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Fourth NAM/CAR Air Navigation Implementation Working Group Meeting (ANI/WG/4)
Miami, United States, 21 – 24 August 2018

Agenda Item 4: Follow-up, Performance Evaluation and Monitoring of the CAR Regional Performance Based Air Navigation Implementation Plan
4.1 Progress Reports of the Task Forces of the ANI WG

PROGRESS REPORT ON ASBU TASK FORCE WORK PROGRAMME

(Presented by the ASBU/TF Rapporteur)

EXECUTIVE SUMMARY

This working paper presents the progress achieved by the ASBU Task Force (TF) since its formation during the NACC/WG/5 Meeting in Trinidad and Tobago in May 2017. This paper presents the newly created Terms of References for this TF including the Work Programme and Membership Tables. The major accomplishments since formation of this TF, such as the contribution to prepare the Regional Performance-Based Air Navigation Implementation Plan (RPBANIP) and the State Air Navigation Plan (ANP) Workshop, are also presented.

Action:	The Suggested Actions are presented in Section 3.
Strategic Objectives:	<ul style="list-style-type: none">• Safety• Air Navigation Capacity and Efficiency
References:	<ul style="list-style-type: none">• NAM/CAR Regional Performance-Based Air Navigation Implementation Plan (RPBANIP)• Global Air Navigation Plan, 5th Edition (Doc 9750)• The Aviation System Block Upgrades, the Framework for Global Harmonization, issued July 2016• Manual on Global Performance of the Air Navigation System (Doc 9883)• Third NAM/CAR Air Navigation Implementation Working Group Meeting (ANI/WG/3) report, Mexico City, Mexico, 4 April to 6 April 2016• Fifth NACC Working Group Meeting (NACC/WG/5) report, Port of Spain, Trinidad and Tobago, 22 May to 26 May, 2017

1. Introduction

1.1 The Aviation System Block Upgrades (ASBU) Task Force was established during the NACC/WG/5 Meeting in Trinidad and Tobago in May 2017. The ICAO Global Air Navigation Plan (GANP) is designed to guide complementary and sector-wide air transport to future progress. The GANP presents the consensus-driven ASBU systems engineering framework for global harmonization of aviation technologies. The formation of ANI/WG ASBU TF reflects the importance of such advancements in the NACC region. The objective of the ASBU TF is to assist the region in the implementation of harmonized technologies that support the operation.

2. ASBU TF Progress and Results

2.1 The ASBU TF Rapporteur and ICAO NACC ASBU TF Officer prepared the draft of Terms of Reference (ToR) for this TF. (Refer to Attachment 1 for the detailed descriptions.) The ASBU TF ToR consists of:

- Objectives
- Working Methods
- Work Programme
- Membership Table

2.2 The original and draft ASBU ToRs and Work Programme was created shortly after the formation of this TF and delivered to the ANI/WG Chairperson and Vice Chairperson. The ASBU TF Rapporteur and the ICAO NACC RO started to move forward using this Work Programme and have already made excellent progress.

2.3 The ICAO NACC RO created the ASBU TF web page via ANI/WG web site. The URL is: <https://www.icao.int/NACC/Pages/regional-group-asbu.aspx>. This page shares information such as NASCC ASBU Handbook, ASBU Air Navigation Reporting Form (ANRF), ASBU Block 0 Implementation Status Summary Table Template, ToRs, and Work Program. This page is also used for the information/document repository. The submitted State ANRFs and ANPs can be accessed through this page.

2.4 NAM/CAR RPBANIP was updated to version 3.1 in April 2014 by aligning the activities and strategies with ICAO ASBU methodology/framework. This document covers both NAM and CAR regions. The ICAO NACC RO conducted some analysis and determined that it makes strategic sense to separate NAM and CAR in preparation of regional ANPs to reflect the realistic differences between them. This way, the ICAO NACC RO can better provide the necessary support to the necessary areas/locations.

2.5 Guided by the ICAO NACC RO, NAM region is working to prepare the NAM Electronic ANP (eANP) Volume III covering Canada and United States. The NAM/CAR RPBANIP will become RPBANIP for covering the CAR region. Since the last update of RPBANIP in 2014, the ICAO NACC RO studied the ASBU methodology/framework and found the better way to communicate the concept of ASBU, its intention, and how it could be applied to support the States.

2.6 The ASBU TF supported the ICAO NACC RO to revise RPBANIP from version 3.1 to version 4. The RPBANIP version 4 is aligned with GANP and provides realistic metrics and targets, a clear ASBU implementation process, and reporting mechanisms.

2.7 The Saint Lucia and ASBU TF Rapporteur collaborated to prepare the Saint Lucia State ANP in September 2017. The experience to create the State ANP, which has the structure to work together with RPBANIP, was vital and provided valuable lessons. Using this experience, the process to create the State ANP was identified and the State ANP template was made. Many States in CAR region do not have a comprehensive State ANP aligned with GANP/RPBANIP. However, the use of this template is not mandated; it is available to assist States creating an ANP

2.8 The ICAO NACC RO and ASBU TF Rapporteur organized the State ANP Development Workshop. The 1st State ANP Development WS was hosted by the ICAO NACC RO in Mexico City, Mexico, March 12 and 13, 2018. Attendees were (1) Barbados, (2) Belize, (3) Mexico, (4) Curacao, and (5) COCESNA. The class size was small, but this size was perfect for the very first Development Workshop to provide sufficient attention to each Attendee. Upon completion of the Workshop, all attendees created their State ANP in draft form including all Block 0 ANRFs.

2.9 The 1st State ANP Development WS was very productive and well received. The ICAO NACC RO is planning to organize two additional such WS in the remaining year of 2018. The 2nd WS will be hosted by COCESNA in August 2018 for Central American States. The 3rd WS is planned to be hosted by Barbados in November 2018 for Eastern Caribbean States. Additional WS are also considered for early 2019. The goal is all CAR states having their State ANP.

2.10 The ICAO has the “No Country Left Behind (NCLB)” initiative highlighting the ICAO’s efforts to assist States in implementing ICAO Standards and Recommended Practices (SARPs). The preparation of State ANP provides the awareness of SARPs to implement certain ASBU capabilities. From this point alone, it is important that all States to participate the ASBU TF and provide Point of Contact information.

2.11 It is State’s decision not to prepare the State ANP. However, all states are strongly requested to fill in the Air Navigation Reporting Forms (ANRFs) for ASBU Block 0 Modules/Elements and submit to the ICAO NACC RO.

3. Suggested Actions and Required Actions.

3.1 The required actions are:

- a) Each State provides ASBU TF Point of Contact information. Primary PoC (minimum) and Secondary PoC (multiple Secondary PoCs are accepted) need to be communicated with the ASBU TF Rapporteur; and
- b) Each State must submit the ANRFs for ASBU Block 0 Modules/Elements (Note: State ANP includes this information.)

The Meeting is invited to:

- a) evaluate the progress of the ASBU TF detailed in this paper;
- b) review and comment on ASBU TF ToR;
- c) review and comment on ASBU TF Work Program;
- d) consider participating the State ANP Development WS when available; and
- e) prepare and maintain the State ANP.

APPENDIX A

Terms of Reference Aviation System Block Upgrade (ASBU) Task Force

1. Background

- 1.1. At the ANI/WG/2 Meeting in June, 2015, an Ad Hoc group was formed to discuss metrics of the ASBU Block 0 implementation status, performance reporting and revisions to the Air Navigation Reporting Forms (ANRF) which will be used by States and Territories in the NAM/CAR regions. In the ANI/WG/2 report, this ad hoc group was named the ANRF Ad Hoc group. Their given tasks are:
 - a) For the NAM/CAR States/Territories to review and adopt the proposed new ANRFs for application by June 2016;
 - b) For the NAM/CAR States/Territories to assess their status of implementation and report to ICAO NACC Regional office by 30 July 2016; and
 - c) For ICAO to organize by the first semester of 2016. a hands-on ANS/ASBU ANRF workshop to improve the use and understanding of the new ANRFs with participation of CANSO, IATA, civil aviation training centers and air navigation planning experts.
- 1.2. At the ANI/WG/3 Meeting in April, 2016, the delegates agreed to more active participation from their States/ANSPs to reflect their national priorities and users' main needs, and therefore agreed to create an ad hoc group to support review, follow-up and reporting on the achievement of the air navigation (AN) targets established in the NAM/CAR Regional Performance-Based Air Navigation Implementation Plan (RPBANIP) and in the Port-of-Spain Declaration. During ANI/WG/3, this ad hoc Group was named the ASBU Ad Hoc Group.
- 1.3. At the NACC/WG/5 Meeting (May 2017), the delegates agreed that the ASBU Ad Hoc Group would become the ANI/WG ASBU Task Force (TF).

2. Objectives

To assist the region in the implementation of harmonized technologies that supports the operation.

- 1) Develop effective methods to determine the regional implementation status of the ASBU Block-0 elements and the performance monitoring of the Regional Air Navigation System, on a cyclical annual basis, as a regional input to the Annual Global Air Navigation Report and feedback for the Global Air Navigation Plan and the Regional Dashboard.
- 2) Assist NACC's States to formulate or update their National Air Navigation Plans by using a planning process to ensure alignment with the RPBANIP and the GANP.
- 3) Contribute with the continuous updating of the RPBANIP in order to maintain the validity, accuracy, and applicability of the Plan.

3. Responsibilities

The Task Force is responsible for:

- a) Work Programme Management;
- b) Coordination and support of the development and maintenance of State/Territory Air Navigation Plans; and
- c) Support the revision and enhancement of Regional Performance Based Air Navigation Implementation Plan (RPBANIP)

4. Working Methods

The Task Force will:

- a) Present its work programme containing activities in terms of objectives, responsibilities, deliverables and timelines;
- b) Avoid duplicating work within the ANI/WG and maintain close coordination among the existing entities to optimize use of available resources and experience;
- c) Designate, as necessary, ad hoc groups to work on specific topics and activities and organize clearly defined tasks and activities;
- d) Coordinate tasks to maximize efficiency and reduce costs via electronic means including emails, telephone and teleconference calls, and convene meetings as necessary; and
- e) Report on and coordinate the progress of assigned tasks to the ANI/WG.

5. Work Programme – See the **Appendix A**.

6. Membership

All ICAO States, Territories and International Organizations which are accredited to the ICAO NACC Regional Office, Other stakeholders in NAM/CAR Regions are encouraged to actively participate. **Appendix B** lists the Point of Contacts.

7. References

- Global Air Navigation Plan, 2016-2030 (Doc 9750-AN/963 Fifth Edition – 2016)
- The Aviation System Block Upgrades; the Framework for Global Harmonization. Issued: July 2016.
- Doc 9854 Global Air Traffic Management Operational Concept
- Doc 9882 Manual on Air Traffic Management System Requirements
- Doc 9883 Manual on Global Performance of the Air Navigation System

APPENDIX B

ASBU TF Work Programme

Updated on August 15, 2018

This ASBU Task Force (TF) work programme covers the basis for the preparation and maintenance of State ANPs by each member states in the region. To prepare and maintain the State ANPs, States need to understand GANP/ASBU in addition to their States' needs in current and future aviation technologies. The State ANP should be used by the State to strategically plan what capability will be implemented and when to implement it.

Note 1: This document establishes a guideline for attaining ASBU NAM/CAR goals and will be reviewed periodically throughout the year. A formal review each calendar year shall be conducted during the ANI/WG and NACC/WG meeting so as to update/revise/modify its content for currency and applicability.

Note 2: The GANP/ASBU will be updated every 3 years with ASBU Block definitions maturing every 6 years. Thus, minor updates are expected every 3 years and significant updates are expected every 6 years.

Objective 1: Develop effective methods to determine the regional implementation status of the ASBU block-0 elements and the performance monitoring of the Regional Air Navigation System, on a cyclical annual basis, as a regional input to the Annual Global Air Navigation Report and feedback for the Global Air Navigation Plan and the Regional Dashboard.

No	Activity	Purpose	Deliverable
1.1	<p>Establish and Update the ASBU TF PoC List</p> <ul style="list-style-type: none"> • Draft the letter (by NACC RO and TF Rapporteur; Target Date: Dec 19, 2017) • Send a letter to request the PoC information States, Territories, and other stakeholders (by NACC RO; Target Date: Jan 12, 2018) • Receive the response (by NACC RO; Target Date: Feb 9, 2018) • Create the ASBU TF PoC List (by NACC RO; Target Date: Feb 9, 2018) • Distribute the ASBU TF PoC list via ASBU Website (by NACC RO; Target Date: Feb 16, 2018) • Update the ASBU TF PoC List (by NACC RO and TF Rapporteur; Target Date: as needed) 	Each organization needs a PoC who is responsible for their ANP.	PoC List
	<p>Status/Remarks: There are 21 States and one Territory in the Region who should have State ANP that is aligned with GANP and Regional ANP. In addition, COCESNA should have its ANP. Further coordination and investigation is needed by the NACC RO regarding the Territory handling. This coordination will take place once the Objective 1 is accomplished initially.</p>		
1.2	<p>Generate ANRF</p> <ul style="list-style-type: none"> • Fill in forms (by each State; Target Date: Apr 30, 2018) • Fill in State Summary Table (a.k.a. Pretty Table) (by each State; Target Date: Apr 30, 2018) • Examine and update the ANRF (by ASBU TF and each State; Target Date: May 31, 2018) • Keep track of ANRF status (by NACC RO and TF Rapporteur; Target Date: from Jan 2018 to Dec 2018) • Generate the Regional Summary Table (a.k.a. Pretty Table) (by NACC RO and TF Rapporteur; Target Date: May 31, 2019) 	Support the ANRF generation at two levels: (1) the form itself and (2) contents of the form by State.	<ul style="list-style-type: none"> • ANRF Form Template • ANRFs by States and Territories • State and Regional Summary Table
	<p>Status/Remarks: • As of August 15, 2018, following organizations have filled in ANRFs: Barbados, Belize, Costa Rica, Cuba, Dominican Republic, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Saint Lucia, Trinidad and Tobago, Curacao, and COCESNA.</p>		
1.3	<p>Performance Monitoring</p> <ul style="list-style-type: none"> • Analyze States specific needs (by each State; Target Date: Apr 30, 2018) • Determine regional needs (by NACC RO; Target Date: Apr 30, 2018) • Propose the Regional Performance Objectives (by NACC RO; Target Date: May 31, 2018) 	Promote the formulation of a measurement strategy and identify the regional performance metrics.	Regional performance metrics
	<p>Status/Remarks: None</p>		

Objective 2: Assist NACC States to formulate or update their National Air Navigation Plans by using a planning process to ensure alignment with the RPBANIP and the GANP.			
No	Activity	Purpose	Deliverable
2.1.	<p>Schedule assistance activities</p> <ul style="list-style-type: none"> Assess training/discussion needs of ANSPs (by NACC RO; Target Date: Jan 31, 2018) - Completed Establish a list of training/discussion subjects (by NACC RO and TF Rapporteur; Target Date: Jan 31, 2018) - Completed Establish schedule (by NACC RO and TF Rapporteur; Target Date: Jan 31, 2018) - Completed Publish/coordinate events (by NACC RO; Target Date: Jan 31, 2018) - Completed Perform ASBU workshops/seminars/meeting (by NACC RO and TF Rapporteur; Target Date: Jan 31, 2018) - Completed Host the 2nd State ANP Workshop (scheduled at COCESNA for central American states in August 2018) - Completed Host the 3rd State ANP Workshop (scheduled in Barbados for ECAR states in November 2018) Host the 4th State ANP Workshop (TBD, 2019) 	Provide a foundational baseline of refresher & supplemental training for personnel involved in ANP and ASBU.	WS/Seminar/ Meeting Materials and Report
<p>Status/Remarks: NACC RO hosted the 1st State ANP Workshop in Mexico City, Mexico on March 12-15, 2018. The WS was very well received and two additional WSs are scheduled in August and November 2018.</p>			
2.2	<p>Support Creation of State ANP</p> <ul style="list-style-type: none"> Prepare the State ANP template (by ASBU TF; Target Date: Jan 15, 2018) - Completed Create the initial State ANP (by each State; Target Date: May 31, 2019) Support States to finalize the initial State ANP (by each State; Target Date: TBD) 	Ensure that all States in the region have their own State ANP which is aligned with the Regional ANP as well as GANP.	<ul style="list-style-type: none"> State ANP template Initial State ANP Status summary State ANPs
<p>Status/Remarks: Use of State ANP template is optional. Saint Lucia worked with the TF Rapporteur prior to the WS and has draft State ANP. The 1st ANP Workshop: Barbados, Belize, Curacao, Mexico, and COCESNA created the draft State ANPs including the new/updated ASBU B0 ANRFs during March 12-15, 2018. The 2nd ANP Workshop: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Dominican Republic created the draft state ANPs during August 6-9, 2018. Belize and COCESNA refined their ANPs.</p>			
2.3	<p>Support Updates of State ANP</p> <ul style="list-style-type: none"> Update the State ANP (by each State; Target Date: annual) Support States to update their State ANPs (by NACC RO and TF; Target Date: as needed) Keep State ANP status known (by ASBU TF) 	Ensure the State ANP information is current.	<ul style="list-style-type: none"> Updated State ANP State ANP Status summary
<p>Status/Remarks: None</p>			
Objective 3: Contribute with the continuous updating of the RPBANIP in order to maintain the validity, accuracy, and applicability of the Plan.			
No	Activity	Purpose	Deliverable
3.1	<p>Support RPBANIP</p> <ul style="list-style-type: none"> Identify the necessary updates that need to be applied to the existing RPBANIP (by NACC RO and TF; Target Date: Feb 28, 2018)) - Completed Identify the regional goals/objectives that should be reflected in the RPBANIP (by NACC RO; Target Date: Feb 28, 2018) – Guideline for the next version of RPBANIP is determined. Identify the needs of States in the region (by NACC RO and TF; Target Date: Feb 28, 2018) – Guideline for the next version of RPBANIP is determined. Update RPBANIP (by NACC RO and TF; Target Date: May 31, 2018)) - Underway 	Ensure the RPBANIP that is aligned with GANP/ASBU and reflect the needs of States in the region and the information is current.	Updated RPBANIP
<p>Status/Remarks: The State ANPs will reflect guidance from the RPBANIP while the RPBANIP will reflect the needs described in the State ANPs.</p>			
3.2	<p>Update NACC ASBU Handbook and Other Support Materials</p> <ul style="list-style-type: none"> Update the NACC ASBU Handbook (by ASBU TF; Target Date: After the 2019 version of GANP/ASBU is released.) Identify other ASBU materials that will support the States to prepare State ANPs and provide such materials to the States. (by ASBU TF; Target Date: As needed.) 	Provide materials for States and stakeholders and the aviation community to understand the ASBU.	NACC ASBU Handbook and other support materials
<p>Status/Remarks: None</p>			
3.3	<p>Provide ANI/WG ASBU Website</p> <ul style="list-style-type: none"> Design ANI/WG ASBU Website and implement (by NACC RO and ASBU TF; Target Date: March 31, 2018) - Completed 	Provide the capability to exchange ASBU related information as	ANI/WG ASBU Website

	<ul style="list-style-type: none"> Update ANI/WG ASBU Website (by NACC RO; Target Date: As needed) Add "Bible" link to the ANI/WG ASBU webpage - Completed 	well as store information	
Status/Remarks: ICAO NACC Regional Office is the webmaster.			
3.4	Support ANI/WG Decisions <ul style="list-style-type: none"> Provide progress report/update for Chairperson for relevant meetings such as NACC/WG and ANI/WG (by ASBU TF; Target Date: Associated with NACC/WG and ANI/WG dates) 	Liaison between Regional Coordination Groups and ASBU TF	Revised ToR to ICAO RO
Status/Remarks: ANI/WG meeting is biannual and the next meeting (ANI/WG/4) is scheduled for August 20-24, 2018 in Miami, Florida.			

APPENDIX C
Membership

Aviation System Block Upgrades (ASBU) Task Force

Rapporteur: Midori Tanino, United States
NACC Officer: Luis Sanchez

States	Member	E Mail	Remarks
 Antigua & Barbuda	(P) Shenneth Phillips (S)	Shenneth.Phillips@ab.gov.ag	Need verification
 Bahamas	(P) (S)		Need PoC
 Barbados	(P) Zeta Morris (S) Kendrick Mason	zeta.morris@barbados.gov.bb kendrick.mason@barbados.gov.bb	Verified at the 1 st WS.
 Belize	(P) Gilberto Orlando Torres (S) Marco Castellanos	gilberto.torres@civilaviation.gov.bz mikecharlie68@gmail.com	Verified at the 1 st WS. (S) added at the 2 nd WS.
 Canada	(P) Carole Stuart Green (S)		Need verification.
 Costa Rica	(P) Carlos Bolanos (S) Fernando Zeledón	cbolanos@dgac.go.cr fzeledon@dgac.go.cr	Need verification (S) added at the 2 nd WS.
 Cuba	(P) Iván González Valdés (S) Orlando González		Need verification.
 Dominican Republic	(P) Julio Mejia (S) Francisco Bolivar León	jmejia@idac.gov.do	Need verification of (S).
 El Salvador	(P) Rolando Hernandez (S) Danilo Ramirez (S) Marco Henríquez	rhernandez@aac.gob.sv Danilo.ramirez@dgac.go.cr mhenriquez@aac.gob.sv	Need verification.
 Grenada	(P) (S)		Need PoC
 Guatemala	(P) Mynor Xoy Chiquin (S) Silvia Jeaneth Herrera	mynor.xoy@dgac.gob.gt jeaneth.herrera@dgac.gob.gt	Need verification. 2 nd WS participants.
 Haiti	(P) Joseph Boursiquot (S) Mario Eric Legagneur		Need verification.
 Honduras	(P) Yalena Bonilla (S) Heriberto Sierra (S) Eric Martinez	ybonilla@ahac.gov.hn hsierra@ahac.gov.hn emartinez@ahac.gov.hn	Need verification. 2 nd WS participants.
 Jamaica	(P) Christopher Chambers (S) Orville Shaw		Need verification.
 Mexico	(P) José I. Gil Jimenez (S) Martin García Hernández	jgiljim@sct.gob.mx mgarcher@sct.gob.mx	Verified at the 1 st WS.
 Nicaragua	(P) Hugo Cano (S) Luis Mahamud	osuprad@inac.gob.ni ona@inac.gob.ni	Need verification. 2 nd WS participants.
 Saint Kitts & Nevis	(P) (S)		Need PoC
 Saint Lucia	(P) Lynden Leonce (S) Amy Charles	Lynden.Leonce@slaspa.com Amy.Charles@slaspa.com	Verified.
 Saint Vincent & the Grenadines	(P) (S)		Need PoC
 Trinidad and Tobago	(P) Rohan Garb (S) Robert Rooplal	rgarb@caa.gov.tt	Need verification.
 United States	(P) Midori Tanino (S) Leah Moebius	Midori.Tanino@faa.gov Leah.Moebius@faa.gov	Verified.

Territories with ANP			
 Curacao	(P) Inberto Vos (S) Michael Celestijn	l.vos@dc-ansp.org michael.celestijn@gobiernu.cw	Verified at the 1 st WS.
Territories - Participation			
Aruba			Participate via Curacao
Bonaire			Participate via Curacao
Organization with ANP			
 COCESNA	(P) Pablo Luna (S) Cesar Nunez	Pablo.Luna@cocesna.org Cesar.Nunez@cocesna.org	Verified at the 1 st WS.
Organization - Participation			
 CANSO	(P) Javier Vanegas	Javier.Vanegas@canso.org	Need verification.
 IATA	(P) Marco Vidal Macchiavello	vidalm@iata.org	Need verification.