International Civil Aviation Organization North American, Central American and Caribbean Office

WORKING PAPER

NACC/WG/7 — WP/09 02/08/22

Seventh North American, Central American and Caribbean Working Group Meeting (NACC/WG/7)
ICAO NACC Regional Office, Mexico City, 29 August - 1 September 2022

Agenda Item 3: Follow-up of the Activities of the NACC/WG Task Forces

3.1 Progress of the NACC/WG on Aeronautical Information Management (AIM), Air Traffic Management (ATM) and Communications, Navigation and Surveillance (CNS)

THE ASBU TASK FORCE: RECOMMENDATIONS TO THE TERMS OF REFERENCE (TOR), WORK PROGRAM, AND MEMBERSHIP POINT OF CONTACT (POC) LIST

(Presented by ASBU Task Force Rapporteur)

EXECUTIVE SUMMARY

The world pandemic temporarily slowed down the ICAO NACC Aviation System Block Upgrade (ASBU) Task Force (TF) work in 2020 and 2021. To begin resuming the ICAO NACC ASBU TF work, it is necessary to update its core documents namely Terms of Reference (ToR), Work Program, and Membership Point of Contact (PoC) list. This paper provides recommendation to modify these documents and seeks suggestions and concurrences from the TF members.

suggestions and concurrences from the 11 members.		
Action:	Suggested actions are presented in Section 6.	
Strategic Objectives:	Safety	
	Air Navigation Capacity and Efficiency	
	Economic Development of Air Transport	
References:	Global Air Navigation Plan (GANP, Doc 9750)	
	https://www4.icao.int/ganpportal/	
	Aviation System Block Upgrade (ASBU) Framework	
	https://www4.icao.int/ganpportal/ASBU	
	Basic Building Block (BBB) Framework	
	https://www4.icao.int/ganpportal/BBB	

1. Introduction

- 1.1. The Aviation System Block Upgrades (ASBU) Task Force (TF) was established during the NACC/WG/5 Meeting in Trinidad and Tobago in May 2017. The objective of the ASBU TF is to assist the region in the implementation of harmonized technologies that support the operation guided by the ICAO Global Air Navigation Plan (GANP) and the Aviation System Block Upgrades (ASBU).
- 1.2. The ASBU TF work programme covers the basis for the preparation and maintenance of National Air Navigation Plans (NANPs) by ICAO Member States, organization and territories in the region. To prepare and maintain the States' National Air Navigation Plans (NANPs), states need to understand

GANP/ASBU in addition to their states' needs in current and future aviation technologies. The NANP should be used by the states to strategically plan what capability will be implemented and when to implement it.

- 1.3. The ICAO issues new edition of GANP/ASBU every 3 years. The needs of states also changes based on the complex circumstances surrounding them. It is necessary to update NANPs periodically to align with the newer edition of GANP/ASBU while addressing new and old needs of states.
- 1.4. This paper make recommendation to update three components of the ICAO NACC ASBU TF and they are:
 - ICAO NACC ASBU TF Terms of Reference;
 - ICAO NACC ASBU TF Work Program; and
 - ICAO NACC ASBU TF Membership Point of Contacts List.

2. ICAO NACC ASBU TF Terms of Reference

- 2.1. **Appendix** A presents the existing ICAO NACC ASBU TF Terms of Reference (ToR) dated 8 November 2018. This section lists the recommended changes to the ToR and reasons. The ToR refers to Work Program and the ASBU TF Membership Point of Contacts (PoC) List as appendices A and B. To avoid confusion, this paper presents ICAO NACC ASBU TF Work Program in **Appendix B** and the ASBU TF Membership PoC list in **Appendix C**.
- 2.2. Recommend to add a new paragraph in section 1 of ToR (Introduction), to explain the transition from ANI/WG to NACC WG. Replace ANI/WG with NACC WG where applicable.
- 2.3. Recommend to modify Section 2, Objection, 1) as follows: Change recommendation is due to the readiness of Block 1 elements. In addition, change "a cyclical annual bases" to "a cyclical 3-year bases" to align with the ICAO Assembly and GANP/ASBU new edition cycle.

Current: Develop effective methods to determine the regional implementation status of the ASBU BlockO 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.

Recommended: Develop effective methods to determine the regional implementation status of the ASBU Block 0 and Block 1 elements and the performance monitoring of the Regional Air Navigation System, on a cyclical 3-year basis, as a regional input to the Annual Global Air Navigation Report and feedback for the Global Air Navigation Plan and the Regional Dashboard.

- 2.4. ICAO NACC Regional Office (RO) had developed the Regional Performance Based Air Navigation Implementation Plan (RPBANIP) as its regional ANP. The ToR should reflect the recent efforts of collaboration between ICAO CAR and SAM ROs to produce a joint regional plan for the CAR/SAM Regional Planning and Implementation Group (GREPECAS).
- 2.5. Recommend to update section 7 of ToR (References). Specifically, present new version of GANP and ASBU.

3. ICAO NACC ASBU TF Work Program

- 3.1. This section lists the recommended changes to the Work Program and reasons. Appendix B provides the latest version of ASBU TF Work Program. Editorial modifications and changes in certain names (e.g., from ANI/WG to NACC WG, from state ANP to national ANP, from Block 0 to Block 0 and 1, and from RPBANIP to GREPECAS ANP) will be adjusted accordingly.
- 3.2. Recommend the Note 1 describing the frequency of national ANP updates to align with the ICAO Assembly and GANP/ASBU new edition cycle. This change will also affect the Objective 1 of the Work Program.

Previous: 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.

Recommended: A formal review in every 3-year after the new edition of GANP/ASBU is issued, shall be conducted to revise its content for applicability.

- 3.3. Recommend to remove the Work Program activity items that are completed and/or no longer required for the easy of program usage.
- 3.4. Recommend updating the existing activities (e.g., target dates affected by the world pandemic).
- 3.5. Plan and add the future activities to the Work Program. Examples of future activities includes:
 - Preparation of the support materials to host the NANP workshops based on the 7th edition of GANP/ASBU;
 - Scheduling and coordination of the NANP workshops based on the 7th edition of GANP/ASBU; and
 - Planning of NACC ASBU status reporting materials and reporting methods.

4. ICAO NACC ASBU TF Membership Point of Contacts List

4.1. The last update of the PoC list is dated 26 August 2021 and was a minor update. Recommend that all PoC information be updated/verified including ICAO NACC ASBU TF coordinator.

5. Basic Building Block

5.1. The 6th edition of GANP introduced the Basic Building Block (BBB) framework that outlines the foundation of any robust air navigation system. The BBB is an independent framework and not a block of the ASBU framework as they represent a baseline rather than an evolutionary step. This baseline is defined by essential services recognized by ICAO Member States as necessary for international civil aviation to develop in a safe and orderly manner. Once these essential services are provided, they constitute the baseline for any operational improvement.

5.2. Although the BBB and ASBU are different frameworks, GANP supports both frameworks. It is natural that the NACC ASBU TF supports BBB implementation in the region. Recommend that BBB implementation support be included into the NACC ASBU TF Work Program.

6. Suggested Actions

- 6.1. The meeting is invited to:
 - a) provide comments on the recommendations to the NACC ASBU TF ToR;
 - b) provide comments on the recommendations to the NACC ASBU TF Work Program;
 - c) provide comments on the recommendations to the NACC ASBU TF Membership PoC List; and
 - d) provide comments on the recommendations to include BBB support work to the ASBU TF.

APPENDIX A

Last updated: 8 November 2018

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

- 2.1. 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-O 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

- 3.1 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

- 4.1 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** (note: refer to APPENDIX B).

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 (note: refer to APPENDIX C) 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

Appendix A – ASBU TF Work Programme

Last Updated on Aug 26, 2021

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 blocks 0/1 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	 Establish and Update the ASBU TF PoC List – Completed and Maintenance Mode 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
	Status/Remarks: There are 21 States and one Territory in the Region who should have State ANP that is alig addition, COCESNA should have its ANP. Further coordination and investigation is needed handling. This coordination will take place once the Objective 1 is accomplished initially.	by the NACC RO regarding	g the Territory
1.2	 Generate ANRF - Completed and Maintenance Mode 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) Generate ANRFs that are aligned with the 6th edition of GANP/ASBU 	Support the ANRF generation at two levels: (1) the form itself and (2) contents of the form by State.	ANRF Form Template ANRFs by States and Territories State and Regional Summary Table
	 Status/Remarks: As of August 15, 2018, following organizations have filled in ANRFs: Barbados, Belize, Co Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Saint Lucia, Trinidad and April 17, 2019: Generation of ANRF became part of the State ANP creation. Refer to Task August 17, 2021: The 6th edition of ANRFs were submitted to the ICAO NACC RO. 	Γobago, Curacao, and CO0	
1.3	Performance Monitoring 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
	Status/Remarks: None		

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.

Activity Schedule assistance activities 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) -	Provide a foundational baseline of refresher & supplemental training for personnel involved	Deliverable WS/Seminar/ Meeting Materials and	
 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 	baseline of refresher & supplemental training	Meeting	
 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) - Completed 	in ANP and ASBU.	Report	
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 tw additional WSs are scheduled in August and November 2018. April 17, 2019: See Task 2.2 Remarks for the details of ANP WS results. August 26, 2021(NACC/WG/6 WP08): NANP workshops were postponed due to COVID-19 pandemic. Need to continue hosting NAN workshops the 6th edition of ASPIL.			
Support Creation of State National ANP Prepare the National ANP template (by ASBU TF; Target Date: Jan 15, 2018) - Completed Create the initial National ANP (by each State; Target Date: May 31, 2019) - Three WS were organized in 2018. 16 out of 21 targeted state/territory/organization created draft/initial ANP. Support States to finalize the initial National 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.	State ANP template Initial State AMP Status summary State ANPs	
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/update 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. The 3nd ANP Workshop: Antigua and Barbuda, Haiti, Saint Vincent and Grenadines, Trinidad and Tobago, and Barbados during November 6-9, 2018.			
Support Updates of State ANP 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) Status/Remarks:	Ensure the State ANP information is current.	Updated State ANP State AMP Status summary	
	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) - Completed Host the 4rd State ANP Workshop (scheduled in Barbados for ECAR states in November 2018) - Completed Host the 4rd State ANP Workshop (TBD, 2019 2022) Status/Remarks: NACC RO hosted the 1rd State ANP Workshop in Mexico City, Mexico on March 12-15, 2018 additional WSs are scheduled in August and November 2018. April 17, 2019: See Task 2.2 Remarks for the details of ANP WS results. August 26, 2021 (NACC/WG/6 WPO8): NANP workshops were postponed due to COVID-19 workshops to address the 6th edition of ASBU. Support Creation of State National ANP Prepare the National ANP template (by ASBU TF; Target Date: Jan 15, 2018) - Completed Create the initial National ANP (by each State; Target Date: May 31, 2019) - Three WS were organized in 2018. 16 out of 21 targeted state/territory/organization created draft/initial ANP. Support States to finalize the initial National ANP (by each State; Target Date: TBD) 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 1rd ANP Workshop: Barbados, Belize, Curacao, Mexico, and COCESNA created the draft Subject of State ANP template is optional. Scient Lucia worked with the TF Rapporteur prior to the WS and has draft State ANP. The 2rd ANP Workshop: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and DotaNPs during August 6-9, 2018. Belize and COCESNA refined their ANPs. The 2rd ANP Workshop: Antigua and Barbuda, Haiti, Saint Vincent and Grenadines, Trinidac November 6-9, 2018. Support Updates of State ANP Update the State ANP (by each State; Target Date: annual) Support Updates of State AN	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) - Completed Host the 4rd State ANP Workshop (TBD, 2049 2022) Status/Remarks: NACC RO hosted the 1st State ANP Workshop in Mexico City, Mexico on March 12-15, 2018. The WS was very well readditional WSs are scheduled in August and November 2018. April 17, 2019: See Task 2.2 Remarks for the details of ANP WS results. August 26, 2021(NACCWG/6 WPO8): NANP workshops were postponed due to COVID-19 pandemic. Need to continuous workshops to address the 6th edition of ASBU. Support Creation of State National ANP Prepare the National ANP template (by ASBU TF; Target Date: Jan 15, 2018) - Completed Create the initial National ANP (by each State; Target Date: May 31, 2019) - Three WS were organized in 2018. 16 out of 21 targeted state/territory/organization created draft/initial ANP. Support States to finalize the initial National ANP (by each State; Target Date: TBD) Status/Remarks: Jse of State ANP template is optional. Saint Lucia worked with the TF Rapporteur prior to the WS and has draft State ANP. Ente 1rd ANP Workshop: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Dominican Republic created ANPs during August 6-9, 2018. Belize and COCESNA refined their ANPs. Fine 2rd ANP Workshop: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Dominican Republic created ANPs during August 6-9, 2018. Belize and COCESNA refined their ANPs. Fine 2rd ANP Workshop: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Dominican Republic created ANPs during August 6-9, 2018. Belize and COCESNA refined their ANPs. Fine 2rd ANP Workshop: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Dominican Republ	

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	Support RPBANIP 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	
	Status/Remarks: The State ANPs will reflect guidance from the RPBANIP while the RPBANIP will reflect the needs described in the State ANPs. Aug 26, 2021 (NACC/WG/6 WP16): RPBANIP will be integrated into the GREPECAS (CAR/SAM combined) eANP Volume III.			
3.2	Update NACC ASBU Handbook and Other Support Materials Update the NACC ASBU Handbook (by ASBU TF; Target Date: After the 2019 version of GANP/ASBU is released.)	Provide materials for States and stakeholders and the	NACC ASBU Handbook and	

	 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.) NACC ASBU Handbook and other support materials are updated to be aligned with the 6th edition of GANP/ASBU in early 2020 and submitted to ICAO NACC RO in Aug 2021. 	aviation community to understand the ASBU.	other support materials	
	Status/Remarks:			
	None			
3.3	Provide ANI/WG ASBU Website - Completed and Maintenance Mode Design ANI/WG ASBU Website and implement (by NACC RO and ASBU TF; Target Date: March 31, 2018) - Completed Update ANI/WG ASBU Website (by NACC RO; Target Date: As needed) Add "Bible" link to the ANIWG ASBU webpage - Completed	Provide the capability to exchange ASBU related information as well as store information	ANI/WG ASBU Website	
	Status/Remarks: ICAO NACC Regional Office is the webmaster.			
3.4	Support ANI/WG Decisions 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/5 meeting is scheduled for was held in May 27-31, 2019 in Mexico City, Mexico.			

APPENDIX C

Last updated: August 26, 2021

Appendix B – Membership

Aviation System Block Upgrades (ASBU) Task Force

Rapporteur: Midori Tanino, United States

NACC Officer: Luis Sanchez

States		Member	EMail	Remarks
	Antigua &	(P) Shenneth Phillips	Shenneth.Phillips@ab.gov.ag	Need verification
	Barbuda	(S)		
	Bahamas	(P)		Need PoC
		(S)		
W	Barbados	(P) Zeta Morris	zeta.morris@barbados.gov.bb	Verified at the 1 st WS.
Ψ		(S) Kendrick Mason	kendrick.mason@barbados.gov.bb	
	Belize	(P) Gilberto Orlando Torres	gilberto.torres@civilaviation.gov.bz	Verified at the 1 st WS.
		(S) Marco Castellanos	mikecharlie68@gmail.com	(S) added at the 2 nd WS.
4	Canada	(P) Kelly McIlwaine	Kelly.McIlwaine@navcanada.ca	Verified on April 11,
T		(S)		2019
•	Costa Rica	(P) Marco López	mlopez@dgac.go.cr	Marco Lopez replaced
_		(S) Fernando Zeledón	fzeledon@dgac.go.cr	Carlos Bolanos on July 3
				2019
	Cuba	(P) Iván González Valdés	ivan.gonzalez@iacc.avianet.cu	Updated on July 2, 2019.
		(S) Orlando González	orlando.nevot@iacc.avianet.cu	
	Dominica	(P)		New member.
T		(S)		Need PoC
	Dominican	(P) Julio Mejia	imejia@idac.gov.do	Need verification of (S).
	Republic	(S) Francisco Bolivar León		
9	El Salvador	(P) Rolando Hernandez	rhernandez@aac.gob.sv	Need verification.
		(S) Danilo Ramirez	Danilo.ramirez@dgac.go.cr	
		(S) Marco Henríquez	mhenriquez@aac.gob.sv	
	Grenada	(P)		Need PoC
-		(S)		
ලා	Guatemala	(P) Mynor Xoy Chiquin	mynor.xoy@dgac.gob.gt	Need verification. 2 nd
		(S) Silvia Jeaneth Herrera	<u>ieaneth.herrera@dgac.gob.gt</u>	WS participants.
es	Haiti	(P) Joseph Boursiquot		Need verification.
		(S) Mario Eric Legagneur		
243	Honduras	(P) Yalena Bonilla	ybonilla@ahac.gov.hn	Need verification. 2 nd
		(S) Heriberto Sierra	hsierra@ahac.gov.hn	WS participants.
		(S) Eric Martinez	emartinez@ahac.gov.hn	
\sim	Jamaica	(P) Christopher Chambers	orville.shaw@gov.jm	Need Chambers' email
		(S) Orville Shaw	orville.shaw@jcaa.gov.jm	address.
	Mexico	(P) José I. Gil Jimenez	jigiljim@sct.gob.mx	Verified at the 1 st WS.
		(S) Martin García Hernández	mgarcher@sct.gob.mx	
*	Nicaragua	(P) Hugo Cano	osuprad@inac.gob.ni	Need verification. 2 nd
		(S) Luis Mahamud	ona@inac.gob.ni	WS participants.
//	Saint Kitts &	(P)		Need PoC
	Nevis	(S)		
A	Saint Lucia	(P) Lynden Leonce	Lynden.Leonce@slaspa.com	Verified.
		(S) Amy Charles	Amy.Charles@slaspa.com	

	Saint Vincent &	(P) Dale Ollivierre		Need email address
W III	the Grenadines	(S) Dillet Davis		
	Trinidad and	(P) Rohan Garb	rgarb@caa.gov.tt	Need verification.
	Tobago	(S) Robert Rooplal		
	United States	(P) Midori Tanino	Midori.Tanino@faa.gov	Verified.
		(S) Leah Moebius	<u>Leah.Moebius@faa.gov</u>	
Territo	ries with ANP			
*	Curacao	(P) Inberto Vos	l.vos@dc-ansp.org	Verified at the 1 st WS.
		(S) Michael Celestjin	michael.celestijn@gobiernu.cw	
Territo	ries - Participatior	ı		
+	Aruba	Refer to Curacao	Refer to Curacao	Participate via Curacao
(Bonaire	Refer to Curacao	Refer to Curacao	Participate via Curacao
Organi	zation with ANP			
	COCESNA	(P) Pablo Luna	Pablo.Luna@cocesna.org	Verified at the 1 st WS.
CHCESNA		(S) Cesar Nunez	Cesar.Nunez@cocesna.org	
Organi	zation - Participat	ion		
CANSO	CANSO	(P) Javier Vanegas	Javier.Vanegas@canso.org	Need verification.
IATA	IATA	(P) Marco Vidal Macchiavello	vidalm@iata.org	Need verification.

August 2021: Added Dominica to the table (15 April 2019 – Dominica has become the 193rd Member State of the ICAO). Replaced old CANSO logo with new logo.