situational awareness and reduces errors.
- ✈ ANSPs need the information from the industry of the Aircraft Performance to update the data base configuration of the ATS and allow system calculation, estimate with the real aircraft performance information
- ✈ It is necessary that States/Organizations promote the implementation of automation protocols between the Flight Information Regions (FIRs) since it has been proved that the correct implementation reduces the error in air traffic coordination between ANSPs.

1.2 From this action, the Implementation Group is working among ANSPs and Airlines to find a way to share the aircraft performance data to update the database configuration of the ATS information with the ANSP.

2. Development

2.1 In the ANS implementation matters, Safety is the main priority. The NAM/CAR Air Navigation Implementation Group (ANI/WG) is working in the following activities:

2.2 SURV/TF: Surveillance Task Force

1. Improve ADS-B and MLAT Implementation in the region.
2. Support activities of radar data sharing in the region and technical requirement of the AIDC implementation.
3. Provide surveillance backup information according with the implementation of the regional surveillance radar data sharing.

2.3 AIDC/TF: ATS Interfacility Data Communication Task Force

1. Support the implementation of the AIDC in the region.
2. Improve continuous climb and descent procedures in all airports when AIDC is implemented.
3. Improve the efficient management of the Air Space.
4. Support the reduction of LHD.
5. Improve regional procedures and mechanism to reduce flight plans errors.

2.4 AMHS/TF: Aeronautical Message Handling System Task Force

1. Improve a better mechanism to share air information in the region.
2. Support the AIDC implementation, providing the appropriate network to carry out the AIDC messages.
3. Supporting other type of messages that AFTN network does not carry out because of its technical specifications.
4. A system prepared to support future aeronautical services.

2.5 **ATFM/TF**: Air Traffic Flow Management Task Force, **PBN/TF**: Performance Based Navigation Task Force.

Both Task Forces part of the ATM regional Strategic, are working in updating the regional plan implementation according with the needs and current priorities of the region.

2.6 **ASBU/TF**: **Aviation System Block Upgrade Task Force**

1. To assist the States in the interoperability and harmonization in the implementation of ASBU technologies that supports their operation.
2. Coordination and support to State ANS Plan development and implementation
3. Support the review and enhancement of Regional Performance Based Air Navigation Implementation Plan (RPBANIP).

2.7 **MET TF**: **Meteorological Task Force**

1. Support to solve the GANDD deficiencies in the region
2. Improve OPMET and SIGMET quality information.

2.8 In the SAM Region in the ANS implementation matters the safety is the main priority. The SAM/IG SAM implementation group is working in the following activities:

PBN group main activities

- Coordination and harmonisation of the route network (based on route network versions, to ensure that the best airspace structure is available under an integrated development concept (ATSRO meeting))
- Actions to standardise longitudinal separation of aircraft en route
- Support the implementation of the Standard Instrument Departure Route (SID) / Standard Arrival Routes (STAR)
- Support the implementation of the Continuous descent operations (CDO) and continuous climb operations (CCO)
- Support the implementation of the Approach procedures with vertical guidance (APV) - Resolution A37/11
- PBN redesign of the main South American TMAs
- Updating contingency plans and ATS letters of agreement, to guarantee safety and consolidate PBN implementation and improvement
- Updating PBN CONOPS

ATFM group

- Runway capacity and ATC sector calculations.
- Implemented ATFM at flow management units (FMUs) or flow management positions (FMPs).
- Issuance of NOTAMs with flow control measures
- Updating ATFM CONOPS

CNS group

- Managing regional digital network (REDDIG II network)
- Supporting the implementation of national IP network
- Develop CNS implementation regional guidelines
- Support AMHS interconnection implementation (Migration from AFTN to AMHS circuits)
- Support the implementation of datalink (CPDLC ADS C)
- Support the implementation of the navigation infrastructure system
- Support the implementation of the advanced surveillance system ADS B , Multilateration

Automation Group

- Support the implementation of the interconnection of ATM automation system between adjacent ACCs
Surveillance data sharing
- AIDC interconnection
- Support the mitigation of flight plan error
- Support safety network implementation (STCA, APW, MSAW)

AIM group

- Support the transition AIS to AIM
- QMS implementation
- AIXM implementation
- eTOD implementation
- Digital NOTAM

MET group

- Support QMS implementation
- Support the OPMET exchange
- Support the IAVW Implementation
- Improvements to MET services in accordance with the new operational requirements in support of ATM

3. Suggested actions**3.1 The Meeting is invited to:**

- a) Take note of the information presented in this working paper regarding to the activities development for the ANI/WG Task Forces and SAM implementation Groups (SAM/IG) aiming to improve safe in air operations in the NACC/CAR/SAM Regions; and
- b) analyse any potential synergy between RASG-PA teams and ICAO ANS implementation Groups.