



ICAO

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

WORKING PAPER

ANI/WG/5 — WP/21
24/05/19

Fifth NAM/CAR Air Navigation Implementation Working Group Meeting (ANI/WG/5)
Mexico City, Mexico, 27 to 31 May, 2019

- Agenda Item 2: Review and Follow-up to Valid Conclusions/Decisions of the ANI/WG/04, NACC/WG/05 and GREPECAS/18 Meetings**
- 2.1 Follow-up and performance and monitoring assessment of the NAM/CAR Regional Performance-Based Air Navigation Implementation Plan (RPBANIP)**

AIR NAVIGATION IMPLEMENTATION WORKING GROUP (ANI/WG) PROGRESS REPORT

(Presented by the ANI/WG Chairman)

EXECUTIVE SUMMARY

This Working Paper presents the progress achieved by the NAM/CAR Air Navigation Implementation Working Group (ANI/WG) since its fourth meeting (ANI/WG/4), including action plans approved.

Action:	Suggested actions in Section 3
<i>Strategic Objectives:</i>	<ul style="list-style-type: none">• Safety• Air Navigation Capacity and Efficiency
<i>References:</i>	<ul style="list-style-type: none">• Global Air Navigation Plan (GANP)• Air navigation implementation Plan based on the• Performance for NAM/CAR regions (NAM/CAR RPBANIP), version 4.0• Report of the fourth meeting of the Working Group on the implementation of air navigation for THE NAM/CAR regions (ANI/WG/4)• Fifth meeting of the Working Group of North America, Central America and the Caribbean (NACC/WG/5)• ANIWG Action Plan

1. Introduction

1.1 The Air Navigation Implementation Working Group (ANI/WG) for the NAM/CAR regions was established by the conclusion 4/9 - consolidation of Sub-regional working groups in the CAR region of the fourth meeting of North America, Central America and the Caribbean Directors of Civil Aviation (NACC/DCA/4), and approved by all NAM/CAR Directors in 2012, through their respective DCA sub-regional meetings.

1.2 The objective of the ANI/WG is to consolidate existing sub-regional working groups, reduce the number of meetings, avoid duplication, streamline the progress of work and improve regional harmonization focused on the Air Navigation areas, Air Traffic Management Area (ATM), communications, navigation and Surveillance (CNS) and aeronautical Information Management (AIM).

1.3 The ANI/WG according to its Terms of Reference works with all sub regional implementation groups.

2 ANI/WG Advances

2.1 This WP presents the progress achieved by ANI/WG since its fourth meeting (ANI/WG4), held in Miami, United States, in August 2018, in the same way, the Action Plan of the NAM/CAR Air Navigation Implementation Working Group, ANI/WG, and was presented.

2.2 An executive list of the valid conclusions of the fourth meeting of the NAM/CAR regions Air Navigation implementation Working Group (ANI/WG/4) are presented in **Appendix A**¹ to this Working paper; as well, the ANI/WG Action Plan is presented in **Appendix B** for review, during the progress of this meeting.

2.3 It is expected that during the meeting, the rapporteurs of the ANI Task Forces through their respective reports, present the progress of their Plans and activities carried out after the ANI/WG4, as well as review and update the ANI/WG Actions Plan, especially those that reflects a delays status or lack of progress.

3 Suggested actions

3.1 The Meeting is invited to:

- a) take note of the information presented in this WP;
- b) update and follow up the conclusions of appendix "A" (Spanish only), as well as the Actions Plans presented in the Appendix "B" of this note; and
- c) take the actions that are considered appropriate.

¹ Refer to the ANI/WG/4 Meeting report for the English version.

**APPENDIX A
CONCLUSIONS EXECUTIVE LIST**

Número	Conclusión/Decisión	Responsable acción	Fecha límite
C/01	DISPONIBILIDAD DEL DOC 10066 – PANS-AIM		
	Que, la Oficina Regional NACC comunique a la Sede de la OACI la preocupación de los Estados de la región ante la falta de disponibilidad del PANS AIM y otros materiales de referencias para la transición a AIM conforme a la hoja de ruta de la OACI	OACI NACC RO Sede de la OACI	31 de marzo 2019
C/02	MAYOR APOYO DE LOS ESTADOS Y OPERADORES DE AEROPUERTOS PARA LOS GRUPOS DE TAREA AGA/AOP, MET		
	Que el personal operativo de aeropuertos de los Estados/Territorios y Organizaciones Internacionales demuestre un mayor compromiso y tome medidas más efectivas en apoyo de los proyectos armonizados de GREPECAS AGA, MET y SAR, y designe a expertos como puntos focales a más tardar el 31 de octubre de 2018, para apoyar la implementación de Certificación de Aeródromos, Meteorología y actividades de Búsqueda y Rescate a través de la integración en el ANI/WG.	Estados, Organizaciones Internacionales	31 de octubre de 2018
C/03	ESTRATEGIA DE RESPUESTA Y PLANIFICACIÓN DE CONTINGENCIAS REGIONALES CAR		
	Que, los Estados y Territorios de las Regiones NAM/CAR: a) actualicen sus planes de contingencia ATS y presenten sus planes de contingencia actualizados a la Oficina Regional NACC de la OACI a más tardar el 31 de octubre de 2018;	Estados, OACI NACC RO	31 de octubre de 2018.
	b) apoyen y colaboren para desarrollar e implementar el Equipo Regional de Coordinación de Contingencias (CCT) CAR; y		
c) como parte del Equipo Regional de Coordinación de Contingencias (CCT) de la región CAR, actualicen su(s) punto(s) de contacto para situaciones de contingencia y envíen esta información a la Oficina Regional NACC de la OACI antes del 31 de octubre de 2018.			

Número	Conclusión/Decisión	Responsable acción	Fecha límite
C/04	DESARROLLO DEL PLAN REGIONAL SAR DE LA REGION CAR		
	<p>Que, para apoyar la implementación SAR en la Región CAR, el ANI/WG Establece un Grupo Ad hoc para redactar el Plan regional de implementación SAR para la Región CAR y redactar un Plan SAR regional. Este plan regional incluirá recomendaciones concretas para abordar el apoyo SAR regional, identificando iniciativas regionales en curso y oportunidades para mejorarlas a un nivel más amplio; este grupo Ad hoc estará compuesto por los siguientes Estados, Territorios y Organizaciones Internacionales:</p> <ul style="list-style-type: none"> • Cuba • Estados Unidos (Guardia Costera de los Estados Unidos) • República Dominicana • Trinidad y Tabago • COCESNA <p>Y deberá presentar sus resultados a la Oficina Regional NACC de la OACI a más tardar el 1 de diciembre de 2018.</p>	Estados	1 de diciembre de 2018
C/05	REVISAR LA PROPUESTA PARA ENMENDAR EL CONOPS DEL ATFM DE LAS REGIONES CAR/SAM		
	Que, el Grupo de Tarea del ATFM:		
	<p>a) Revisar la propuesta de enmienda del CONOPS del ATFM para las Regiones CAR/SAM, y enviar sus resultados a la Oficina Regional NACC de la OACI a más tardar el 1 de octubre de 2018;</p> <p>b) desarrollar una hoja de ruta para describir futuros desarrollos para la implementación ATFM en la Región CAR.</p>	Estados, Grupo de Tarea ATFM	1 de octubre de 2018
C/06	APOYAR LA IMPLEMENTACION SMS PARA LOS ANS EN LAS REGIONES NAM/CAR		
	Que, con el fin de apoyar la implementación SMS para los ANS en las Regiones NAM/CAR:		
	<p>a) la Oficina Regional NACC de la OACI continúe trabajando para apoyar la implementación inicial de SMS de los ANSP de la Región CAR y la aceptación en representación de los reguladores;</p> <p>b) los Estados y Territorios de las Regiones NAM/CAR trabajen para armonizar los requisitos de SMS para los ANSP, incluidos los indicadores de desempeño de la seguridad operacional; y</p>	Estados, OACI NACC RO	31 de diciembre de 2019

Número	Conclusión/Decisión	Responsable acción	Fecha límite
	c) la Secretaría sugiere al Grupo de Trabajo de Escrutinio (GTE) del GREPECAS que considere ampliar su alcance para incluir entre sus actividades el establecimiento de una red de intercambio de información de seguridad operacional relacionada con la medición del desempeño de seguridad operacional de los servicios de navegación aérea.		
C/07	ESTRATEGIA REGIONAL PARA LA GESTIÓN DEL ESPECTRO RADIOELÉCTRICO PARA LOS SERVICIOS AERONÁUTICOS		
	Que los Estados apoyen el trabajo del Grupo Ad hoc de MEVA para la gestión de la información y actividades a desarrollar para una gestión armonizada y regional de las frecuencias aeronáuticas en las regiones NAM/CAR y proporcionen el nombre de las personas en cada Estado que apoyaran las tareas de este Grupo Ad hoc a más tardar el 30 de septiembre de 2018.	Estados	30 de septiembre 2018
C/08	PUNTO DE CONTACTO (PoC) RESPONSABLE DE LA GESTIÓN Y MANTENIMIENTO EL AMHS O AFTN		
	Que, los Estados proporcionen el PoC de su Estado responsable de la gestión técnica del sistema AMHS o AFTN, a más tardar el 30 de septiembre de 2018. Información que la OACI pondrá a disposición para el uso de los Estados.	Estados	30 de septiembre de 2018
C/09	ANÁLISIS DEL ESTADO DE IMPLEMENTACIÓN PBN EN LAS REGIONES NAM/CAR Y SUMINISTRO DE PLANES INDIVIDUALES PARA ESTADOS/TERRITORIOS/ORGANIZACIONES INTERNACIONALES		
	Que, con el fin de determinar el estado actual de la implementación PBN en las Regiones NAM/CAR, determinar los controles para la implementación e identificar las iniciativas inefectivas usadas en proyectos PBN pasados:		
	a) la Oficina Regional NACC de la OACI difunda la encuesta desarrollada por el TF PBN a los Estados/Territorios/Organizaciones Internacionales a más tardar el 30 de septiembre de 2018; b) los Estados/Territorios/Organizaciones Internacionales suministren respuestas adecuadas a la encuesta y evidencia donde la implementación de las tareas se manifieste como completada a más tardar el 31 de diciembre de 2018; y	Estados, OACI NACC RO, Grupo de Tarea PBN del ANI/WG	31 de mayo de 2019

Número	Conclusión/Decisión	Responsable acción	Fecha límite
	c) el TF PBN lleve a cabo un análisis de cada respuesta de la encuesta y suministre evaluaciones individuales a la Oficina Regional NACC de la OACI a más tardar el 31 de mayo de 2019.		
C/10	ESTUDIO DE FACTIBILIDAD EN EL ESTABLECIMIENTO DE UN PROGRAMA DE PROCEDIMIENTO DE VUELO (FPP) DENTRO DE LAS REGIONES NAM/CAR		
	Que, tomando en consideración la Resolución A39 – 14 de la Asamblea de la OACI, donde se insta a los Estados a utilizar los FPP para la implementación PBN, el Grupo de Tarea PBN, en colaboración con la Oficina Regional NACC de la OACI :	Grupo de Tarea PBN del ANI/WG	30 de abril de 2019
	a) difundirá una encuesta a más tardar el 30 de septiembre de 2018, que busque identificar qué Estados/Territorios/Organizaciones Internacionales requieren asistencia en el diseño de procedimientos;		
	b) identificar que los recursos requeridos para el establecimiento de un FPP dentro de la Región; y		
c) suministre un informe a la Oficina Regional NACC de la OACI con las recomendaciones apropiadas a más tardar el 30 de abril de 2019.			
C/11	REVISIÓN PARA LA APROBACIÓN DE LA VERSIÓN 4.0 DEL RPBANIP		
	Que, considerando que el Plan de Implementación de Navegación Aérea basado en el Desempeño para la Región CAR (CAR RPBANIP) es la base para la implementación de la navegación aérea en la Región CAR, donde se han acordado los objetivos e hitos regionales y se reflejan las prioridades de la navegación aérea regional que:	Estados OACI	30 de marzo de 2019
	1. OACI identifique los tres objetivos regionales a desarrollarse más fuertemente durante 2019 y 2020 a más tardar el 30 de enero del 2019.		
2. Que los Grupos de trabajo alineen sus tareas para cumplir los objetivos regionales identificados a más tardar el 30 de marzo del 2019.			

APPENDIX B

Action Plan of the NAM/CAR Air Navigation Implementation Working Group (ANI/WG)

Status Not started/ no iniciado		Lack of progress/ falta de avance		Behind scheduled/ retrasada		Ongoing- as scheduled/ Ok segun programa	
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Revision: June 2015

ACTION PLAN FOR PBN IMPLEMENTATION

Task Name/ Tarea	Start/ Inicio	Finish/ Final	Deliverables/ Resultados	Follow-up/ Seguimiento	Responsible/ Responsables	Observations/ Comments- Observaciones/ Comentarios
a) Implement Collaborative Decision-Making (CDM) process in coordination with stakeholders	Abril 2008	Dec 2016	CDM implementation	ATFM/CDM Workshop conducted in 2015. Completed	PBN TF States, Territories, Int. Orgs	
b) Implement PBN Airspace Redesign Project for oceanic, continental and terminal areas in of CAR Region in accordance with the ICAO PBN Manual Doc 9613 and Doc 9992	Abril 2015	Dec 2017	Up-to-date the regional PBN Airspace concept with implementation activities for the period 2015-2017	PBN Workshop conducted in 2015 to update the Regional PBN Airspace Concept	PBN TF States, Territories, Int. Orgs	States to develop a PBN Airspace Redesign Project including: a) revision of regional ATS Route network, b) implementation of CDOs/CCOs c) TMA redesign d) Implementation of PBN approach procedures
c) Analyze GNSS implementation in accordance with PBN airspace concept requirements	Abril 2016	Dec 2018	SACSA Project completed a feasibility study (2015) on the use of GNSS Introduction of GNSS (GBAS and SBAS-Ionosphere matters)	GNSS workshop agreed for 2016	SACCSA Project support / WAAS States, Territories, Int. Orgs	
d) GNSS mitigations Plannings	April 2016	Dec 2018	Mitigation means	GNSS workshop agreed for 2016 RAIM Prediction topic presented in ANI/WG/02 Meeting DW Presentation	States, Territories, Int. Orgs	
e) Develop and implement PBN training programme for pilots, ATCOs, operators and regulators	Abril 2014	Dec 2018	PBN training programme	ICAO PBN Manual includes guidelines to develop training programmes	States, Territories, Int. Orgs	PBN TF to support Training Centers WG to develop PBN training programmes for pilots and controllers

f)	Optimize the ATS route structure through implementation of RNAV routes between major city pairs with navigation specification RNAV-5 /2 for en-route operations	Abril 2015	Dec 2017	Develop a proposal for amendment (PFA) to Doc 8733 in Dec 2015	A Workshop on Regional Implementation on Performance-Based Navigation PBN Airspace Redesign was conducted on May 2015. States will submit proposals not later than 31 st August 2015	PBN TF States, Territories, Int. Orgs	On-going revision of ATS route network. States to send proposals to ICAO NACC Regional Office by 31 st August 2015
g)	Implement CDOs/CCOs for SIDs/STARS in terminal areas based on RNAV 1-2 and RNP 1-/2 navigation specification, as required	Abril 2015	Dec 2016	Implement CDOs/CCOs in TMAs	States continue implementation of CDOs and CCOs	PBN TF States, Territories, Int. Org	
h)	Design and implement PBN APV in accordance with Assembly Resolution A37-11	2008	Dec 2016	PBN Instrument Approach Procedures implementations (APV, etc.)	Completed	PBN TF States, Territories, Int. Orgs	
i)	Efficient application of longitudinal separation across the NAM/CAR/SAM regions.	Abril 2014	Dec 2017	Analysis of applicable separation minima for transfer traffic between FIRs	ANSPs of States, Territories, Int. Orgs to update existing Letters of Agreement (LOAs) between ATC units	ANSPs of States, Territories, Int. Orgs	PBN TF to support ANSPs. While some FIRs were using as low as 5NM in their own airspace, based on existing procedures and LOAs, in most
	Task Name/ Tarea	Start/ Inicio	Finish/ Final	Deliverables/ Resultados	Follow-up/ Seguimiento	Responsible/ Responsables	Observations/ Comments- Observaciones/ Comentarios
							cases, ten (10) minutes (80NM) were required for transfer from one FIR to the next.
j)	Conduct PBN safety assessment based ATC simulations (fast time and/or real time), live trials, etc., as required	Abril 2014	Dec 2016	States to conduct PBN safety assessment	Completed	PBN TF States, Territories, Int. Orgs	
k)	Develop performance measurement programme	2008	Dec 2016	performance measurement programme	PBN Targets have been defined in the RPANIP and the Port of Spain Declaration as Performance metrics. Completed	States, Territories, Int. Orgs	Reviewed by the NACC/DCA Meetings
l)	Develop post-implementation PBN Safety Assessment Programme	2010	Dec 2016	States to conduct postimplementation PBN Safety Assessment	Permanent On going activity conducted by States	States, Territories, Int. Orgs	
m)	Monitor implementation progress	2008	Dec 2018	Annual review of PBN implementation	On-going activity conducted by ICAO	ICAO, States, Territories, Int. Orgs	

ACTION PLAN FOR DEMAND AND CAPACITY MANAGEMENT

Task Name/ Tarea	Start/ Inicio	Finish/ Final	Deliverables/ Resultados	Follow-up/ Seguimiento	Responsible/ Responsables	Observations/ Comments- Observaciones/ Comentarios
a) Identify key stakeholders (ATC service providers and users, military authorities, airport authorities, aircraft operators and relevant organizations) for purposes of coordination and cooperation - using a CDM process	Apr 2014	Dec 2016	CDM implementation	completed	ATFM TF States, Territories, Int. Orgs	Coordination with PBN
b) Analyze traffic flow problems	Apr 2014	Dec 2016	Analysis of traffic flows	A Workshop on Air Traffic Flow Management (ATFM) Implementation for the CAR and SAM Regions was conducted in May, 2015. Completed	ATFM TF States, Territories, Int. Orgs	Established 3 traffic flows in CAR Region in coordination with PBN TF
c) Define common elements of situational awareness between FMUs: i. Common traffic displays ii. Common weather displays iii. Communications (teleconferences, web) iv. Daily teleconference/messages methodology advisories	Apr 2014	Dec 2016	Identify common elements of ATM situational awareness between FMUs	To be reviewed by ATFM TF and report progress	ATFM TF States, Territories, Int. Orgs	Being Follow-up by AIDC TF
d) Develop methods to establish demand/capacity forecasting	Apr 2014	Dec 2016	Identify electronic tools to establish demand/capacity forecasting	To be reviewed by ATFM TF and report progress	ATFM TF States, Territories, Int. Orgs	
e) Define common electronic information and databases required for decision support and alerting systems for interoperable situational awareness between centralized ATFM units	Apr 2014	Dec 2016	ATFM common electronic information and databases and alerting systems required	To be reviewed by ATFM TF and report progress	ATFM TF States, Territories, Int. Orgs	Being Follow-up by AIDC TF
f) Develop regional procedures for efficient and optimum use of aerodrome and runway capacity	Apr 2014	Dec 2016	Develop regional procedures for efficient and optimum use of aerodrome and runway capacity	To be reviewed by ATFM TF and report progress	ATFM TF States, Territories, Int. Orgs	
g) Develop a national ATFM Procedures Manual to manage demand/capacity balancing	Apr 2014	Dec 2016	States to publish their national ATFM Manual	ATFM Manual available	GREPECAS	
h) Develop operational agreements between ATFM units for interregional demand/capacity balancing	Apr 2014	Dec 2016	Develop a model of ATFM LOAs	The ICAO Doc 9971 includes a Model of ATFM LOA. Completed	States, Territories, Int. Orgs	
i) Monitor implementation progress	Apr 2014	Dec 2016	Annual review of ATFM implementation	On-going activity conducted by ICAO	ICAO	

ACTION PLAN FOR FLEXIBLE USE OF AIRSPACE

Task Name/ Tarea	Start/ Inicio	Finish/ Final	Deliverables/ Resultados	Follow-up/ Seguimiento	Responsible/ Responsables	Observations/ Comments- Observaciones/ Comentarios
a) Establish civil/military coordination bodies	Apr 2014	Dec 2016	civil/military coordination bodies	On-going activity	States, Territories	
b) Arrange for permanent liaison and close cooperation between civil ATS units and appropriate air defence units	Apr 2014	Dec 2016	Permanent liaisons	On-going activity	States, Territories	
c) Conduct a regional review of Special Use Airspace: assess use of airspace i. management processes; improve current national airspace ii. management to adjust dynamic changes in tactical stage to traffic flows; and iii. introduce improvements in ground support systems and associated procedures for the extension of FUA with dynamic airspace management processes	Apr 2014	Dec 2016	Special use of Airspace review	A NAM/CAR/SAM Meeting/Workshop to Improve Regional Search and Rescue (SAR) System and Civil/Military Coordination was conducted in Havana, Cuba, 13 to 17 April 2015, several Presentations about FUA were discussed. On-going activity	States, Territories, Int. Orgs, ICAO	
d) implement dynamic ATC sectorization in order to provide the best balance between demand and capacity to respond in real-time to changing situations in traffic flows and to accommodate the preferred routes of users in short-term	Apr 2014	Dec 2018	dynamic ATC sectorization	On-going activity	States, Territories, Int. Orgs, ICAO	
e) Develop performance measurement programme	Apr 2014	Dec 2016	performance measurement programme	On-going activity	States, Territories, Int. Orgs	
f) Monitor implementation progress	Apr 2014	Dec 2016	Annual review of FUA implementation	On-going activity conducted by ICAO	ICAO	

ACTION PLAN FOR SITUATIONAL AWARENESS IMPROVEMENTS

Task Name/ Tarea	Start/ Inicio	Finish/ Final	Deliverables/ Resultados	Follow-up/ Seguimiento	Responsible/ Responsables	Observations/ Comments- Observaciones/ Comentarios
a) Identify the automation level required according to the ATM service provided in airspace and international aerodromes, assessing: i. Operational architecture design ii. Characteristics and attributes for interoperability iii. Data bases and software iv. Technical requirements	Abril 2014	Dic 2018	Review status of automation	ongoing	States, Territories, Int. Orgs	
b) Implement flight plan data processing systems and electronic transmission tools	Abril 2014	Dic 2018	Full FPL2012 processing/ no converters Reduced lack/duplicate FPLs	Being Follow-up by AIDC TF	AIDC TF States, Territories, Int. Orgs	ICAO Model 2012 FPL – converters removal plan Lack/duplicate FPL Action Plan
c) Implement radar data sharing programmes where benefits can be obtained	Abril 2014	Dic 2017	Radar Data Sharing in all continental areas	Radar data sharing Cuba- Jamaica- COCESNA Radar Data sharing on going in E/CAR	States, Territories, Int. Orgs	Bilateral agreements ECAR Radar Data Sharing Project
d) Develop situational awareness training programmes	Abril 2014	Dic 2018	Identify and inform of training needs	To be reviewed by ADSB TF and report progress	Training Centers Working Group States, Territories	
e) Identify and implement additional ATM surveillance systems to improve accuracy and coverage of traffic situational information (ADS-B, MLAT, etc.) and associated procedures	Abril 2014	Dic 2018	MLAT implementation ADS-B Implementation	Progress reported by ADS-B TF Report	ADS-B TF States, Territories	ADS-B Implementation Plan
f) Implement ATS automated message exchanges as required (FPL, CPL, CNL, DLA, etc.)	Abril 2014	Dic 2015	AIDC implementation- initial phase	Progress reported by AIDC TF Report	AIDC TF States, Territories, Int. Orgs	AIDC TF to review target date Regional AIDC Plan
g) Implement automated radar handoffs where possible	Enero 2016	Dic 2017	AIDC implementation- second phase	Being Follow-up by AIDC TF: currently only phase 1	AIDC TF States, Territories, Int. Orgs	AIDC TF to review target date Regional AIDC Plan
h) Implement ground and air electronic warnings as needed: i. Conflict prediction ii. Terrain proximity iii. MSAW iv. DAIW v. Surveillance system for surface movement	Abril 2014	Dic 2017	Improvement in electronic alarms / warnings	Need to be reviewed by ADS-B TF and GREPECAS C Project	GREPECAS C Project States, Territories, Int. Orgs	

i) Implement data link surveillance technologies and applications as required: ADS, CPDLC, AIDC	Abril 2014	Dic 2018	CPDLC/ ADS-C Implementation	Being Follow-up by AIDC TF and ANI/WG RLA/09/801 TEAMS	GOLD TF States, Territories	CPDLC implementation Plan IDEM COM g)
j) Implement additional/ advanced automation support tools to increase i. aeronautical information sharing ii. ETMS or similar iii. MET information iv. AIS/NOTAM dissemination Surveillance tools to identify airspace sector constraints	Abril 2014	Dic 2018	Increase Automation applications	Needs from ATFM, MET and AIS to be defined	States, Territories, Int. Orgs	
k) Training in the application and implementation of automated surveillance technologies and ATS	Abril 2014	Dic 2018	Identify and inform of training needs	ADS-B and AIDC TFs to coordinate with CATC/WG	States, Territories	
Task Name/ Tarea	Start/ Inicio	Finish/ Final	Deliverables/ Resultados	Follow-up/ Seguimiento	Responsible/ Responsables	Observations/ Comments- Observaciones/ Comentarios
system automation						
l) Enhance the training infrastructure of the region and the training programmes related to surveillance and automated systems	Abril 2014	Dic 2018	Support training centers and Train Air Plus	ADS-B and AIDC TFs to coordinate with CATC/WG	Training Centers Working Group States, Territories	
m) Implement ACAS 7.1	Abril 2014	Dic 2018	ACAS 7.1 implementation	Not started	States, Territories	
n) Monitor implementation progress	Abril 2014	Dic 2018		ADS-B/ AIDC TFs	ICAO	

AERONAUTICAL COMMUNICATION ACTION PLAN

Task Name/ Tarea	Start/ Inicio	Finish/ Final	Deliverables/ Resultados	Follow-up/ Seguimiento	Responsible/ Responsables	Observations/ Comments- Observaciones/ Comentarios
a) Review the performance status of current AFS services and identify deficiencies or improvements (AFTN, oral ATS services, A/G communications)	April 2014	Dec 2015	Improvements to A/G Communications Plan	To follow-up Regional AMS Communication Improvement Plan	States, Territories in Plan (Mexico, Jamaica and Haiti)	Identify improvements into Regional AMS Communication Improvement Plan
b) Implement communication service improvements as required to support current and planned Air Navigation applications, including Required Communication Performance (RCPs).	April 2014	Dec 2018	Improvements to A/G Communications Plan RCP application- 2015	No RCP has been implemented	States, Territories	Follow-up Regional AMS Communication Improvement Plan
c) Develop regional ATN planning documents	April 2014	Dec 2015	ATN and applications documents	Completed	GREPECAS Project D AMHS TF	Regional AMHS Plan Regional AIDC Plan
d) Coordinate and test ATN G-G application implementation aspects (AMHS, AIDC, etc.)	April 2014	Dec 2018	Test G-G Applications	Being track by AMHS and AIDC TFs	AMHS TF AIDC TF States, Territories	Regional AMHS Plan Regional AIDC Plan
e) Conduct planning, trial and implementation activities for A-G data applications (DCL, D-ATIS, etc.)	April 2014	Dec 2018	Update regional plan D-ATIS implementation	Lack of progress	GREPECAS Project D States, Territories	CAR/SAM ANP CNS TABLE 1Bc
f) Carry out technical review of regional telecommunication networks for ATN implementation	April 2014	Dec 2015	MEVA III implementation	Completed	MEVA TMG States, Territories	
g) Implement available technologies in order to facilitate ground and airborne applications (CPDLC, ADS-C, ADSB)	April 2014	Dec 2018	CPDLC/ ADS-C Implementation	Completed	States, Territories	CPDLC implementation Plan This Task has been concluded by GOLD TF.
h) Implement the necessary communications network for ACDM	April 2015	Dec 2018	Communications for ACDM	Need to be defined by AGA	States, Territories	
i) Support ICAO position during the ITU WRC and ensure regional coordination for the protection of the aviation spectrum	April 2014	Dec 2018	WRC-2015 support WRC-2018 support Support for C- Band	Ongoing work	States, Territories	
j) Ensure participation of civil aviation experts in State delegations to ITU WRC meetings	April 2014	Dec 2018	Participation by States	Ongoing work	States, Territories	
k) Disseminate ICAO policy statements on aeronautical radio frequency spectrum requirements	April 2014	Dec 2018	CAA and National Spectrum Authority coordination	Ongoing work	States, Territories	

l) Implement frequency spectrum management for protection and new services	April 2014	Dec 2018	<input type="checkbox"/> Optimum use of frequencies <input type="checkbox"/> No interferences	Ongoing work	States, Territories	COM Lists
m) Support training on the application and implementation of advanced communication technologies and ATN related	April 2014	Dec 2018	Identify and inform of training needs	AMHS TF reported training needs, this information was passed to the CATC/WG	States, Territories	
n) Enhance the regional training infrastructure and training programmes related to communications	April 2014	Dec 2018	Support training centers and Train Air Plus	ongoing	Training Centers Working Group States, Territories	
o) Monitor implementation and improvement of telecommunications and ATN application issues	April 2014	Dec 2018	ATN implementation	MEVA TMG	ICAO	

ACTION PLAN FOR IMPLEMENTATION OF AERONAUTICAL INFORMATION MANAGEMENT (AIM)

Task Name/ Tarea	Start/ Inicio	Finish/ Final	Deliverables/ Resultados	Follow-up/ Seguimiento	Responsible/ Responsables	Observations/ Comments- Observaciones/ Comentarios
a) Comply with the process to introduce and implement Annex 15 and 4 amendments to the Chicago Convention	April 2014	Dec 2015	Implementation of the Annexes referred AIS and MAP Standards and Requirements	AIM TF to report progress	States / Territories	Comply with all Steps from Phase 1 for the transition to AIM according with ICAO Roadmap for the transition to AIM
b) Periodically report on the generation and distribution of Integrated IAP aeronautical information that improves the safety of ATS in the Region to the ICAO NACC Office	April 2014	Dec 2016	Provide the proper Report requested	Lack of progress	States / Territories	Implement AIM QMS
c) Develop a method to measure the performance and outcomes from States, Territories and international organizations with distribution of quality aeronautical information to improve recognition of ATM requirements, safety, and effectiveness related to the electronic distribution of information	April 2014	Dec 2016	Survey to States / Territories	AIXM defined from NACC/WG AIM TF to report progress	ICAO, GREPECAS	Consider AIXM implementation as basic requirement
d) Assist States, Territories and international organizations to improve decision making related to their transition to AIM	April 2014	Dec 2016	Provide respective guidance material on AIM issues	AIM TF to report progress	ICAO	ANConf/12 Rec 3/6
e) Assist States, Territories and international organizations with the AIM, in order to implement ICAO Standards for aeronautical information products, services, and technologies in electronic format, as required	April 2014	Dec 2018	Identify training needs and Support training centers and Train Air Plus	AIM TF to report progress	ICAO, GREPECAS	Development and implementation of AUTO AIS/AIM project

f)	Support AIM developments to achieve the ATM system improvements in the Global Air Traffic Management Operational Concept; including NOTAM contingency plans	April 2014	Dec 2018	Complete implementation of all AIM Transition phases (1 to 3)	AIM TF to report progress	States / Territories	Including all AIM developments associated with SWIM for ASBU Block 1 module B-31
g)	Ensure that AIM requirements harmonize and integrate at a regional and international level, on-board electronic management of aeronautical information for the requirements or the use of ground systems	April 2014	Dec 2018	Complete implementation of all AIM Transition phases (1 to 3)	AIM TF to report progress	ICAO States / Territories	Including all AIM developments associated with SWIM for ASBU Block 1 module B-31
h)	Share experience and resources with implementation of e-TOD through establishment of an e-TOD regional working group	April 2014	Dec 2018	Prepare and Establish LoAs	AIM TF to report progress	GREPECAS States / Territories	-----
i)	Implement ICAO Doc 9881 technical requirements as required	April 2014	Dec 2018	Identify personnel and training needs and prepare a Report to ICAO for assistance	AIM TF to report progress	States / Territories	-----
j)	Report requirements to the ICAO NACC Regional Office and monitor implementation status of e-TOD using electronic media	April 2014	Dec 2018		AIM TF to report progress	States / Territories	-----
k)	Develop a high-level agreement for the management of a national e-TOD programme	April 2014	Dec 2018	Establish permanent liaisons and coordination among all bodies involved	AIM TF to report progress	States / Territories	-----