



OACI

Organización de Aviación Civil Internacional
Oficina para Norteamérica, Centroamérica y Caribe

NOTA DE DISCUSIÓN

ANI/WG/2 — ND/01

03/06/15

Segunda Reunión del Grupo de Trabajo sobre implementación de Navegación Aérea para las Regiones NAM/CAR (ANI/WG/2)

Puntarenas, Costa Rica, 1 al 4 de junio 2015

**Cuestión 4 del
Orden del Día**

Seguimiento al Plan de Implementación de Navegación Aérea Basado en la Performance para las Regiones NAM/CAR (RPBANIP NAM/CAR)

4.1 Informes de avance de los Grupos de Tarea y del ANI/WG

**AVANCES DEL GRUPO DE TRABAJO SOBRE IMPLEMENTACIÓN DE NAVIGACIÓN
AÉREA PARA LAS REGIONES NAM/CAR (ANI/WG)**

(Presentada por el Presidente del ANI/WG)

RESUMEN EJECUTIVO	
Esta nota de estudio presenta el avance logrado por el ANI/WG desde su creación en la Primera Reunión del Grupo de Trabajo sobre implementación de Navegación Aérea para las Regiones NAM/CAR (ANI/WG/1), incluyendo los planes de acción aprobados.	
<i>Objetivos Estratégicos:</i>	<ul style="list-style-type: none">• Seguridad Operacional<ul style="list-style-type: none">• Capacidad y eficiencia de la navegación aérea• Seguridad de la aviación y facilitación• Desarrollo económico del transporte aéreo• Protección del medio ambiente
<i>Referencias:</i>	<ul style="list-style-type: none">• Plan de Implementación de Navegación Aérea basado en la Performance para las Regiones NAM/CAR (NAM/CAR RPBANIP), Versión 3.1• Primera Reunión sobre implementación de Navegación Aérea para las Regiones NAM/CAR (ANI/WG/1)• Cuarta Reunión del Grupo de Trabajo de Norteamérica, Centroamérica y Caribe (NACC/WG/4), Ottawa, Canadá, 24 al 28 de marzo de 2014• Teleconferencias del ANI/WG

1. Introducción

1.1 El ANI/WG fue establecido por la Conclusión 4/9 - *Consolidación de Grupos de Trabajo Sub-Regionales en la Región CAR* de la Cuarta Reunión de Directores de Aviación Civil de Norteamérica, y aprobada por todos los Directores NAM/CAR en 2012, a través de sus respectivas Reuniones DCA sub-regionales.

1.2 El objetivo del ANI/WG es consolidar los grupos de trabajo sub-regionales existentes, reducir el número de reuniones, evitar duplicación, agilizar el avance del trabajo y mejorar la armonización regional enfocada a las áreas de navegación área de Gestión de Tránsito Aéreo (ATM), Comunicaciones, Navegación y Vigilancia (CNS) y Gestión de Información Aeronáutica (AIM).

1.3 A pesar de que el ANI/WG no se reunió en el 2014, las actividades de implementación y su seguimiento se realizaron a través de la reunión del NACC/WG/04, donde se aprobaron los planes de acción respectivos del ANI/WG.

2. Avance del ANI/WG

2.1 El ANI/WG según sus términos de Referencia trabaja con todos los grupos subregionales de implementación.

2.2 Durante la reunión NACC/WG/04 se realizó un seguimiento a las actividades de implementación de los aspectos de navegación aérea, incluyendo las asignaciones del ANI/WG en sus áreas de ATM, AIM y CNS, cuyo avance se refleja en varias de las conclusiones del NACC/WG.

2.3 El ANI/WG, a través de sus Grupos de Tarea, realizó un seguimiento del progreso de implementación de varias prioridades regionales tales como: la Navegación basada en la performance (PBN), el Uso flexible del espacio aéreo (FUA), la Gestión de afluencias del tránsito aéreo (ATFM), la aplicación de Documento de Enlace de Datos Operacionales (GOLD), Vigilancia dependiente automática - radiodifusión (ADS-B), el Sistema de tratamiento de mensajes ATS (AMHS), todo contemplados en los planes de acción aprobados para las metas establecidos en la Declaración de Puerto España y el Plan de Implementación de Navegación Aérea Basado en la Performance (RPBANIP).

Durante la reunión ANI/WG/2 se revisaron las

- 1) NE/05, avances logrados por el ANI/WG desde su creación y los planes acción aprobados.
- 2) WP/22, reporte con información actualizada de la 5ta reuniones del Grupo Técnico de Red del Caribe del Oriental, (E/CAR/NTG/5) y la 3ra reunión del Grupo Técnico de Compartición de Datos Radar (E/CAR/RD/3) del caribe Oriental.
 - a) ECAR Servicio Fijo Aeronáutico (AFS) Desempeño de la Red.
 - b) Mejoras en la Vigilancia
 - i. Revisión de las actividades de Compartimiento de Datos Radar.
 - ii. Requerimientos de Monitores de presentación radar.
- 3) WP/25, detalles de las actividades del Comité AIM, ATM y CNS del Grupo Técnico de Aviación Civil del Caribe del Este Oriental (ECARCATG) a partir de la primera reunión del grupo ANI (ANI/WG/1).
 - a) Flight Planning and Related Issues
 - b) Centralized flight Planning System (CFPS)
 - c)
 - 4) NI/15, presenta una visión general de la implementación de la Red MEVA III con la cual casi se completan los objetivos del RPBANIP relacionados con la Comunicación

2.4 Desde la Reunión del NACC/WG/04, el ANI/WG llevó a cabo al menos una teleconferencia de seguimiento a las tareas asignadas, destacando la identificación de preocupaciones y actividades planificadas siguientes:

- a) **ADS-B:** La última reunión se celebró el año pasado en donde fueron creados dos grupos Ad hoc sobre Concepto de Operaciones (CONOPS) y la Especificación técnica para el ADS-B.

- b) **AMHS:** La implementación del AMHS se ha realizado principalmente con actividades bilaterales y de acuerdo al Plan de implementación regional. El Proyecto CAR RLA09/801 ha apoyado la implementación mediante una misión de asistencia (*Go-Team*) a Curazao y otra misión está programada para México en 2015. El Relator comentó que las actividades de la Red MEVA han ocupado la mayor parte del tiempo, sin embargo, se tratará de realizar una teleconferencia de seguimiento en el corto plazo. Un Taller de aplicación ATN está programado para octubre de 2015, donde se discutirá el AMHS.
- c) **AIDC:** Bajo el Grupo de Tarea AIDC, se creó un Grupo Adhoc para resolver/mitigar problemas Plan de Vuelo Presentado (FPL). Se enviaron a los Estados un grupo de acciones sugeridas y celebró en México la Segunda Reunión del Grupo de Tarea AIDC/TF. Las actividades de AIDC han avanzado en la implementación del NAM ICD y con el apoyo de dos misiones *Go-Team* sobre las AIDC para República Dominicana y COCESNA. Se revisó el estado de la implementación de las AIDC en la Regiones NAM y CAR
- d) **Comunicaciones por enlace de datos controlador-piloto - vigilancia dependiente automática – contrato (CPDLC-ADS-C) del GOLD:** Se preparó una lista de verificación sobre esta implementación para los Estados CAR que planean la implementación CPDLC y ADS-C (Curazao, México, Trinidad y Tabago, y COCESNA).
- e) **PBN:** El Grupo de Tarea realizó recientemente una teleconferencia para revisar su programa de trabajo y los eventos del 2014 (*Go-Team* PBN en Trinidad y Tabago, Curso sobre el diseño de los procedimientos PBN en diciembre de 2014; encuesta PBN en agosto de 2014). Se revisaron las rutas de Servicio de Tránsito Aéreo (ATS) en el taller sobre implementación PBN celebrado en marzo de 2015.
- f) **AIM:** El trabajo está en curso. Una misión *Go-Team* se llevó a cabo a Haití en noviembre de 2014 con la asistencia de Cuba y COCESNA. Próximamente se realizará una teleconferencia de seguimiento.
- g) **ATFM** (proporcionado por el Presidente del AN/WG): Se ha nombrado un nuevo Relator, el Sr. Frank McIntosh de Estados Unidos. El Grupo de Tarea ATFM ha estado participando en diferentes actividades tales como la 8ª. Conferencia Mundial de Gestión de Afluencias de Tránsito Aéreo, celebrada en México el 15 de noviembre de 2014, seguida por una teleconferencia el 25 de noviembre de 2014, y también programaron otra teleconferencia el 28 de enero de 2015. Está llevando a cabo una encuesta con el propósito de recolectar información y desarrollar un punto de referencia regional de las iniciativas actuales de la Gestión de Afluencias de Tránsito Aéreo (ATFM) dentro de las Regiones de Norteamérica y el Caribe y la planificación de las futuras actividades e interoperación ATFM entre los Proveedores de Servicios de Navegación Aérea (ANSP). Los resultados de esta encuesta se revisarán en la próxima teleconferencia. Se realizara un taller ATFM en Panamá en Mayo 2015.

2.5 El progreso en la implementación de los planes de acción del ANI/WG se presenta en el **Apéndice** a esta nota. Para la reunión ANI/WG/02, se consolidarán los avances y progresos en la implementación según el RPBANIP y reportando a través de los Formato de Notificación de Navegación Aérea (ANRF) específicamente sobre las metas regionales de cada módulo ASBU del bloque 0.

2.6 El sitio web del ANI/WG presenta más información y detalles de su segunda reunión incluyendo el orden del día provisional, en la siguiente dirección: <http://www.icao.int/NACC/Pages/nacc-regionalgroups-aniwg.aspx>

3. Acciones sugeridas

3.1 La reunión se invita a:

- a) tomar nota de la información suministrada en esta nota sobre el avance del ANI/WG;
- b) revisar los comentarios y avances presentados en los planes de acción del ANI/WG mostrados en el Apéndice a esta nota; y
- c) tomar cualquier acción que consideren convenientes.

ACTIONS PLANS
(available only in English)

ACTION PLAN FOR PBN IMPLEMENTATION

Task Name	Start	Finish	Deliverables/ Entregables	Follow-up/ Seguimiento	Responsibles/ Responsables	Observations/ Observaciones/ Comentarios
a) Implement Collaborative Decision-Making (CDM) process in coordination with stakeholders	Abril 2014	Dec 2016	CDM implementation	To be reviewed by PBN TF and report progress	PBN TF States, Territories, Int. Orgs	
b) Implement PBN airspace concept for oceanic, continental and terminal areas in accordance with the ICAO PBN Manual	Abril 2014	Dec 2016	PBN Airspace concept implementation	To be reviewed by PBN TF and report progress	PBN TF States, Territories, Int. Orgs	
c) Update Letters of Agreement between ATC units	Abril 2014	Dec 2016	Updates LOAs	To be reviewed by PBN TF and report progress	States, Territories, Int. Orgs	
d) Publish regulations and procedures for PBN operational approval	Abril 2014	Dec 2016	PBN operational approval implemented	To be reviewed by PBN TF and report progress	States, Territories, Int. Orgs	
e) Evaluate and implement PBN requirements for ATC automated systems, as required	Abril 2014	Dec 2016	Identify and implement PBN related automated features	To be reviewed by PBN TF and report progress	PBN TF States, Territories, Int. Org	
f) Analyze and enhance air communication, navigation (ground navaids GNSS) and surveillance infrastructure in accordance with PBN requirements	Abril 2014	Dec 2018	Nav aids infrastructure review Introduction of GNSS (GBAS and SBAS- Ionosphere matters)	SACSA Project completed study (IP to be presented) WAAS/GNSS topic to be discussed in ANI/WG/02	SACCSA Project support / WAAS States, Territories, Int. Orgs	NDB Deactivation Target: 2018 Navigation Infrastructure Plan- CAR/SAM ANP Related to surveillance (Situational Awareness) and COM Plans
GNSS mitigations Plannings	Jan 2015	Dec 2018	Mitigation means	WAAS/GNSS topic to be discussed in ANI/WG/02 RAIM Prediction topic to be presented	States, Territories, Int. Orgs	
g) Develop and implement PBN training programme for pilots, ATCOs, operators and regulators, as well as implementation of GNSS technologies	Abril 2014	Dec 2018	Identify training needs and Support training centers and Train Air Plus	PBN TF to support and identify needs for Training Center WG.	Training Centers Working Group States, Territories, Int. Orgs	
h) 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 2014	Dec 2016	Optimize the ATS route structure with RNAV 5/2	To be reviewed by PBN TF and report progress	PBN TF States, Territories, Int. Orgs	
i) Implement CDOs/CCOs for SIDs/STARS in terminal areas based on RNAV 1-2 and RNP 1- /2 navigation specification, as required	Abril 2014	Dec 2016	CDOs/CCOs	To be reviewed by PBN TF and report progress	PBN TF States, Territories, Int. Org	
j) Design and implement PBN APV in accordance with Assembly Resolution A37-11	Abril 2014	Dec 2016	PBN Procedures implementations (APV, etc.)	To be reviewed by PBN TF and report progress	PBN TF States, Territories, Int. Orgs	

k)	Conduct PBN safety assessment based ATC simulations (fast time and/or real time), live trials, etc., as required	Abril 2014	Dec 2016	PBN safety assessment	To be reviewed by PBN TF and report progress	PBN TF States, Territories, Int. Orgs	
l)	Develop performance measurement programme	Abril 2014	Dec 2016	performance measurement programme	PBN TF is talking action for Performance metrics	States, Territories, Int. Orgs	
m)	Develop post-implementation PBN Safety Assessment Programme	Abril 2014	Dec 2016	post-implementation PBN Safety Assessment Programme	To be reviewed by PBN TF and report progress	States, Territories, Int. Orgs	
n)	Monitor implementation progress	Abril 2014	Dec 2018		To be reviewed by PBN TF and report progress	ICAO, States, Territories, Int. Orgs	

ACTION PLAN FOR DEMAND AND CAPACITY MANAGEMENT

Task Name	Start	Finish	Deliverables/ Entregables	Follow-up/ Seguimiento	Responsibles/ Responsables	Observations/ Comentarios/ 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	To be reviewed by ATFM TF and PBN TF and report progress	ATFM TF States, Territories, Int. Orgs	Coordination with PBN
b) Analyze traffic flow problems and develop methods for improving efficiencies on a gradual basis, as needed for: i. Aerodrome capacity ii. ATS capacity iii. ATS letters of agreement	Apr 2014	Dec 2016	traffic flow problems analysis	To be reviewed by ATFM TF and report progress	ATFM TF States, Territories, Int. Orgs	
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	common elements of situational awareness between FMUs	To be reviewed by ATFM TF and define elements	ATFM TF States, Territories, Int. Orgs	
d) Develop methods to establish demand/capacity forecasting	Apr 2014	Dec 2016	methods 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 minimum 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 minimum databases required for decision support and alerting systems	To be reviewed by ATFM TF and report progress	ATFM TF States, Territories, Int. Orgs	
f) Develop regional procedures for efficient and optimum use of aerodrome and runway capacity	Apr 2014	Dec 2016	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	national ATFM Procedures Manual	ATFM Manual available	GREPECAS	
h) Develop regional coordination for implementation of ATFM units	Apr 2014	Dec 2016	regional coordination	To be reviewed by ATFM TF and report progress	ATFM TF States, Territories, Int. Orgs	
i) Develop operational agreements between ATFM units for interregional demand/capacity balancing	Apr 2014	Dec 2016	ATFM LOAs	To be reviewed by ATFM TF and report progress	States, Territories, Int. Orgs	
j) Monitor implementation progress	Apr 2014	Dec 2016		To be reviewed by ATFM TF and report progress	ICAO	

ACTION PLAN FOR FLEXIBLE USE OF AIRSPACE

Task Name	Start	Finish	Deliverables/ Entregables	Follow-up/ Seguimiento	Responsibles/ Responsables	Observations/ Comments- Observaciones/Comentarios
a) Establish civil/military coordination bodies	Apr 2014	Dec 2016	civil/military coordination bodies	To be reviewed by ATFM TF and report progress	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	To be reviewed by ATFM TF and report progress	States, Territories	
c) Conduct a regional review of Special Use Airspace: i. assess use of airspace management processes; ii. improve current national airspace 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 Aispace review	FUA Workshop conducted	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	To be reviewed by ATFM TF and report progress	States, Territories, Int. Orgs, ICAO	
e) Develop performance measurement programme	Apr 2014	Dec 2016	performance measurement programme	To be reviewed by ATFM TF and report progress	States, Territories, Int. Orgs	
f) Monitor implementation progress	Apr 2014	Dec 2016		To be reviewed by ATFM TF and report progress	ICAO	

ACTION PLAN FOR SITUATIONAL AWARENESS IMPROVEMENTS

Task Name	Start	Finish	Deliverables/ Entregables	Follow-up/ Seguimiento	Responsibles/ 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	To be reviewed by AIDC TF and report progress	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	To be reviewed by ADS-B TF and report progress: Surveillance System Plan	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 ADS-B 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	To be reviewed by ADS-B TF and report progress: Surveillance System Plan	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	Being Follow-up by AIDC TF	AIDC TF States, Territories, Int. Orgs	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	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 review by ADS-B TF	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 GOLD and AIDC TF	GOLD TF States, Territories	CPDLC implementation Plan IDEM COM g)

j) Implement additional/advanced automation support tools to increase aeronautical information sharing i. ETMS or similar ii. MET information iii. AIS/NOTAM dissemination iv. 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 system automation	Abril 2014	Dic 2018	Identify and inform of training needs	To be reviewed by ADS-B and AIDC TFs and report progress	States, Territories	
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	To be reviewed by ADS-B and AIDC TFs and report progress	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/ GOLD TFs	ICAO	

COM ACTION PLAN

Task Name	Start	Finish	Deliverables/ Entregables	Follow-up/ Seguimiento	Responsibles/ 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	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	
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	MEVA TMG to report progress	MEVA TMG States, Territories	
g) Implement available technologies in order to facilitate ground and airborne applications (CPDLC, ADS-C, ADS-B)	April 2014	Dec 2018	CPDLC/ ADS-C Implementation	Being track by GOLD TF	GOLD TF States, Territories	CPDLC implementation Plan
h) Implement the necessary communications network for ACDM	April 2015	Dec 2018	Communications for ACDM	Need to de define 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: WP presented on this matter	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: WP presented on this matter	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: WP presented on this matter	States, Territories	
l) Implement frequency spectrum management for protection and new services	April 2014	Dec 2018	•Optimum use of frequencies •No interferences	Ongoing work: WP presented on this matter	States, Territories	COM Lists
m) Support training on the application and implementation of advanced communication related technologies and ATN	April 2014	Dec 2018	Identify and inform of training needs	AMHS TF reported training needs, but need review	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	AMHS TF/ MEVA TMG to identify needs	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	Start	Finish	Deliverables/ Entregables	Follow-up/ Seguimiento	Responsibles/ Responsables	Observations/ 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	AIM TF to report 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 <i>Global Air Traffic Management Operational Concept</i> ; 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	-----

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