



ICAO

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

WORKING PAPER

E/CAR/DCA/26 — WP/10
21/10/15

**Twenty-sixth Directors of Civil Aviation of the Eastern Caribbean Meeting (E/CAR/DCA/26)
New Orleans, United States, 1 - 3 December 2015**

Agenda Item 6: Air Navigation Matters

- 6.3 Implementation of Air Navigation under the NAM/CAR Regional Performance Based Air Navigation Implementation Plan (RPBANIP)
- 6.3.1 Follow-up to North American, Central American and Caribbean Working Group (NACC/WG) and North American, Central American and Caribbean Air Navigation Implementation Working Group (NAM/CAR ANI/WG)

FOLLOW-UP TO NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN WORKING GROUP (NACC/WG) AND NAM/CAR AIR NAVIGATION IMPLEMENTATION WORKING GROUP (ANI/WG)

(Presented by the ANI/WG Chairman)

EXECUTIVE SUMMARY

This working paper presents the progress achieved by the Second Meeting of the ANI/WG, highlighting its conclusions and the actions taken by the E/CAR States for its follow-up. Similarly, the ANI/WG/2 Meeting covered the results of the Fourth North American, Central American and Caribbean Working Group Meeting (NACC/WG/4), which are also listed as an Appendix to this paper.

Action:	Suggested Actions are included in Section 3.
<i>Strategic Objectives:</i>	<ul style="list-style-type: none">• Safety• Air Navigation Capacity and Efficiency• Environmental Protection
<i>References:</i>	<ul style="list-style-type: none">• Second NAM/CAR Air Navigation Implementation Working Group Meeting (ANI/WG/2), Puntarenas, Costa Rica, 1 to 4 June 2015

1. Introduction

1.1 For the NAM/CAR Regions, the implementation of Air Navigation matters is being coordinated and harmonized by the regional groups created by the mandate of the North America, Central America and Caribbean Civil Aviation Directors.

1.2 The first instance is the NACC/WG, which encompasses all air navigation areas (AGA, AIM, ATM, CNS, MET, SAR) and meets every three years, after the ICAO Assembly. The NACC/WG/4 Meeting was the last meeting conducted in 2014 and allowed the follow-up on implementation activities in all the air navigation areas for the NAM/CAR Regions, with the approval of future implementation works, the NAM/CAR Regional Performance-Based Air Navigation Implementation Plan (RPBANIP) endorsement and efforts consolidation to make the implementation actions more efficient, harmonized and optimum in the NAM/CAR Regions.

1.3 The immediate implementation group for the NAM/CAR Regions is the ANI/WG, established in response to Fourth Meeting of North American, Central American and Caribbean Directors of Civil Aviation (NACC/DCA/4) Conclusion 4/9 - *Consolidation of Sub-Regional Working Groups in the CAR Region* and endorsed by all NAM/CAR Directors in 2012 through their respective sub-regional DCA Meetings. The objective of the ANI/WG is to consolidate the existing sub-regional working groups, reduce the number of meetings, avoid duplication, expedite work progress, and improve regional harmonization focused on the Air Traffic Management (ATM), Communications, Navigation and Surveillance (CNS) and Aeronautical Information Management (AIM) air navigation fields.

2. Discussion

2.1 **Appendix A** provides a summary of the NACC/WG/4 Meeting. The agreements made at the NACC/WG meetings are followed-up at the ANI/WG and the ECAR/CATG Meetings. The follow-up made by the E/CAR/CATG is shown in **Appendix B**.

2.2 The ANI/WG through its Task Forces as established in the *Port-of-Spain-Declaration* and the NAM/CAR RPBANIP followed-up on the progress in the implementation of several regional priorities such as: Performance-Based Navigation (PBN), Flexible Use of Airspace (FUA), Air Traffic Flow Management (ATFM), Data Link application (GOLD), Automatic Dependent Surveillance – Broadcast (ADS-B), Aeronautical Message Handling System (AMHS) communication improvements, automation achievements, etc. The ANI/WG/2 progress is summarized in **Appendix C**. **Appendix D** presents the follow-up expected from the E/CAR States and Territories on the ANI/WG/2 conclusions.

2.3 Although, several States/Territories have designed their ANI/WG representatives through the different Task Forces, and the E/CAR/CATG is supportive of these activities; there is a lack of a major representation of the Eastern Caribbean by each State as stated in the current ANI/WG membership: <http://www.icao.int/NACC/Documents/RegionalGroups/ANIWG/PocsMembership.pdf>.

2.4 The ANI/WG website presents the action plans and the Terms of Reference (ToRs) of this group, as well as additional information and the progress achieved is shown at: <http://www.icao.int/NACC/Pages/nacc-regionalgroups-aniwg.aspx>

3. Suggested Actions

3.1 The Meeting is invited to:

- a) take note on the progress information reported by the NACC/WG and ANI/WG as detailed in Appendices A to D;
- b) review and designate Points of Contact (PoCs) for the ANI/WG;
- c) support the actions to accomplish the ANI/WG/2 Conclusions as explained Appendix D;
- d) based on the ANI/WG ToRs, to assign any other required tasks for the air navigation implementation; and
- e) agree any other action as deemed necessary.

APPENDIX A NACC/WG/4 SUMMARY

1. The NACC/WG/4 meeting counted with 43 delegates from 12 States/Territories of the CAR and NAM Regions and 3 international organizations; 36 working papers, 14 information papers, 3 presentations and 7 discussion papers were presented.
2. As a part of the NACC/WG/4 meeting, the ANI/WG and sub-regional working groups such as the Eastern Caribbean Civil Aviation Technical Group (E/CAR/CATG) also met informing on RPBANIP implementation progress, updating valid outstanding conclusions/decisions, and reviewing the corresponding technical proposals.
3. The NACC/WG/4 meeting report contains the agreements and results of air navigation matter discussions, follow-up on regional working group implementation activities, as well as on valid conclusions/decisions and review of working group terms of reference and action plans.
4. The NACC/WG/4 meeting followed-up on and analyzed implementation progress of the RPBANIP and implementation achievements obtained by States and the ANI/WG Task Forces, highlighting the following agreements and progress:
 - Review of the RPBANIP with metrics and targets in accordance with the ICAO Aviation System Block Upgrade (ASBU) methodology for approval by the North American, Central American and Caribbean Directors of Civil Aviation Meeting (NACC/DCA/5), considering the *Port-of-Spain Declaration* developed by the First Safety and Air Navigation Directors of the CAR Region Meeting (CAR/DCA/OPSAN/1) Meeting
 - Foster alignment of national implementation plans with the RPBANIP; several States presented progress with their national plans
 - Support for the World Radiocommunication Conference (WRC-2015) ICAO position, including C-band protection and the reception of satellite-based Automatic Dependent Surveillance Broadcast (ADS-B)
 - Carry out follow-up on harmonized implementation of air navigation matters for the NAM/CAR Regions, review progress of the regional implementation groups (ANI/WG, E/CAR/CATG, MEVA Technical Management Group (MEVA TMG), Eastern Caribbean Network Technical Group (E/CAR/NTG), MET and AGA projects) and approve the corresponding action plans. The conclusions of the Sixteenth Meeting of the CAR/SAM Regional Planning and Implementation Group (GREPECAS/16) and the NACC/DCA/4 were also reviewed.
 - Review and update the regional implementation plans (Performance Based-Navigation (PBN); air traffic services Inter-facility Data Communication (AIDC); Aeronautical Message Handling System (AMHS); Controller-Pilot Data Link Communication (CPDLC); Aeronautical Information Management (AIM) Quality Management System (QMS); aerodrome certification, etc.)
 - Agreements for air navigation metrics data collection for the Regional Dashboards and Global Air Navigation Plan, including actions for reporting fuel savings and CO₂ gas emission reduction
 - Update and follow-up on the status of filed Flight Plan (FPL) converters in the CAR Region and Aeronautical Mobile Service (AMS) communication improvement activities
 - CPDLC functionalities implementation support by the ANI/WG Global Operational Data Link Document (GOLD) Task Force

- Agreed actions to reduce Air Traffic Services (ATS) incidents and Large Height Deviation (LHD) occurrences and Air Traffic Flow Management (ATFM) requirements in Aeronautical Information Publications (AIPs) and Doc 7030 - *Regional Supplementary Procedures publications*
- Adoption of specific directives to streamline air navigation implementation in the NAM/CAR Regions:
 - Aeronautical Information Exchange Model (AIXM) 5.1
 - Dec. 2018 target date for ADS-B Out implementation
 - NAM Interface Control Document (ICD) as the preferred Document in the NAM/CAR Regions
 - New revision of the CAR IPv4 addressing scheme
 - Use of the GOLD Document, version 2, for data link applications
- Continuity of mitigation and solution activities implementation for missing and duplicate Flight Plans including the creation of a Flight Plan Monitoring Group under the AIDC Task Force
- Follow-up on the results of the First NAM/CAR Civil Aviation Training Centres Meeting (NAM/CAR/CATC/1) and establishment of the NAM/CAR Civil Aviation Training Centres Working Group (NAM/CAR/CATC/WG)

5. The NACC/WG/4 Meeting Report is available at: <http://www.icao.int/NACC/Documents/Meetings/2014/NACCWG4/NACCWG4Report.pdf>

6. The NACC/WG/4 meeting conclusions were endorsed by the NACC/DCA/5 meeting, through its Conclusion 5/2 *Approval of the Fourth NACC/WG Meeting Conclusions and Terms of Reference*. The Conclusions follow-up is made by the ANI/WG.

7. Under State Letter Ref: EMX0860 dated 30 September 2014, States were urged to take the corresponding actions on the NACC/WG/4 meeting valid conclusions; and ICAO recognized ANI/WG assistance and support and its designated experts for the air navigation implementation support and the aforementioned conclusions.

E/CAR/CATG ACTIONS TO VALID NACC/WG/4 CONCLUSIONS

No.	CONCLUSIONS	FOLLOW-UP	STATUS
<p>CONCLUSION NACC/WG 4/1 APPROVAL OF THE NAM/CAR REGIONAL PERFORMANCE-BASED AIR NAVIGATION IMPLEMENTATION PLAN (RPBANIP) VERSION 3.0</p>	<p>That, considering that the NAM/CAR Regional Performance Based Air Navigation Implementation Plan (NAM/CAR RPBANIP), is the basis for air navigation implementation in the NAM/CAR Regions, where regional targets and milestones have been agreed and regional air navigation priorities are reflected, the Civil Aviation Directors approved the RPBANIP version 3.0</p>	<p>Directors of Civil Aviation accepted version 3.1 after final reviewed by the NACC/WG members</p>	<p>Superseded by Conclusion NACC/DCA 5/3</p>
<p>CONCLUSION NACC/WG 4/2 UPDATE OF NATIONAL AIR NAVIGATION IMPLEMENTATION PLANS IN ACCORDANCE TO THE RPBANIP VERSION 3.0</p>	<p>That, for the effective and timely development and implementation of air navigation in the NAM/CAR Regions ensuring harmonization and coordination of efforts aimed at improving international civil aviation safety, capacity and efficiency, the States/Territories and International Organizations of the NAM/CAR Regions:</p> <p>a) review and update their national Air Navigation Implementation Plans in accordance to their national needs and RPBANIP regional framework; and b) inform and submit ICAO these national plans by 31 December 2014.</p>	<p>Version to follow is RPBANIP 3.1 as approved by the Conclusion NACC/DCA/5/4</p> <p>To be followed-up in ANI/WG/2 Meeting for national AN Plans</p>	<p>Superseded by Conclusion NACC/DCA 5/3</p>
<p>CONCLUSION NACC/WG 4/3 FUEL SAVINGS AND CO₂ GAS EMISSION RESULTS IN THE NAM AND CAR REGIONS</p>	<p>That, considering the importance of obtaining effective information on the consumption of fuel, IATA:</p> <p>a) coordinate with Canada, Dominican Republic, Mexico and United States regarding effective fuel savings information resulting from the implementation of RNAV routes as well as PBN approach procedures at peak hours in 10% of airports in States with the largest number of operations, as applicable, in accordance with the format included in Appendix A to this report; and b) provide the ICAO NACC Regional Office with information on fuel savings and reduction of CO₂ emission obtained from implementation of PBN routes and approach procedures in the NAM and CAR Regions not later than 31 December 2014.</p>	<p>A new conclusion was adopted in the ANI/WG/02 for collecting/ processing the fuel saving and CO₂ emission reductions.</p>	<p>Valid</p>

No.	CONCLUSIONS	FOLLOW-UP	STATUS
CONCLUSION NACC/WG 4/4 ATS INCIDENTS SAFETY ASSESSMENT	<p>That, considering the need to improve safety in the ATS airspace, States and Territories which have not already done so, are urged to implement by 31 May 2015:</p> <p>a) training programmes on flight plan coordination messages in ATC units; and b) ATS incidents and LHD occurrences safety assessment processes in accordance with the ICAO safety management system and timely reporting of the assessment tendencies to their corresponding civil aviation authorities.</p>	<p>Was noted by the ANI/WG/02 Meeting and PBN TF will review this conclusion under their tasks.</p>	<p>Valid</p>
CONCLUSION NACC/WG 4/5 ACTIVE SUPPORT FROM STATES FOR ICAO ITU WRC-2015 POSITION	<p>That NAM/CAR States/Territories, in order to ensure their active support for the ICAO WRC-15 position for the protection of the aeronautical frequency spectrum and satisfy future frequency spectrum aviation needs:</p> <p>a) include the main points addressed by the ICAO International Telecommunication Union (ITU) WRC-15 position for the protection of the C-band when used for aeronautical purposes and the ICAO WRC-15 position as a whole, including any amendments, when preparing national ITU WRC-15 proposals in coordination with the National Spectrum Management Authority; b) include representatives from civil aviation administrations and aviation experts from national delegations, to the extent possible, when participating in the ITU Radio and regional preparatory activities for WRC-15; and c) if not already done so, nominate their focal point for WRC-2015 to ICAO by December 2014.</p>	<p>A new conclusion was adopted by the ANI/WG/02 for a final follow-up for the last 2015 WRC Meeting in Ottawa.</p> <p>Actions taken</p>	<p>Completed</p>
CONCLUSION NACC/WG 4/6 REPORTING ON THE PROGRESS ACHIEVED IN THE IMPLEMENTATION OF THE AERONAUTICAL INFORMATION EXCHANGE MODEL (AIXM)	<p>That NAM/CAR States and international organizations:</p> <p>a) adopt the AIXM 5.1 information exchange model; and b) report on the progress achieved with application of the conceptual model and aeronautical information exchange to the ICAO NACC Regional Office by 31 December 2014.</p>	<p>AIM Committee is to follow up this task.</p>	<p>Valid</p>

No.	CONCLUSIONS	FOLLOW-UP	STATUS
CONCLUSION NACC/WG 4/7 AIM ACTION PLANS FOR THE AIS TO AIM TRANSITION	<p>That CAR States that have not yet done so:</p> <p>a) develop/update and execute the Action Plans for the transition from AIS to AIM taking into consideration the latest AIM developments, and the AIM TF work until AIM is completed according the AIM RPO of the RPBANIP; and</p> <p>b) inform the ICAO NACC Regional Office of all the AIM progress to be presented at the upcoming GREPECAS/17 Meeting.</p>	AIM Committee to review	Valid
CONCLUSION NACC/WG 4/8 AMENDMENT TO REGIONAL SUPPLEMENTARY PROCEDURES (DOC 7030) ON THE AIR TRAFFIC FLOW MANAGEMENT (ATFM) IMPLEMENTATION IN THE NAM/CAR REGIONS	<p>That:</p> <p>a) ICAO, with CAR and NAM States support, takes the necessary actions to publish the required information on Air Traffic Flow Management (ATFM) in the Regional Supplementary Procedures (Doc 7030) for NAM and CAR by 31 December 2014; and</p> <p>b) States timely publish corresponding information on Air Traffic Flow Management (ATFM) applicable in their ATS airspace jurisdiction in the corresponding AIP.</p>	ATM Committee to review	Valid
CONCLUSION NACC/WG 4/9 ADOPTION OF NAM INTERFACE CONTROL DOCUMENT (ICD)	<p>That the NAM ICD is adopted as the preferred ICD in the CAR Region, not precluding the use of other ICDs under circumstances favourable to the latter.</p>	Noted	Valid
CONCLUSION NACC/WG 4/10 ADS-B OUT IMPLEMENTATION IN THE NAM/CAR REGIONS	<p>That all States/Territories in the NAM/CAR Regions adopt/include the ADS-B implementation date of 31 December 2018 in their implementation plans to finalize operational implementation of ADS-B OUT.</p>	Noted	Valid

No.	CONCLUSIONS	FOLLOW-UP	STATUS
CONCLUSION NACC/WG 4/11 ADOPTION OF THE GOLD DOCUMENT, VERSION 2, FOR DATALINK APPLICATIONS IN THE NAM/CAR REGIONS	<p>That, in order to promote and facilitate implementation of data link applications in the NAM and CAR Regions, the respective States and Territories adopt the GOLD Document, Version 2, as the guidance material and reference document for implementation of data link applications.</p>	<p>Noted</p>	<p>Valid</p>
CONCLUSION NACC/WG 4/12 APPROVAL OF IPV4 ADDRESSING SCHEME, VER 1.0	<p>That, in order to expedite and facilitate the implementation of the IPv4 ATN in the CAR Region, States/Territories of the CAR Region:</p> <ul style="list-style-type: none"> a) approve the revised version of the CAR IPv4 addressing scheme, version 1.0; b) implement their Aeronautical Telecommunication Networks (ATNs) in accordance with the IPv4 addressing scheme ver. 1.0, where applicable; and c) report use/planned use to the ICAO NACC Regional Office no later than December 2015. 	<p>CNS Committee to implement accordingly</p>	<p>Valid</p>
CONCLUSION NACC/WG 4/15 AIR NAVIGATION REPORTING/ MONITORING IN THE NAM/CAR REGIONS	<p>That no later than December 2014, for the harmonized and efficient collection of data for reporting and monitoring air navigation implementation progress and achieved performance/benefits, NAM/CAR States/Territories:</p> <ul style="list-style-type: none"> a) invite all air navigation stakeholders to participate in the data collection and reporting process; b) use the RPBANIP Air Navigation Report Forms (ANRFs) to the extent possible to report their national, sub-regional and regional implementation and performance progress; and c) periodically report to the ICAO NACC Regional Office on the air navigation implementation status. 	<p>A new revised ANRF was proposed from the ANI/WG/02 and a review of the existing metrics was made to improve its understanding and application.</p>	<p>Valid</p>

APPENDIX C ANI/WG/2 SUMMARY

1. The ANI/WG/2 meeting was attended by 12 States/Territories from the NAM/CAR Regions, 3 International Organizations and the Industry, totaling 48 delegates.
2. As a part of the ANI/WG/2 meeting, the ANI/WG Task Forces and the Sub-regional Implementation groups such as the Eastern Caribbean Civil Aviation Technical Group (E/CAR/CATG) also met informing on RPBANIP implementation progress, updating valid outstanding conclusions/decisions, and reviewing the corresponding technical proposals.
3. The ANI/WG/2 meeting report contains the agreements and results of air navigation matter discussions, follow-up on regional working group implementation activities, as well as on valid conclusions/decisions and review of working group terms of reference and action plans.
4. The ANI/WG/2 meeting followed-up on and analyzed implementation progress of the RPBANIP and implementation achievements obtained by States and the ANI/WG Task Forces, highlighting the following agreements and progress:
 - Coordination for the MET/AIM/ATS Coordination Meeting in 2016.
 - General overview of the MEVA III Network Implementation.
 - Evaluation of the progress in the ANI/WG action plans based on the inputs presented by the Task Forces (Appendix C to ANI/WG/2 report).
 - Actions agreed for the PBN and ATFM Task Forces to improve the effectiveness of the regional PBN implementation, recognizing the need for appropriate resources to the nominated members of the task force in order for them to participate in Telcons/Web meetings, attend meetings/training events and contribute to group activities.
 - Agreement on reporting of fuel saving initiatives.
 - Harmonized and coordinated PBN and ATFM activities for the implementation by sub-regions in accordance with the agreement of the Workshop on Regional Implementation on Performance-Based Navigation (PBN) Airspace Redesign and ATFM Workshops, considering the need for a comprehensive approach to improving operational performance in the region.
 - The ANI/WG welcome the support from all States and users (IATA) as for eg. United States' Eastern Regional Task Group (ERTG), to provide recommendations on the highest priority infrastructure upgrades and airspace modifications to improve operations in the Caribbean; and IATA for proposing reduction and harmonization of the Longitudinal Separation Minima in the FIR boundaries of the NAM/CAR Regions (ATC separation 40 NM by December 2016, 20 NM by December 2017 and 10 NM by December 2018).
 - Follow-up and actions to streamline the work on AIDC implementation with the adoption of AIDC Implementation Checklist, NAM ICD for use as Regional ICD, LOA Annex for AIDC implementation using NAM ICD and providing guidance on Comparison of Existing AIDC Interface control documents (ICDs) and updating the AIDC Regional Implementation Plan.
 - The progress achieved with the FPL Monitoring Group on following-up on flight plan error mitigation measures through nine teleconferences, two rounds of flight plan error data collection, and a meeting at the end of February 2015, proposing a list of suggested actions, supportive measures, contact lists for feedback to the operators and ATS units and a FPL Guidance document for the mitigation of flight plan errors.

- The ADS-B activities have been followed-up by the ADS-B TF through a teleconference in January and its Second Implementation Meeting held in April 2015. The deliverables to support the implementation are the Regional Operational Concept for ADS-B use (CONOPS), proposal of a Surveillance System Plan, and guidance to conduct ADS-B trials is being promoted together with the orientation for acquiring the equipment (Technical Specification document). States support had been requested to identify ADS-B Data Processing Capabilities. Cuba offered its software for analysis of ADS-B data.
- Regarding AIM matters, the AIM TF has included all AIM activities for the implementation in terms of requirements of support documentation and ICAO guidelines in some AIM transition topics, necessary adjustments for updating activities of the Task Force were carried out. One of the recognized issues is the lack of participation/contribution of some of the members. The lack of specialized and advanced AIM training for the region, especially in English language was discussed and coordination with the NAM/CAR Civil Aviation Training Centres Working Group (CATC/WG) will be made.
- The requirements of aerodrome mapping data were commented to be included by States regarding aerodromes data and geographic information directed to the applications that improve user situational awareness and/or complement surface navigation, increasing the safety margins and operational efficiency with the eTOD Area 3 inclusion.
- The Meeting highlighted the interoperability of databases and the uniform application of global comprehensive and coherent standards as principles of the System Wide Information Management (SWIM).
- The progress on AMHS implementation was informed, conducted by the AMHS TF and reflected in the AMHS Regional Implementation Plan; and an announcement of 2016 ATN application implementation workshop in Sint Maarten was made.
- Regarding the CPDLC/ADS-C Implementation, the Meeting recognized the deliverables provided by the GOLD TF (considerations for the implementation of Controller-Pilot Data Link Communication (CPDLC) and Action Plan template for CPDLC/ADS-C implementation) and agreed the disbandment of this TF to continue the assistance through the CAR RLA/09/801 Project Technical Assistance Missions (TEAM).
- The team analysed the need to define and work towards implementing actions for familiarization, planning and implementation of Global Navigation Satellite System (GNSS) activities in support of the Performance-Based Navigation (PBN) and Automatic Dependent Surveillance - Broadcast (ADS-B) implementation. In this regard, it was supported the development of a GNSS implementation workshop for the second semester of 2016 to strategize and develop an action plan for the effective implementation of GNSS to support PBN.
- In other GNSS matter, the United States Wide Area Augmentation System (WAAS) informed of their current status, the availability of the study of a SBAS system by the ICAO Project SACCSA, and finally on the existence of the application on GNSS RAIM Prediction System (GRPS)
- Trinidad and Tobago presented the operational requirements and solution for communication between the FIRs of PIARCO and Dakar through the deployment of AFISNET (African and Indian Ocean Satellite Network), and Very Small Aperture Terminal (VSAT) stations to link the FIR of PIARCO to Dakar kindly offered by ASECNA.
- ICAO presented implementation progress of the ICAO Technical Cooperation Project—Implementation of Performance-Based Air Navigation Systems for the CAR Region (RLA/09/801) in support to the implementation of air navigation issues on behalf of Project member States, through event fellowships, TEAMS and hiring of Subject Matter experts (SMEs).

- The Meeting noted the progress presented by Cuba and United States on their Air Navigation Aviation System Block Upgrades (ASBUs)-based National Plans; however pointed out that many States are still to develop their National Plans for reflecting their national air navigation priorities in line with the ASBUs. The Meeting took note of the IATA/RTCA proposal made in the GREPECAS/17 Meeting for the establishment of a State/Industry collaboration project with the objective to provide fundamental input to the State or regional implementation plan(s) using the methodology based on the ASBU and aligned with the GANP strategic objectives.
- The Meeting discussed the difficulty for Regions and States to correlate their plans with the ICAO ASBU planning framework; providing a straightforward tool for States and Regions to determine how their particular air navigation improvements would address the ASBU implementation; and agreed a metrics table for all ASBU Block 0 elements and then reviewed the RPBANIP and inserted the already agreed metrics in the appropriate places in the reviewed ANRF (Conclusion ANI/WG/2/20 - *Adoption Of New ANRF And Reporting Approach To ASBU Implementation*).
- The Meeting stressed the importance that training is an essential element for skill development and human performance, as well as a key element for all planning, implementation, operation and improvement phases of aeronautical activities.

5. The follow-up to the ANI/WG/2 Conclusions is detailed in Appendix D.

APPENDIX D
FOLLOW-UP TO ANI/WG/2 CONCLUSIONS

Number	Conclusion/Decision	Deliverable	Responsible for action	Deadline	Follow-up by E/CAR/CATG	
2/1	MEETING/ WORKSHOP ON ATM, AIM AND MET COORDINATION That, in preparation of the Meeting/Workshop on ATM/AIM/MET Coordination (May 2016), and in order to promote coordination to improve safety during natural events with major aviation impact, States of the CAR Region and COCESNA provide information on coordination among ATM, AIM and MET services to the ICAO NACC Regional Office by 28 December 2015.	Provide information for workshop	CAR States and COCESNA	28 Dec 2015	AIM Committee noted and will coordinate	
		Conduct Workshop	ICAO NACC Office	May 2016		
2/2	COORDINATION FOR UPDATED VERSION OF THE ICAO WRC-2015 POSITION That in order to ensure an effective coordination for the support of the ICAO Position for WRC-2015 considering the update of this position by ICAO NAM/CAR States:				E/CAR States/Territories to support. Updates to be provided to CNS Committee.	
		a) timely coordinate that this update of the ICAO Position is shared with their national Spectrum regulators; and	Coordination with National Spectrum Regulator	NAM/CAR States		August 2015
		b) attend as possible, with their National Spectrum Regulators to attend the last 2015 Regional CITEL (Ottawa, Canada, August 2015) and vote for the Interamerican proposals related with the ICAO position	Attendance to last 2015 Regional CITEL (Ottawa, Canada)	NAM/CAR States		August 2015
2/3	IMPROVEMENT OF THE EFFECTIVENESS OF THE PBN TASKFORCE That, in order to improve the effectiveness of the PBN Task Force, CAR States:					
		a) update the PBN Taskforce PoCs information by June 30 2015; and	Update PBN TF PoC	CAR States/Territories	30 June 2015	
		b) provide the appropriate resources to the nominated members of the taskforce in order for them to participate in Telcons/Web meetings, attend meetings/training events and contribute to group activities.	Provide resources to PBN TF PoC	CAR States/Territories	ANI/WG/3	

Number	Conclusion/Decision	Deliverable	Responsible for action	Deadline	Follow-up by E/CAR/CATG
2/4	REPORTING OF FUEL SAVING INITIATIVES In order to quantify the effectiveness of proposed PBN initiatives within the CAR Region				E/CAR States will designate PoC for the task
	a) PBN Task Force in coordination with IATA, submit to ICAO by 30 June 2015 the final version of the form to report fuel saving from PBN initiatives;	Submit final fuel saving form	PBN Task Force	30 June 2015	
	b) ICAO NACC Regional Office to submit States/Territories this reporting form that is capable of reflecting predicted fuel savings resulting from proposed PBN initiatives by 30 July 2015;	Submit fuel saving reporting form	ICAO NACC Regional Office	30 July 2015	
	c) CAR States/Territories submit information relating to predicted fuel savings based on proposed PBN implementation in the agreed to standardized format every 6 months, as applicable; and	Submit fuel saving form complete	CAR States/Territories	Every 6 months	
	d) PBN Task Force to collaborate with IATA re validation of information received from States.	Revalidate and process information	PBN Task Force	Every 6 months	
2/5	THE IMPROVEMENT OF THE EFFECTIVENESS OF THE ATFM TASK FORCE That, in order to improve the effectiveness of the ATFM TF, CAR States/Territories				Noted by ATM Committee and action has been taken
	a) update the POCs for the ATFM TF by 31 July 2015;	Update ATFM TF PoC	CAR States/Territories	31 July 2015	
	b) provide to the members of the taskforce nominated the appropriate time and resources in order to participate in Telcons/GoTo Webinars and attend meetings/training events that contribute to ATFM; and	Provide resources to ATFM TF PoC	CAR States/Territories	ANI/WG/3	
	c) based on the ATFM TF work programme, report their current ATFM implementation status by 14 August 2015.	Inform ATFM implementation progress	CAR States/Territories	14 August 2015	
2/6	AIDC IMPLEMENTATION CHECKLIST That, in order to support the implementation of AIDC, States/Territories in the CAR Region, adopt the attached AIDC Implementation checklist (Appendix E refers) as a guidance for planning and implementing AIDC service.	Adopt AIDC Implementation Checklist	CAR States/Territories	ANI/WG/3	Noted

Number	Conclusion/Decision	Deliverable	Responsible for action	Deadline	Follow-up by E/CAR/CATG
2/7	<p>AIDC IMPLEMENTATION AND MONITORING That in order to accurately monitor and report the operational benefits and implementation progress as well as to facilitate the harmonious AIDC implementation:</p>				Noted
	a) the ICAO NACC Regional Office upload the AIDC Regional Implementation Plan into the ANI/WG Webpage;	Upload AIDC Regional Implementation Plan into ANI/WG Webpage	ICAO NACC Office	Upon approval of ANI/WG/02 report	
	b) the NAM/CAR States/Territories review and inform the AIDC TF and ICAO of any update to the AIDC Regional Implementation Plan by the ANI/WG/03 Meeting; and	Review and report updates to AIDC Regional Implementation Plan	NAM/CAR States	ANI/WG/3	
	c) the AIDC TF track the implementation progress of AIDC as shown in the AIDC Implementation Performance Indicator, including operational benefits information by the ANI/WG/3 Meeting.	Track AIDC implementation progress	AIDC TF	ANI/WG/3	
2/8	<p>AIDC PLANNING IMPLEMENTATION That, in order to promote the planning of successful AIDC implementation the CAR States/Territories update the status of their FPL System and the dis-use of converters (Appendix F refers) by ANI/WG/03 Meeting.</p>	Update status of FPL system and converters	CAR States/Territories	ANI/WG/3	E/CAR States/Territories to update as possible. CNS Committee to follow-up
2/9	<p>PROVISION OF FPL SUPPLEMENTAL INFORMATION That, in order to control and ensure the provision of FPL supplemental information the CAR States/ANSPs establish agreements with operators to provide FPL supplemental information to the ANSPs when needed, and the complete contact information be used at any time for this purpose, or to provide this information for each flight plan by means of the local dispatch office. The agreement to provide the information on demand would only apply to those operators that have 24/7 availability of personnel to attend the request.</p>	Provision of FPL supplemental Information	CAR States/Territories	ANI/WG/03	Take note

Number	Conclusion/Decision	Deliverable	Responsible for action	Deadline	Follow-up by E/CAR/CATG
2/11	ADS-B/MLAT SURVEILLANCE PLAN That, in order to support the implementation of ADS-B and MLAT in the CAR Region:				Review and report update to ADS-B TF in coordination with CNS Committee
	a) the Surveillance System Plan (Appendix K refers) be taken as a reference for the planning and implementation of MLAT and ADS-B systems; and	Take Surveillance System Plan as reference	CAR States/Territories	ANI/WG/03	
	b) States/Territories in coordination with ICAO to update this plan by 20 December 2015.	Update Surveillance System Plan	CAR States/Territories	20 December 2015	
2/12	ADS-B IMPLEMENTATION REFERENCE DOCUMENTATION That in order to support and guide implementation of ADS-B in the CAR Region and to achieve regional milestone date of December 2018 for the implementation of ADS-B OUT:				Take note
	a) the Regional ADS-B CONOPS document version 1.0 be adopted as a guide to planning and implementation of ADS-B service to the States/ANSPs in the region; and	Take as reference the ADS-B CONOPS document	CAR States/Territories	December 2018	
	b) Technical Specification document be adopted as a guide for the acquisition and implementation of ADS-B service.	Take Technical Specification document as a guide	CAR States/Territories	December 2018	
2/13	DATA PROCESSING CAPABILITIES FOR ADS-B That in order to follow-up and guide the ADS-B implementation in the CAR Region, and to achieve the regional milestones by December 2018 for ADS-B Out implementation:				E/CAR States/Territories to confirm these capabilities. CNS Committee to follow-up
	a) the ADS-B Data Processing Capabilities Table (Appendix L) be adopted as a guidance on the status of the ATS Automation System to process ADS-B data; and	Take ADS-B Data Processing Capabilities Table as guidance	CAR States/Territories	December 2018	
	b) CAR States/Territories to confirm these capabilities to ICAO by December 2015.	Inform Status of ADS-B Data Processing capabilities	CAR States/Territories	December 2015	

Number	Conclusion/Decision	Deliverable	Responsible for action	Deadline	Follow-up by E/CAR/CATG
2/14	ADS-B TRIALS KICK OFF IN CAR REGION That, in order to promote ADS-B implementation States/Territories that have not yet conducted trials coordinate the implementation/planning test of ADS-B with ADS-B TF in order to obtain the operating benefits identified.				E/CAR States/Territories to inform and CNS Committee to follow-up
2/15	AERODROME MAPPING DATA BASE (AMDB) That States/Territories/International Organizations:				E/CAR States/Territories and AIM Committee to follow-up
	a) take into account the applications based on the aerodromes data publication, including the new air-ground collaborative systems applying SWIM principles according with ASBU dates for Block DATM (AIM);	Take into account the applications based on the aerodromes data publication	NAM/CAR States/Territories	ANI/WG/3	
	b) accelerate the adoption of aerodrome mapping databases provision and maintain close coordination with other Aeronautical Authorities related with the implementation of the AMDB; and	Accelerate the adoption of aerodrome mapping databases provision and maintain close coordination with other Aeronautical Authorities	NAM/CAR States/Territories	ANI/WG/3	
	c) participate in the Terminal Procedures and Aerodrome Mapping Seminar to be held at the ICAO NACC Regional Office, Mexico City, Mexico, 24 to 28 August 2015.	Participate in the Terminal Procedures and Aerodrome Mapping Seminar	NAM/CAR States/Territories	24 August 2015	
2/16	PROCEDURES FOR AIR NAVIGATIONS SERVICES (PANS) – AERONAUTICAL INFORMATION MANAGEMENT (AIM) That States/Territories:				E/CAR States/Territories and AIM Committee to follow-up
	a) review the draft version of the mentioned document as shown in Appendix to IP/09; and	Review document on PANS-AIM	NAM/CAR States/Territories	31 December 2015	
	b) send to ICAO NACC Regional Office their comments no later than 31 December 2015.	Send comments	NAM/CAR States/Territories	31 December 2015	

Number	Conclusion/Decision	Deliverable	Responsible for action	Deadline	Follow-up by E/CAR/CATG
2/17	AMHS IMPLEMENTATION PROCESS IN THE CAR REGION That in order to streamline the implementation of AMHS Systems, CAR Region States/ANSPs				Done: Trinidad and Tobago update provided by CNS Committee
	a) update accordingly the CAR Region Implementation Matrix by 31 Dec 2015; and	Update CAR Region Implementation Matrix	CAR States/ANSPs	31 Dec 2015	E/CAR States/Territories to participate in workshop
	b) participate in the ATN Application Workshop (2016, Sint Maarten) to exchange information and advance the implementation.	Participate in workshop	CAR States/ANSPs	2016	
2/18	CPDLC/ADS-C IMPLEMENTATION GUIDANCE AND CONSIDERATIONS That, in order to support the implementation of CPDLC, ADS-C, the States/Territories involved adopt as references the CPDLC Implementation Considerations; and a CPDLC/ADS-C implementation Action Plan shown in Appendix O and Appendix P, respectively.	Adopt as references the CPDLC Implementation Considerations; and a CPDLC/ADS-C implementation Action Plan	CPDLC/ADS-C involved States-ANSPs	December 2018	Trinidad and Tobago update provided by CNS Committee
2/20	ADOPTION OF NEW ANRF AND REPORTING APPROACH TO ASBU IMPLEMENTATION That, in order to provide a straightforward tool for States/Territories/International Organizations to determine their operational air navigation improvements:				Noted on E/CAR/CATG/02
	a) NAM/CAR States/Territories to review and adopt the proposed new ANRFs for application by June 2016 (Appendix R);	adopt the proposed new ANRFs	NAM/CAR States/Territories and ANSPs	June 2016	
	b) NAM/CAR States/Territories to assess their status of implementation and report to ICAO NACC Regional Office by 30 July 2016; and	Assess implementation Status	NAM/CAR States/Territories	July 2016	
	c) ICAO to organize by the first semester of 2016 a hands-on ANS/ASBU ANRF workshop for the use and understanding of the new ANRFs with the participation of CANSO, IATA, Civil Aviation Training Centers and air navigation planning experts.	Organize ASBU ANRF workshop	ICAO	First semester 2016	