

NAM/CAR AIR NAVIGATION IMPLEMENTATION WORKING GROUP (ANI/WG) TASK FORCES FIRST AERONAUTICAL INFORMATION MANAGEMENT (AIM), FLIGHT PLAN (FPL) ERROR MANAGEMENT AND AIR TRAFFIC SERVICES INTERFACILITY DATA COMMUNICATION (AIDC) MEETING

AIM/FPL/AIDC/1

Final Report

Tegucigalpa, Honduras, 30 October - 3 November 2017

Prepared by the Secretariat

December 2017

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of ICAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

List of Contents

ntents		Page
List o	f Contents	i-1
Histo	rical	ii-1
ii.1	Place and Date of the Meeting	ii-1
ii.2	Opening Ceremony	ii-1
ii.3	Officers of the Meeting	ii-1
ii.4	Working Languages	ii-1
ii.5	Schedule and Working Arrangements	ii-1
ii.6	Agenda	ii-2
ii.7	Attendance	ii-2
ii.8	Draft Decisions	ii-2
ii.9	List of Working and Information Papers	ii-3
List o	f Participants	iii-1
	Contact Information	iv-1
Agen	da Item 1	1-1
Appro	oval of Provisional Agenda	
Agen	da Item 2	2-1
Aeror	nautical Information Management (AIM) Task Force Report	
Agen	da Item 3	3-1
Flight	Plan (FPL) Error Management and Air Traffic Services Inter-Facility Data	
	nunication (AIDC) Task Force Report	
Agen	da Item 4	4-1
Other	Business	

HISTORICAL

ii.1 Place and Date of the Meeting

The First Aeronautical Information Management (AIM), Flight Plan (FPL) Error Management and Air Traffic Services Inter-Facility Data Communication (AIDC) Meeting (AIM/FPL/AIDC/1) was held at the *Corporación Centroamericana de Servicios de Navegación Aérea* (COCESNA) in Tegucigalpa, Honduras, from 30 October to 3 November 2017.

ii.2 Opening Ceremony

Mr. Raúl Martínez, Regional Officer, Aeronautical Information Management (RO/AIM) of the North American, Central American and Caribbean (NACC) Regional Office of the International Civil Aviation Organization (ICAO) provided opening remarks and thanked COCESNA for hosting the meeting. Mr. Alfredo Santos Mondragón, AIM Chief, COCESNA, and Mr. Heriberto Sierra Pavón, Air Navigation Chief, Agencia Hondureña de Aviación Civil, welcomed the participants to Honduras and officially opened the meeting.

ii.3 Officers of the Meeting

The AIM/FPL/AIDC/1 Meeting was held with the participation of the AIM and AIDC/FPL Task Forces rapporteurs, Mrs. Natasha Leonora Belefanti, Curaçao, and Mr. Fernando Casso, Dominican Republic, respectively. Mrs. Belefanti and Mr. Casso chaired the meeting plenary, which was held from 30 to 31 October 2017: the AIM Task Force and the AIDC/FPL Task Force. Mr. Raúl Martínez, RO/AIM and Mrs. Mayda Ávila, Regional Officer, Communications, Navigation, and Surveillance (RO/CNS), served as Secretaries of the Meetings.

ii.4 Working Languages

The working language of the Meeting was English and working papers, information papers and presentations were available to participants in said language.

ii.5 Schedule and Working Arrangements

It was agreed that the working hours for the sessions of the meeting would be from 09:00 to 16:00 hours daily with adequate breaks. The first two days of the meeting, the AIM/TF and the AIDC/FPL/TF met in plenary and the following days both task forces held jointly their meetings.

ii.6 Agenda

Agenda Item 1: Approval of Provisional Agenda

Agenda Item 2: Aeronautical Information Management (AIM) Task Force Report

Agenda Item 3: Flight Plan (FPL) Error Management and Air Traffic Services Inter-Facility Data

Communication (AIDC) Task Force Report

Agenda Item 4: Other Business

ii.7 Attendance

The Meeting was attended by 13 States/Territories from the NAM/CAR Regions, 3 International Organizations and 5 representatives of the industry, totalling 38 delegates as indicated in the list of participants.

ii.8 Draft Decisions

The Meeting recorded its activities as Draft Decisions as follows:

DRAFT

DECISIONS: Activities requiring endorsement by the NAM/CAR Air Navigation

Implementation Working Group (ANI/WG) or the NACC Working Group

(NACC/WG).

List of Draft Decisions

Number	AIM
1/1	ROADMAP STATUS FORM
1/2	CONTINUATION OF AIS TO AIM TRANSITION
1/3	AMENDMENTS TO ANNEX 1
1/4	TRAINING CURRICULA
1/5	MOS AND SLA TEMPLATES

Number	AIDC/FPL
1/6	IMPLEMENTATION OF THE FLIGHT PLAN PROCESSING PROCEDURE
1/7	MONITORING AND REPORTING ERRORS IN FLIGHT PLANS
1/8	IMPROVE FEEDBACK BETWEEN AIRLINES AND ATS UNITS
1/9	REGIONAL PROCEDURE DRAFT FOR FLIGHT PLAN PROCESSING
1/10	DATA FOR ANALYSIS OF THE ERROR IN FLIGHT PLANS
1/11	MAINTENANCE OF THE AIRCRAFT TYPE DATABASE

ii.9 List of Working and Information Papers

The Meeting documentation is available at:

https://www.icao.int/NACC/Pages/meetings-2017-aimfpl.aspx

		WORKING PAPERS		
Number	Agenda Item	Title	Date	Prepared and Presented by
WP/01	1	Review and Approval of the Meeting Agendas, Working Method and Schedule of the Meeting	20/10/17	Secretariat

		Information Papers		
Number	Agenda Item	Title	Date	Prepared and Presented by
IP/01REV		List of Working, Information Papers and Presentations	20/10/17	Secretariat

LIST OF PARTICIPANTS

ANTIGUA AND BARBUDA JAMAICA

Luana Issac Jeffery Gallow

Maxine Allen

BAHAMAS

Nicaragua

Rashad Penn Colyn Brown

Eleane José Salguera Montes

Luis Mahmud Tapia

BARBADOS

BELIZE

TRINIDAD AND TOBAGO

Shirley lanthe Ford

Ricky Bissessar Nirmala Nohar

Gilberto Orlando Torres

UNITED STATES

COSTA RICA

Scott Leis
Dan Eaves

Bernardita Mora Segura

COCESNA

CURAÇAO

Jenny Lee

Natasha Leonora-Belefanti

Alfredo Santos Mondragon

DOMINICAN REPUBLIC

IATA

Rubén Mercado

Marco Vidal Macchiavello

Julio Rodríguez Alcántara Fernando A. Cassó Rodríguez

IFAIMA

EL SALVADOR

Luis Cruz Alburqueque

AEROLINEAS EJECUTIVAS

José Balmaceda Contreras

HONDURAS

Bob Oberstar

Heriberto Sierra Pavón Harold Zerón Villatoro **AMERICAN AIRLINES**

Hector A. Hernández Escobar

Michael Beasley Brian Gonzalez

Omri Amaya Omar Aybar

Elia Patricia Sánchez Salgado

iii - 2

BUREAU VERITAS UPS AIRLINES

Marlon Aldrete William Steel

JET BLUE ICAO

Alberto Ortega Raúl Martínez John Martin Mayda Ávila

UNITED AIRLINES

Maria Flores

CONTACT INFORMATION

Name / Position	Administration/Organization	Telephone / E-mail
	Antigua and Barbud	la
Luana Issac Coordinator AIS	V.C. Bird Air Traffic Services	Tel. +268 562 5235 E-mail luana.issac@ab.gov.ag
	Bahamas	
Rashad Penn AIS/FSS Officer		Tel. 1242 326 0339 E-mail lilnassau@yahoo.com
Colyn Brown Operations Officer/O.I.C. AIS	Bahamas/Civil Aviation Department	Tel. + 1 242 397 4713 E-mail colyn55@live.com
	Barbados	
Shirley lanthe Ford Chief Aeronautical Information Services Officer	Civil Aviation Department	Tel. +1 246 428 0952 E-mail shirley.ford@barbados.gov.bb
	Belize	
Gilberto Orlando Torres Deputy Director CAA	Belize Department of Civil Aviation	Tel. +501-225-2014 E-mail gilberto.torres@civilaviation.gov.bz
	Costa Rica	
Bernardita Mora Segura Técnico AIS/MAP	Dirección General de Aeronáutica Civil	Tel. (506) 2443-1648 E-mail bmora@dgac.go.cr
	Curaçao	
Natasha Leonora - Belefanti Chief AIS/ARO	DC-ANSP	Tel. (+5999) 839 3514 E-mail n.leonora-belefanti@dc- ansp.org
	Dominican Republi	с
Rubén Mercado Encargado Depto. Vigilancia Seg. Operacional	Instituto Dominicano de Aviación Civil (IDAC)	Tel. +1 809 796 5969 E-mail ruben1675@hotmail.com
Julio César Rodríguez Alcántara Encargado Departamento Gestión de Información Aeronáutica	IDAC	Tel. +809 274 4322 ext2301 E-mail julio.rodriguez@idac.gov.do

Name / Position	Administration/Organization	Telephone / E-mail
Fernando A. Cassó Rodríguez Radar Systems Manager	IDAC	Tel. +1 809 274 4322 ext2084 E-mail fernando.casso@idac.gov.dc
	El Salvador	
José César Balmaceda Contreras Inspector AIS	Autoridad de Aviación Civil del Salvador	Tel. +503 2565 4575 E-mail jbalmaceda@aac.gob.sv
	Honduras	<u>i</u>
Heriberto Sierra Pavón Jefe de Navegación Aérea	Agencia Hondureña de Aviación Civil (AHAC)	Tel. + 504 2233 1104 E-mail hsierra@ahac.gob.hn
Harold Alexander Zerón Villatoro Colaborador SMS Honduras	AHAC	Tel. +504 8737 3882 E-mail hzeron19@gmail.com
Hector Alexander Hernandez Escobar Jefe Depto Vigilancia ANS	AHAC	Tel. +504 2234-02-63 ext 2052 E-mail halex.2012@gmail.com; ahernandez@ahac.gob.hn
Omar Aybar	AHAC	Tel. E-mail omaraa@gmail.com
Elia Patricia Sánchez Salgado Encargada de Publicaciones	AHAC	Tel. +504 2233 1104 E-mail esanchez@ahac.gob.hn
Omri Amaya	UNAH	Tel. E-mail omri.amaya@unah.edu.hn
	Jamaica	
Jeffery Gallow AIS Supervisor	Jamaica Civil Aviation Authority	Tel. +1 876 960-3948/932-7193 E-mail jgallow@jcaa.gov.jm
Maxine Allen Manager AlS	Jamaica Civil Aviation Authority	Tel. +1 876 960-3948 ext 3127 E-mail maxine.allen@jcaa.gov.jm
	Nicaragua	
Eleane José Salguera Montes Control de Calidad de la Dirección de Navegación Aérea	Instituto Nicaragüense de Aeronáutica Civil (INAC)	Tel. +505 227-68580 Ext. 1580 E-mail aisvof@inac.gob.ni

		iv – 3
Name / Position	Administration/Organization	Telephone / E-mail
Luis Mahmud Tapia AIM	INAC	Tel. E-mail
	Trinidad and Tobag	<u>.</u>
Ricky Bissessar Unit Chief-AIM Operations	Trinidad and Tobago Civil Aviation Authority (TTCAA)	Tel. + 868 669 4806 E-mail rbissessar@caa.gov.tt
Nirmala Nohar Unit Chief AIM Quality Assurance (Ag)	TTCAA	Tel. 1868 668 8222 ext 2563 E-mail nnohar@caa.gov.tt
	United States	<u>i</u>
Scott Leis Aeronautical Information Specialist	Federal Aviation Administration (FAA)	Tel. +202 267 3641 E-mail scott.leis@faa.gov
Dan Eaves Air traffic Control Specialist/ATC Requirements	FAA	Tel. +1 202 267 4726 E-mail dan.eaves@faa.gov
	COCESNA	i.
Jenny Lee Instructora de Tránsito Aéreo	COCESNA	Tel. +504 2283 4750 E-mail jenny.lee@cocesna.org
Alfredo Santos Mondragón Jefe AIM	COCESNA	Tel. +504 2283 4769 E-mail alfredo.mondragon@cocesna.org
	IATA	
Marco Vidal Macchiavello Manager Safety and Flight Operations – The Americas	IATA	Tel. +1 786 536 3476 E-mail vidalm@iata.org
	IFAIMA	

Name / Position	Administration/Organization	Telephone / E-mail
Luis Fernando Cruz Alburqueque Director Regional SAM – IFAIMA	IFAIMA	Tel. +519 691 06062 E-mail luiscruza@ifaima.org
	Aerolineas Ejecutiva	ns
Bob Oberstar	Delta Airlines	
	American Airlines	
Michael Beasley	American Airlines	
Brian Gonzalez Air Traffic Systems Manager – Latin America	American Airlines	Tel. +1 267-251-9031 E-mail Brian.Gonzalez@AA.com
	Bureau Veritas	
Marlon Aldrete Business Development Specialist	Bureau Veritas Certification North America	Tel. +281 249 4524 E-mail marlon.aldrete@us.bureauveritas.com
	Jet Blue	
Alberto Ortega Manager, International Operations	JetBlue	Tel. (718) 709-3595 E-mail Reynaldo.Ortega@jetblue.com
John Martin	Jet Blue	
	United Airlines	<u> </u>
Maria Flores	United Airlines	
	UPS Airlines	
William Steel	UPS	
	ICAO	
Raúl Martínez Regional Officer, Aeronautical Information Management	ICAO NACC Regional Office	Tel. + 52 55 5250 3211 E-mail rmartinez@icao.int

AIM/FPL/AIDC/1 List of Participants – Contact Information

	List of Participants – Contact in	Tormation	iv – 5
Name / Position	Administration/Organization	Telephone / E-mail	
Mayda Ávila Regional Officer Communications, Navigation and Surveillance	ICAO NACC Regional Office	Tel. +52(55) 5250 3211 E-mail mavila@icao.int	

Agenda Item 1: Approval of Provisional Agenda

- 1.1 The Meeting was invited to approve the provisional agenda (WP/01), working method, and schedule of the AIM/FPL/AIDC/1 Plenary Meeting. With reference to IP/01 with the list of associated documents and presentations, the approved meeting agenda, decisions and/or recommendations are presented in this report.
- 1.2 For the specific AIM Task Force and AIDC Task Force meetings, part of the AIM/FPL/AIDC/1 Meeting, the agendas were modified, merging some items to optimize the discussion and results. The resulting Task Forces Agenda Items are included in the respective parts of this report.

Agenda Item 2: Aeronautical Information Management (AIM) Task Force Report

2.1 This Agenda Item is presented under **Appendix A** to this report.

Agenda Item 3: Flight Plan (FPL) Error Management and Air Traffic Services Inter-Facility Data Communication (AIDC) Task Force Report

3.1 This Agenda Item is presented under **Appendix B** to this report.

Agenda Item 4: Other Business

- 4.1 The next AIDC Task Force (TF) and the FPL Monitoring Ad hoc Working Group Meeting was proposed for May 2018, on a venue to be defined.
- 4.2 The AIM Task Force proposed other dates, supported by the AIM Rapporteur suggested the next meeting for the end of August, September or October 2018, on a venue to be defined.
- 4.3 The importance of having a user meeting was pointed out by the AIM TF Rapporteur. Together with the Service Level Agreement (SLA), States are recommended to have regular user meetings, which include primarily the AIM Data Originators as well as key users (pilots, flight dispatchers, ATCs etc.), in order to remain efficient, accurate and timely.

APPENDIX A

AERONAUTICAL INFORMATION MANAGEMENT (AIM) TASK FORCE REPORT

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of ICAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

List of Contents

nts	
List o	f Contents
Histo	rical
ii.1	Agenda
ii.2	Draft Decisions
ii.3	List of Working Papers, Information Papers and Presentations
•	da Item 1 ted Status on States (AIM)
_	da Item 2 w and Amendment to set target d Transitions AIS to AIM
Agen	da Item 3
Revie staff	da Item 3
Revie staff amer Agen Final	ew of Draft Doc 9991 and 7192 Part E3. Discussion and conformation of the AIM profile level (Special required trainings in ARO). Inclusion/proposal for
Reviestaff amer Agen Final Reco	w of Draft Doc 9991 and 7192 Part E3. Discussion and conformation of the AIM profile level (Special required trainings in ARO). Inclusion/proposal for adment to Annex15/Annex 1 da Item 4
Revies staff amer Agen Record Agen QMS	w of Draft Doc 9991 and 7192 Part E3. Discussion and conformation of the AIM profile level (Special required trainings in ARO). Inclusion/proposal for adment to Annex15/Annex 1 da Item 4
Revie staff amer Agen Final Recoi Agen QMS Domi	w of Draft Doc 9991 and 7192 Part E3. Discussion and conformation of the AIM profile level (Special required trainings in ARO). Inclusion/proposal for adment to Annex15/Annex 1 da Item 4
Reviestaff amer Agen Final Recon Agen QMS Domi	w of Draft Doc 9991 and 7192 Part E3. Discussion and conformation of the AIM profile level (Special required trainings in ARO). Inclusion/proposal for adment to Annex15/Annex 1 da Item 4stated Dates for the AIS to AIM transition (IFAIMA in KAMPALA mmendations) da Item 5implementation workshop outcome survey review/presentation (Cuba/ Mexico,
Reviestaff amer Agen Final Recon Agen QMS Domi	w of Draft Doc 9991 and 7192 Part E3. Discussion and conformation of the AIM profile level (Special required trainings in ARO). Inclusion/proposal for adment to Annex15/Annex 1 da Item 4
Revies staff amer Agen Record Agen Agen SWIM	w of Draft Doc 9991 and 7192 Part E3. Discussion and conformation of the AIM profile level (Special required trainings in ARO). Inclusion/proposal for adment to Annex15/Annex 1 da Item 4
Reviestaff amer Agen Final Recon Agen QMS Domi Agen SWIN Agen Revies	w of Draft Doc 9991 and 7192 Part E3. Discussion and conformation of the AIM profile level (Special required trainings in ARO). Inclusion/proposal for adment to Annex15/Annex 1 da Item 4

Contents	Page
Agenda Item 10	. A10-1
Safety Risk Analysis	
Agenda Item 11	. A11-1
AIM Implementation Regional Plan Review	
Agenda Item 12	. A12-1
Papers/Reports to submit to ICAO	

HISTORICAL

ii.1 Agenda

Agenda Item 1: Updated Status on States

Agenda Item 2: Review and Amendment to set target Transitions AIS to AIM

Agenda Item 3: Review of Draft Doc 9991 and 7192 Part E3 draft review. Discussion and

conformation of the AIM staff profile level (Special required trainings in ARO).

Inclusion/proposal for amendment to Annex15/Annex 1.

Agenda Item 4: Final stated Dates for the AIS to AIM transition (IFAIMA in KAMPALA

Recommendations)

Agenda Item 5: QMS implementation workshop outcome survey review/presentation

(Cuba/Mexico, Dominican Republic, Certifying company ISO 9001-2008 AIM

QMS))

Agenda Item 6: SWIM Presentation/Workshop AIXM/WIXM Interoperability - Roadmap

Development

Agenda Item 7: Review of Survey Results Report

Agenda Item 8: AIM SLA Standardization template

Agenda Item 9: Amendment 40 to Annex 15- PANS AIM – Doc 8126 (Vol 1 to 4)

Agenda Item 10: Safety Risk Analysis

Agenda Item 11: AIM Implementation Regional Plan Review

Agenda Item 12: Papers/Reports to submit to ICAO

ii.2 Draft Decisions

The Meeting recorded its activities as Draft Decisions as follows:

DRAFT

DECISIONS: Activities requiring endorsement by the NAM/CAR Air Navigation

Implementation Working Group (ANI/WG) or the NACC Working Group

(NACC/WG).

List of Draft Decisions

Number	AIM	Page
1/1	ROADMAP STATUS FORM	A1-1
1/2	CONTINUATION OF AIS TO AIM TRANSITION	A2-1
1/3	AMENDMENTS TO ANNEX 1	A3-2
1/4	TRAINING CURRICULA	A3-3
1/5	MOS AND SLA TEMPLATES	A8-1

ii.3 List of Working Papers, Information Papers and Presentations

		WORKING PAPERS		
Number	Agenda Item	Title	Date	Presented by
WP/04	3	AIM Training	20/10/17	Secretariat

		INFORMATION PAPERS		
Number	Agenda Item	Title	Date	Presented by
IP/02	2	Update on the FAA's AIS-AIM Transition	9/10/17	United States
IP/03	5	Implementation and Certification of a QMS in the AM Department	27/10/17	Trinidad and Tobago

Presentations			
Number	Agenda Item	Title	Presented by
3	1	GANP (5th Edition)	Secretariat
4	11	ICAO Support in AIM Implementation	Secretariat
5	2	Roadmap for the Transition from AIS to AIM	Secretariat
7	6	Global Air Navigation AIM/SWIM/AIDC Consideration	Secretariat
8	11	IDS AIM Suite	IDS
9	2	Digital Notam	IDS
10	4	IFAIMA Global AIM 2017	IFAIMA
11	3	AIM Training	Secretariat
14	4	The Global Voice of AIM	IFAIMA
15	6	COCESNA's Flight Plan Statistics	COCESNA

Agenda Item 1: Updated Status on States (AIM)

- 1.1 The status of AIM implementation by States was discussed during the review of the Regional Plan (Agenda Item 12).
- 1.2. Various Agenda Items (3, 8, 9 and 12) aided in better understanding of the States' position as it relates to the transition from AIS to AIM.
- 1.3 In that sense, the Meeting proposed the following draft decision:

DRAFT DECISION AIM/FPL/AIDC/1/1

ROADMAP STATUS FORM

That,

- a) the AIM TF create a fillable Roadmap Status form by 30 November 2017; and
- b) AIM Units submit the Roadmap Status by 31 March 2018, based on the results presented by the AIM/TF, which will provide more accurate information on the status of the States.

Agenda Item 2: Review and Amendment to set targeted Transitions AIS to AIM

- During the AIM/TF's separate discussion sessions, States and participants were asked to describe what was understood under various AIM roadmap steps, which already have been or still had to be taken. Steps such as Quality Management System (QMS), Electronic Terrain and Obstacle Data (eTOD), Digital NOTAM, Electronic Aeronautical Information Publication (eAIP) and eCharts were discussed and explained, as necessary. Furthermore, clarity into what one can expect from the type of available systems and possibilities were considered in presentations P/08, P/09 and P/16, under agenda items 6 and 7.
- 2.2. AIM/TF Members were urged to fill out the form that will be sent by the Rapporteur by the end of December 2017. This form must be filled out and submitted by 31 January 2018.
- 2.3. The Rapporteur stressed out the importance of accurately specifying where each NAM/CAR State stands within each step in order to get a clearer view on the actual and real status of each State within the transition. Survey results show that although a State is stating that it has completed Phase 2, there is no process or procedure in place to show/verify how data is being monitored, published accordingly or that there is an eAIP (interactive/interoperable) in place.
- 2.4. The Rapporteur requested States to identify the assistance needed within the transition steps by each State, so that ICAO can start planning and scheduling the needed assistance accordingly. Therefore the following draft decision was extracted:

DRAFT DECISION AIM/FPL/AIDC/1/ 2

CONTINUATION OF AIS TO AIM TRANSITION

That, the States' AIM Units request the AIM/TF more assistance to continue the transition and propose new target dates for the region.

Agenda Item 3:

Review of Draft Doc 9991 and 7192 Part E3 Draft Review. Discussion and Conformation of the AIM Staff Profile Level (Special Required Trainings in ARO). Inclusion/Proposal for amendment to Annex15/Annex 1

- 3.1 AIM (AIS/ARO/FPL) personnel entry level/educational background was discussed under this agenda Item. It has been recognized that most current AIM (AIS/ARO/FPL) personnel in the NAM/CAR Regions, do not hold a "technical" background/knowledge within aviation operations. Most personnel has been placed into the AIM Unit without any previous training, or aviation knowledge in any field in other cases. Considering the fact that AIM personnel deals with safety critical information, it is therefore necessary that AIM personnel have a background check, sufficient educational qualifications as follows:
 - a) AIS: Bachelor/Graduate or equivalent (comparable) degree and/or working level experience;
 - b) Air Traffic Services Reporting Office (ARO)/FPL: Graduate/College/High school equivalent (comparable) degree and/or working level experience, etc.
 - c) Persons selected to operate within the AIM unit must as a minimum be able to:
 - work with computerised systems and/or programmes,
 - understand mathematical calculations (geodesic calculations),
 - understand the principals of ATS and the basic infrastructure for air navigation (such as the use and/or purpose of navigational aids, aerodrome operations (airside), weather information, etc.),
 - read (and when applicable, manage) aeronautical charts,
 - understand maps, and
 - PANS OPS principles

Note: AIM personnel are there to support ATS (ATM, CNS and automation) in procedures content etc. Understanding of Air Law, ATS, air navigation and other topics is required in order to carry out the numerous AIM safety critical tasks. With these aspects stated, it is clear that AIM personnel should undergo a pre-acceptance check, interview(s) and psychological test, which will determine if the person is qualified to apply for, or be permitted to start AIM basic training and work under pressure.

- 3.2 It has come to the attention of the AIM/TF, the AIM Rapporteur and the AIDC/FPL TF that training within AIM is a major concern. Multiple training curricula were presented for basic training by a couple of States (Barbados, Curaçao, Trinidad and Tobago and United States). The training module used by Curaçao appeared to be the most comprehensive. Therefore, the AIM/TF Rapporteur and ICAO decided to present it as an example in the standard Curriculum for AIM Basic Training. The TF will have two weeks during which to view and comment this proposed curriculum in order for the Rapporteur to officially submit it to ICAO.
- 3.3 Once in effect, it is necessary that States have the flexibility to tailor the officialised training curriculum to their own training modules to meet their unique needs, by using the appropriate subjects from the officialised training curriculum's modules 1 and 2 for basic training in their respective

States. A module 3 was also mentioned which is intended for the basic training for a Management position within AIM. It is the intention to go through (required subjects) modules 1 and 2 (and if applicable 3) in that particular order, when undergoing the basic training. During the training period, the personnel is considered to be Trainees.

- 3.4 States have the flexibility to adjust or remove subjects that are non-applicable for their Basic Training in certain instances. For example, if the trainee is being considered for employment only in an eTOD group, they may not be required to take training on meteorology. Nevertheless, the basic training elements of modules 1 and 2 shall be followed for all applicable fields/subjects to prepare the trainee for his/her tasks ahead.
- 3.5 It is a recommendation from the AIM/TF that the Basic AIM Training be completed by AIM (AIS/ARO/FPL) personnel, including pre-exam test(s) and exams (which must be passed with a minimum 60-75%) before a trainee is officially accepted as an AIS/ARO/FPL Officer. The Basic Training should include English language proficiency (Annex 1 Personnel Licensing (see §1.2.9 Language Proficiency and Appendix A Language Proficiency Rating Scale for proper level); Doc 9835 AN/453 Manual on the Implementation of ICAO Language Proficiency Requirements). Since some AIM personnel deals with Flight Crew, ATCs and Flight dispatchers, then it will be required level 4 for AIM Personnel.
- Refresher training is recommended by the AIM Rapporteur at maximum intervals of two (2) years. I.e.: if the Basic training was in August 2017, then Refresher Training would be in August 2019. (If the licencing or certification of AIM personnel is adopted as a requirement, then refresher training should also be required (see 4.6 below).
- 3.7 Refresher training should cover Basic Training subjects which are not constantly used, or which the AIM Department Manager considers lacking within the AIM unit.
- 3.8 In addition, practical training on systems, lessons learned and case studies on commonly identified errors must be taken into account, when creating the refresher training plan.
- 3.9 Airlines presented their concerns with regards to Flight Plan (FPL) handling for the AIM (AIS / ARO / FPL) personnel due to numerous errors occurring in FPLs. Nevertheless, the AIM Rapporteur expressed concerns that automated systems also need to be up-to-date within ANSPs, in order to verify the errors more accurately and thus facilitate more effective and efficient correction.
- 3.10 The AIM Rapporteur also expressed her support for licensing of AIM (AIS/ARO/FPL) personnel, particularly for the reasons of dealing with flight crew, flight dispatchers, and aviation safety critical data and information. IFAIMA also supported the proposal of licensing of AIM personnel. Utilizing a similar format (adjusted to their functions and tasks) as presented in ICAO Annex 1, Chapter 4, the AIM/TF will develop a proposal to submit to ICAO. Therefore, the following draft decision was extracted from the discussion:

DRAFT DECISION AIM/FPL/AIDC/1/3

AMENDMENTS TO ANNEX 1

That, AIM TF submit Annex 1 amendment proposals by the end of March 2018. The proposal shall be presented to ICAO by 30 March 2018 or by the 2nd AIM/AIDC/FPL meeting in 2018, whichever is earlier.

- 3.11 The Rapporteur pointed out that once basic training has been received and tests/exams have been completed, the next step would be the On-the-Job-Training (OJT). A one-time period of 6 to 10 weeks of OJT is suggested to be conducted once modules 1 and 2 have been completed successfully.
- 3.12 Once both Basic Training and OJT are completed, the AIM Trainee can be considered to be an official AIM Officer by the company/ANSP. If the company/ANSP requires additional application processes to be carried out, it is suggested to have these done prior to investing in Training etc. for each potential candidate. A structured OJT programme shall be suggested, inclusive of document performance approvals to ICAO, together with the curriculum proposal, in this sense the meeting agreed the following draft decision:

DRAFT DECISION
AIM/FPL/AIDC/1/4

TRAINING CURRICULA

That, the AIM/TF propose training curricula by 31 December 2017.

Agenda Item 4: Final Stated Dates for the AIS to AIM Transition (IFAIMA in KAMPALA Recommendations)

- 4.1 IFAIMA, gave an instructive presentation, which discussed the use of various staff designations relating to regional AIM personnel, and recommended the adoption of a standard function title for AIM Personnel. Examples of suggested function title for AIM personnel given by IFAIMA were AIMS (AIM Specialist), AIM Officer, etc. where for the word "AIM" the word "AIS" or "ARO" or "FPL", could be used. The AIM Rapporteur suggested that the choice of a proper function title for AIM personnel be discussed within the AIM/TF at a later stage.
- 4.2 IFAIMA also shared its point of view on training and the necessity to have a standardized training curriculum, to which States have to comply with, in order to have training relating to serve the twelve different functions associated with the AIS (ATC -7, FIS-5 MET-18...).
- 4.3 Language (English proficiency), Human Factors Training, Certification and Licensing were brought to the attention of ICAO and the AIM/TF as a requirement for AIS/AIM/ARO personnel who interact with operational aviation employees (pilots, flight dispatchers and ATCs), as these persons must be able to communicate accurately, adequately and on the same level.
- 4.4 The position of States within the transition from AIS to AIM was also presented and discussed. IFAIMA is interested in viewing each State's current position in the transition regarding each step, in order to get a better global view on the progress in the transition.
- 4.5 IFAIMA invited the AIM/TF and participants of the meeting to the IFAIMA GLOBAL AIM conference, which will be held from 22 to 24 May 2018 in Dominican Republic, for more information please check the following web link:

https://drive.google.com/file/d/0B-ifAoxKVRtxSk5JM08wM0N6d2M/view



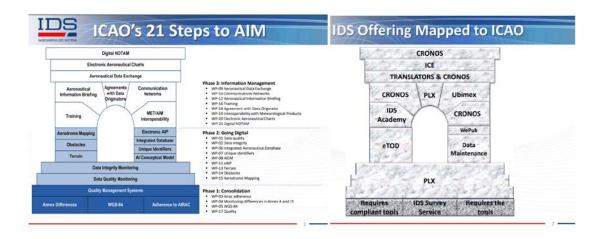
Agenda Item 5: QMS implementation Workshop Outcome Survey Review/Presentation (Cuba/Mexico, Dominican Republic, Certifying company ISO 9001-2008 AIM QMS)

- Bureau VERITAS gave an informative presentation on the QMS. The presentation focused on the ISO 9001:2015 Standard. The AIM/TF was informed that AIM units/organisations already certified to the ISO 9001:2008 Standard must upgrade to the ISO 9001:2015 version by 14 September 2018 in order to avoid the lapsing of their existing certification and thus having to be re-certified at additional costs.
- With regard to QMS for AIM, the participants and TF requested ICAO to clarify the QMS requirements in more detail as they relate to the need for ISO certification, given that this is just a Recommendation in ICAO Annex 15. In addition, the word 'implemented' does not directly state that ISO 9001 Certification is required. Nevertheless, in order to prove that the QMS is implemented, a QMS certifying company will go through audits to prove that which is relevant to the ISO, in this case 9001:2015.
- 5.3 Trinidad and Tobago, presented its experience while implementing the QMS and obtaining ISO 9001 certification. The information shared brought great insight regarding the process, which an organisation undergoes, including challenges faced and lessons learned, in order to attain ISO 9001 certification.
- All States present were asked for information on their current QMS status and/or plans for implementation. It should be noted that most States DO NOT have the QMS implemented or certified. Clarity on whether ISO 9001 Certification is needed is highly required from ICAO.
- 5.5 The required documentations were also discussed and the Manual of Standards (MoS) AIM was presented by the Rapporteur. Examples of the table of contents to the MoS (CAAS MoS and DC-ANSP Curação) were shown as a guide for States to create their own MoS.
- As part of the QMS and SMS, it is of high priority that AIM units have a MoS in place. The MoS defines the units' procedures and basic information. Nevertheless, the GPS and DPS also relate to the MoS. The GPS describes the General Processes and the DPS describes the Detailed Processes. Therefore, the MoS will not include processes. Instead, like Standard Operating Procedures (SOP), the MoS will include the procedures.
- 5.7 The Rapporteur expressed the importance of having an official and standard MoS template for AIM to be approved by ICAO and available on the ICAO Portal website. The MoS of CAAS and DC-ANSP are based on a model presented by ICAO, including add-ons. The ICAO version is not presently an official template which includes a reference number, etc. Therefore, this proposal was presented. The AIM/TF will review the MoS template proposal by 24 November 2017 prior to submission to ICAO by 30 November 2017.

5.8 ICAO informed of the planned QMS event that will be held in the ICAO NACC Regional Office, Mexico City, Mexico from 14 to 17 May 2018, "Aeronautical Information Management (AIM) Data Integrity and Quality Monitoring Workshop". The necessity for a QMS workshop was made clear during this meeting.

Agenda Item 6: SWIM Presentation/Workshop AIXM/WIXM Interoperability- Roadmap Development

IDS gave a very informative presentation on Aeronautical Information Exchange Model (AIXM) and System Wide Information Management (SWIM). It was very interesting to see how to view the ICAO AIM Roadmap in comparison to the required products/systems/software relating to each element in all three (3) Phases of the Roadmap. IDS introduced a better concept and model to States, which will now assist in selection and planning/scheduling the acquisition of appropriate systems/programmes etc. This insight provides for better planning and guidance on achieving the Roadmap steps.



- 6.2 Digital NOTAM was also presented by IDS. Explanation on what is truly expected, how to view the functionality of the Digital NOTAM, the linkage to the AIP Data (whereby Data Monitoring etc. is key), and SWIM was also explained.
- 6.3 Because of the information received from this presentation and the Agenda Item 6 presentation, the AIM Rapporteur expressed to the members of the AIM/TF, as well as to the rest of the meeting participants, that it is essential to follow the roadmap logically and to have systems in place, so that all steps of the Roadmap can be completed accordingly.

Agenda Item 7: Review of Survey Results Report

- 7.1 This Survey was created in order to evaluate the proper management of the Integrated Aeronautical Information Package (IAIP) and NOTAM products by the NACC AIS Units and to obtain productive, efficient and constructive information for the AIM Task Force members and States to implement. Using an online tool as well as PDF version of the Survey, each participating State in the NACC Region completed and submitted the Survey.
- 7.2 The Survey covered the areas of the IAIP (Aeronautical information Publication (AIP), Supplement (SUP), Aeronautical Information Circular (AIC)) and NOTAM. The proper use and promulgation of these products was the main target.
- 7.3 The objective of the Survey was to gain insight into the efficiency, safety and accuracy of the AIS operations in its support to ATS and to determine States' understanding of the use of the various AIS products (including eAIP), taking into account quality consideration (e.g. accuracy and timeliness of data provision) by data originators. It also provided a means of obtaining information on the status of States' transition from AIS to AIM in relation to the twenty-one elements in the Roadmap, including QMS, SLAs, etc.
- 7.4 The graphs of the Survey Results can be viewed via this link on ICAO's website:

https://www.icao.int/NACC/Documents/Meetings/2017/AIMFPL/AIMFPLAIDC-AIMSurveyResults.pdf

Agenda Item 8: AIM SLA Standardization template

- 8.1 The importance of step 18 in phase 3 of the Roadmap of the Transition from AIS to AIM was discussed, namely the 'Agreements with Data Originators'.
- 8.2 Examples of an AIM Service Level Agreement (SLA) with data originators were presented by the Rapporteur, in order to inform those present on the contents of an SLA. It should not be confused with a Letter of Agreement (LOA), which is a document of a non-operational nature, but rather of an executive nature. The SLA must remain on an operational AIM level, covering procedures, expectancies from both parties and responsibilities.
- 8.3 The SLA example presented was based on an old ICAO template that was found. This template was updated with the new and current State developments within AIS (AIM).
- 8.4 A template of an up-to-date SLA will be submitted to ICAO by the Rapporteur, to be used as a standard and official document for States.
- 8.5 The AIM Rapporteur that most complaints between AIM units/officers and data originators can be resolved by the use of a SLA. With an SLA in place both sides are then obligated to function in accordance with that which is stated in the SLA. Furthermore, the SLA will protect the AIM unit in its very important role as information publisher of the safety critical aeronautical data/information it works with. Therefore, the meeting agreed the following draft decision:

DRAFT DECISION AIM/FPL/AIDC/1/5

MoS AND SLA TEMPLATES

That, the AIM/TF create MoS and SLA templates to have them available for States to use at ICAO Portal by the end of December 2017.

Agenda Item 9: Amendment 40 to Annex 15- PANS AIM – Doc 8126 (Vol 1 to 4)

- 9.1 Presentation on the importance of PANS AIM was given by the Secretariat.
- 9.2 It was noted that with the AIS transition to AIM, PANS plays a vital role. Reading and management of charts, procedures and related aeronautical operations linked to the data and aeronautical information the AIM provides all go together.
- 9.3 Therefore, once again, the requirement for more training for AIM personnel to be able to provide the correct, accurate and timely support to ATS through PANS OPS analysis was expressed.
- 9.4 ICAO expressed its support for an increase in training requirements for regional AIM personnel, which would provide correct, accurate and timely support to the ATS/PANS OPS analysis.

Agenda Item 10: Safety Risk Analysis

- 10.1 The Secretariat expressed in the presentation related to this Agenda Item that it is important that Risk Assessments are carried out on the changes the AIM unit must go through while following the steps of the Roadmap.
- Risk assessments point out the potential risks that may be involved in a projected or ongoing activity. Identification of hazards and risk factors that have the potential to cause harm or lower safety below the acceptable level within the ATS is imperative.
- 10.3 In addition to the transition steps which must be looked at in depth, the associated processes and procedures being carried out by the AIM units should also be assessed.

Agenda Item 11: AIM Implementation Regional Plan Review

11.1 The Regional Plan was presented and will be updated again with the important milestones reached within the transition. Each step of the Roadmap for each State will be examined more in depth. The results will be presented after the evaluation by the ICAO NACC Regional Office, once the AIM/TF has submitted the "Update of States – Steps detailed status Form" (30th NOV 2017).

Agenda Item 12: Papers/Reports to submit to ICAO

12.1 The subsequent papers and/or reports will be submitted by the AIM/TF Rapporteur by the dates indicated below, as follows:

a)	Update of States – Steps detailed status Form	30 November 2017
b)	Training Curriculum AIM (AIS/ARO/FPL)	30 November 2017
	Basic Training	
	 On the Job Training (OJT) 	
	Refresher Training	
	 Specialized Training (systems/programs in use) 	
c)	Manual of Standards (MoS) - AIM template	30 November 2017
	• GPS	
	• DPS	
d)	SLA template	23 December 2017
e)	Doc 9991 amendment proposal	31 January 2018
f)	Amendment proposal to Annex 1 – AIM Licensing	31 March 2018
	 Entry Level for AIM (AIS/ARO/FPL) Personnel 	
	 English Language Proficiency 	
	 Medical test 	

12.2 More information available at the ICAO web site:

Psychological test

https://www.icao.int/NACC/Pages/meetings-2017-aimfpl.aspx

APPENDIX B

FLIGHT PLAN (FPL) ERROR MANAGEMENT AND AIR TRAFFIC SERVICES INTER-FACILITY DATA COMMUNICATION (AIDC) TASK FORCE REPORT

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of ICAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

List of Contents

Contents	Page
List of Contents	Bi-1
Historical	Bii-1
ii.1 Agenda	Bii-1
ii.2 Draft Decisions	Bii-1
ii.3 List of Working and Information Papers and Presentations	Bii.2
Agenda Item 1	1-1
Updated Status on States AIDC	
Agenda Item 2	2-1
Discussion of Homogeneous Regional Procedure for Flight Plan Processing	
Agenda Item 3	3-1
Discussion of Benefits of AIDC Implementation (AIDC)	
Agenda Item 4	4-1
AIDC Implementation Benefits Discussion – GTE Presentation Review	
Agenda Item 5	5-1
Discussion of Experience in the Use of Performance Metrics	
Agenda Item 6	6-1
Impact of FPL Errors in AIDC	
Agenda Item 7	7-1
Discussion of Data Collection in Regards to FPL	
Agenda Item 8	8-1
Review AIDC Implementation Regional Plan	

HISTORICAL

ii.1 Agenda

AIDC/FPL

Agenda Item 1: Updated Status on States AIDC

Agenda Item 2: Discussion of Homogeneous Regional Procedure for Flight Plan Processing

Agenda Item 3: Discussion of Benefits of AIDC Implementation (AIDC)

Agenda Item 4: AIDC Implementation Benefits Discussion – GTE Presentation Review

Agenda Item 5: Discussion of Experience in the Use of Performance Metrics

Agenda Item 6: Impact of FPL Errors in AIDC

Agenda Item 7: Discussion of Data Collection in Regards to FPL

Agenda Item 8: Review AIDC Implementation Regional Plan

ii.2 Draft Decisions

The Meeting recorded its activities as Draft Decisions as follows:

DRAFT

DECISIONS: Activities requiring endorsement by the NAM/CAR Air Navigation

Implementation Working Group (ANI/WG) or the NACC Working Group

(NACC/WG).

List of Draft Decisions

Number	FPL/AIDC	Page
1/6	IMPLEMENTATION OF THE FLIGHT PLAN PROCESSING PROCEDURE	B2-1
1/7	MONITORING AND REPORTING ERRORS IN FLIGHT PLANS	B2-2
1/8	IMPROVED FEEDBACK BETWEEN AIRLINES AND ATS UNITS	B2-3
1/9	REGIONAL PROCEDURE DRAFT FOR FLIGHT PLAN PROCESSING	B2-4
1/10	DATA FOR ANALYSIS OF THE ERROR IN FLIGHT PLANS	B7-1
1/11	MAINTENANCE OF THE AIRCRAFT TYPE DATABASE	B7-2

ii.3 List of Working and Information Papers and Presentations

WORKING PAPERS						
Number	Agenda Item	Title	Date	Prepared and Presented by		
WP/02	7	Implementing the Changes in Aircraft Types as Defined in ICAO Document 8643 - Aircraft Type Designators	9/10/17	United States		
WP/03	5	Evolution of the United States Automated Data Exchange Interface within the North American, Central American and Caribbean (NACC) Region – 2017 Update	9/10/17	United States		
WP/05	2	Dominican Republic AIDC Implementation Update	24/10/17	AIDC TF Rapporteur		
WP/06	8	2017 Data Collection Analysis	24/10/17	AIDC TF Rapporteur		

	INFORMATION PAPERS							
Number	Agenda Item	Title	Date	Prepared and Presented by				
			·					
IP/05	5	Comments on the Progress Report of the Scrutiny WG GTE	30/10/17	AIDC Rapporteur				

	Presentations						
Agenda Number Item		Title	Presented by				
1	5	Evolution of the United States Automated Data Exchange (ADE) Interfaces within the North American, Central American and Caribbean (NACC) Region – 2017 Update	United States				
2	4	Benefits of AIDC Implementation	Dominican Republic				
6	7	Implementing the Changes in Aircraft Types as defined in ICAO Document 8643 Aircraft Designators	United States				
12	2	AIM Implementation	COCESNA				
13	8	AIDC Implementation	Dominican Republic				
15	7	COCESNA's Flight Plan Statistics	COCESNA				

Agenda Item 1: Updated Status on States AIDC

- 1.1 Under the WP/03, P/01 and P/12, the States indicated the status of the Air Traffic Services Inter-facility Data Communication (AIDC) implementation and the problems that were identified. The biggest identified problem is the Flight Plan (FPL) errors. The Meeting agreed to develop a regional procedure for flight plan processing.
- 1.2 The status of implementation by the States was discussed during the review of the AIDC Regional Plan under Agenda Item 9.

Agenda Item 2: Discussion of homogeneous Regional Procedure for Flight Plan Processing

- In the discussion the airlines presented important aspects of flight plan problems from their point of view. Their presentation briefly explained how flight planning is carried out in their facilities and the shortcomings of current flight plan practices. The basic concepts revolve around the fact that many States use what they call "local file", which is when the flight plan is only sent to the departure aerodrome. From that point, the airlines do not know the processes that the flight plan follows, which many cases includes submission in paper and thus manual input. This increases the probability of error and often results in multiple flight plans being created for the same flight. The main idea is that flight plans should be sent to all the Flight Information Regions (FIRs) across the proposed route, instead of being sent only to the departure aerodrome.
- 2.2. Another aspect was that of flight plans being sent directly to Air Traffic Control (ATC) centers. This practice requires that controllers deal with any errors, which constitutes a safety risk, as well as additional workload. Moreover, most of the time due to the level of urgency, the errors are corrected locally and no feedback is given to airlines. The importance of the flight plans reaching the ATS Reporting Offices (ARO) personnel was emphasized.
- 2.3. A procedure was proposed and discussed, as described in the **Attachment 1** to this report. In this procedure, airlines would send the flight plans to a designated address across all FIRs. This address would correspond to the unit or system in each FIR in charge of evaluating flight plans for syntactical or semantic errors, as needed. This unit will have the responsibility of sending the messages to the ATC centers, thus guaranteeing that only correct data gets to the control center. Depending on the technology available, the transfer of flight plan data to the ATC center after evaluation could be done automatically or semi-automatically by the systems responsible of processing flight plans. In the cases where this is not possible, the flight plan should be simultaneously sent to the ATC control centre. Thus agreed, the following draft decision was extracted:

DRAFT DECISION AIM/FPL/AIDC/6

IMPLEMENTATION OF THE FLIGHT PLAN PROCESSING PROCEDURE

That, the States in the NAM/CAR Regions adopt the flight plan processing procedure described in Attachment 1 to this report, and propose its inclusion in the ICAO Doc 7030 - Regional Supplementary Procedures by the end of July 2018.

2.4. An important aspect covered was that of feedback. Airlines and Air Navigation Service Providers (ANSPs) informed of a lack of feedback between themselves. The fact that most airline systems can respond to reject messages under a specific format was pointed out. These rejection or acknowledge messages are described in a document from the Federal Aviation Administration of United States, which was sent to the group. Cuba and COCESNA have also defined formats for rejection messages. The Meeting agreed to review and use these message formats as a reference for future updates and implementations, to allow systems to automatically send feedback to the airlines in a format that they can accept, and thus receive answers to any detected errors. Furthermore, to address the need of alternate means of each party having a direct contact with each other to handle any flight plan issues, the publication of updated contact information for both airlines and ANSPs was agreed,

using the NAM/CAR Air Navigation Implementation Working Group (ANI/WG) AIDC Task Force web page (https://www.icao.int/NACC/Pages/regional-group-AIDC.aspx) as a repository. From this discussion the following draft decision was adopted:

DRAFT DECISION AIM/FPL/AIDC/7

MONITORING AND REPORTING ERRORS IN FLIGHT PLANS

That,

- a) States and operators provide feedback to each other on the quality of flight plans processed by means of direct contact, automated systems, regular teleconferences and/or any other means deemed feasible; and
- b) States/International Organizations provide the information of the point of contact, who will be in charge of the quality of flight plan processing and of the report of the FPL errors for the other States by January 2018.
- 2.5. Another issue was the definition of what justifies the rejection of a flight plan and what does not. There are situations in which slight differences can be worked out between the airlines and the ANSPs, without requiring the flight plan to be rejected, and thus impacting operations. Guidance in this sense regarding the rejection message format can be found in the FAA document referred to above. This document was reviewed by the Meeting.
- 2.6. The importance of user meetings, with the participation of airlines, was pointed out. This is a practice of several States, and should be emulated in general. These meetings should involve as far as possible Air Traffic Services Reporting Office (ARO) for flight plans, AIS for publication issues and airspace users, and should be carried out regularly. Each State can carry out recurring meetings or teleconferences according to their particular needs, and/or a regional teleconference can be convened at a regular basis to discuss issues that affect FIR to FIR operations.
- 2.7. The issue of ATS messages was discussed. Not all systems are capable of generating all ATS messages. The capabilities of each will determine what procedures will be carried out for each situation, and how to generalize them. Delays and changes are a good example, as some airlines generate delay/change messages, but others handle them with cancel/refile. In the example of American Airlines, the airline representative stated that their system does not generate change or delay messages. This has had an impact on systems that reassign slots for flight after a cancel. To this end, a survey will identify the capabilities of each system, airlines and ANSPs, to see the differences and allow the definition of general procedures.
- 2.8. The actions agreed were adopted as the following draft decisions:

DRAFT DECISION AIM/FPL/AIDC/1/8

IMPROVED FEEDBACK BETWEEN AIRLINES AND ATS UNITS

That,

- a) IATA update the contact list for the airlines, in which to include Aeronautical Fixed Telecommunication Network (AFTN)/Aeronautical Message Handling System (AMHS) addresses, e-mail addresses and/or phone numbers for the entity responsible for handling flight plan errors, for uploading to the ANI/WG AIDC Task Force web page (https://www.icao.int/NACC/Pages/regional-group-AIDC.aspx), by 30 November 2017;
- b) the FPL Monitoring Group of the AIDC Task Force create an ANSPs contact list for, in which to include AFTN/AMHS addresses, email addresses and/or phone numbers for the entity responsible for handling flight plan errors, for uploading to the AIDC Task Force web page, and also update the Aeronautical Information Publication (AIPs) of each State accordingly, by 1 December 2017;
- c) the FPL Monitoring group review and recommend the use of the reference of the Rejection Message (REJ/ACK) guidance from Cuba, United States and COCESNA, and for future updates and implementation of flight plan processing systems, by 8 December 2017;
- d) the FPL Monitoring Group create a guidance document for determining which circumstances require a rejection of flight plans and which does not, by 15 December 2017;
- e) States consider and carry out user teleconferences with the participation of air navigation personnel as deemed necessary; and
- f) the FPL monitoring group promote and carry out regional user teleconferences to follow up on pertinent issues.

DRAFT DECISION AIM/FPL/AIDC/1/9

REGIONAL PROCEDURE DRAFT FOR FLIGHT PLAN PROCESSING

That,

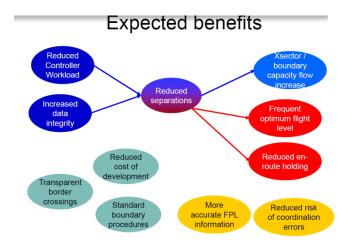
- a) IATA send a survey to airlines to determine flight plan processing systems capabilities;
- the Rapporteur of the ANI/WG AIDC Task Force FPL monitoring group send a survey to ANSPs to determine flight plan processing systems capabilities by 11 December 2017;
- c) States and airlines discuss and agree on the use of ATS messages, in the light of the capabilities of the systems as identified in items a) and b) of Draft Decision AIM/FPL/AIDC/1/8 - IMPROVED FEEDBACK BETWEEN AIRLINES AND ATS UNITS, by 30 March 2018);
- d) States and airlines, which will be selected, carry out trials as proof of concept of the regional procedure, by means of bilateral agreements, by 29 June 2018;
- e) States review and publish the addresses to which airspace users should send flight plans, taking into account the capabilities of their systems and in accordance with the regional procedure, by 28 September 2018; and
- f) the FPL Monitoring Group propose the resulting procedure for flight plan processing, based on the discussed procedure and considering the results of items c) and d) of this decision, to be the regional procedure, and request its publication in Doc 7030 *Regional Supplementary Procedures*, by 28 September 2018.

Agenda Item 3: Discussion of benefits of AIDC implementations (AIDC)

- 3.1 Under P/O2, the benefits of AIDC implementation were presented. The fact that the BO-FICE module is based on AIDC implementation was expressed, and the expected benefits presented in the Global Air Navigation Plan (GANP) for this module were examined. A general idea of the cost/benefit of AIDC implementation was presented, which included the two factors mentioned in the GANP: increased throughput of flights at boundaries and reduced controller workload. IATA commented that AIDC implementation alone would not produce an increase of flights because of the increased throughput, and thus it would not produce an immediate economic benefit. The AIDC Task Force rapporteur commented that although this was true, AIDC would prepare Flight Information Regions (FIRs) to have the capacity to handle the forecasted increase in cross-boundary traffic.
- 3.2 The rapporteur stressed the importance of identifying a positive cost/benefit case for Aviation System Block Upgrade (ASBU) implementations, as an economic benefit in one ASBU module would allow operators as well as ANSPs to carry out the necessary investment for other modules, in a continuous, self-sustaining manner.

Agenda Item 4: AIDC Implementation Benefits Discussion - GTE Presentation Review

4.1 Under the P/05, the AIDC Rapporteur presented the results analysed by the Scrutiny Group (GTE) and the benefits of the implementation of the AIDC between ATC, which facilitate the safety coordination between FIRs, as follows:



- 1. Cost Benefit Analysis: Increase of throughput at ATS unit boundary and reduced ATC workload will outweigh the cost of ground system software changes. The business case remains dependent on the environment.
- 2. Efficiency: Improved collaborative decision-making through electronic aeronautical data sharing. Reduced workload for both pilots and controllers and improved operational efficiency.
- 3. Efficiency: Improved ATS coordination and Communication misunderstandings avoided.
- 4. Continuity: Improved airspace interoperability and seamlessness.
- 4.2 IATA indicated the necessity to have real benefits that will be put in place in operational benefits, such as:
 - Reduced separation between operation
 - Increase the capacity of the air space
 - Increase the efficiency in the operation
 - Manage a seamless sky
- 4.3 The Meeting agreed with the issues indicated by IATA, but it is necessary that the States make the implementation first and are operationally mature before implementing these new challenges.
- 4.4 The Meeting was invited to consider the benefits expected from AIDC implementation as expressed in the global and regional air navigation plans; evaluate the factors involved in obtaining these benefits by each FIR; and consider the cost/benefit analysis and how it is applicable to each State.

Agenda Item 5: Discussion of Experience in Use of Performance Metrics

- 5.1 Under the WP/06, the rapporteur expressed that, due to the high percentage of implemented interfaces in the NAM/CAR regions, it was of significant interest that the performance metrics are in place to indicate if the expected benefits of AIDC implementation are being met. IATA called to attention the difference between implementation metrics and performance metrics.
- 5.2. The table in the **Attachment 2** to this report was presented as the template to use during the discussion.
- 5.3. Regarding the benefit of reduced controller workload, presented in the Agenda Item 4, IATA indicated that the ANI/WG ATFM Task Force is working on a metric for workload, and suggested to use said metric for the purpose of maintaining uniformity, which was agreed. United States mentioned that for one of their interfaces the workload was estimated to have been reduced by 50%. The method used to reach this number would be provided by United States as a guideline on how this metric could be established.
- 5.4. Regarding the benefit of reduced separations, IATA and the airlines present expressed that there are cases of FIRs with AIDC implemented that maintain separations above what would be the minimum level established for an environment without automation, which is 20NM. The need for States to publish their separation standard was also stressed. A metric that established a 5NM separation as the goal was suggested.
- 5.5. Due to time constraints, the table would be further discussed in subsequent Task Force teleconferences.

Agenda Item 6: Impact of FPL Errors in AIDC

- According with the presentations and working papers of the different participants in the meeting, the Flight Plans Errors have an enormous impact in the operations of the AIDC coordination.
- 6.2 Most of the errors in the flight plans are:
 - Wak invalid
 - 2. RTE Format
 - DOF Invalid
 - 4. PBN data no present
 - 5. Route erroneous
 - 6. Aircraft Type
 - 7. Invalid EET
 - 8. Error in equipment
- 6.3 Under P/15, COCESNA made a presentation about their operation and the result of their analysis, and the Meeting agreed that:
 - Most of the problems that arise are related to deficiencies and non-compliance
 with the standards and recommended practices in the ICAO Doc 4444 Air Traffic Management, mainly by the operators, as well as by AIS/ATS units
 that amend or modify the plans already sent by the operators.
 - Lack of acknowledgment in the flight plan management by AIS officer, flight dispatchers and air traffic controllers.
 - Physical flight plan is not always aware of the ICAO standard used to fill each part of the flight plan.
 - The airline does not have a copy of the AIS flight plan, which results in a lack of knowledge of the flight plan issued to all control centers, so no complaints are received by the flight plan originator.
 - In the cases where the flight plan on board the aircraft is in part different from the one transmitted by the AIS office, this can result in an air traffic incident.
- The Meeting took note on the information presented by the States and agreed to work accordingly on the implementation of the Regional FPL procedure.

Agenda Item 7: Discussion of Data Collection in Regards to FPL

- 7.1 Under WP/06, the FPL Monitoring group of the AIDC Task Force carried out a last data collection analysis as previously scheduled during the period from 10 April to 30 April 2017. The purpose was to measure the level of duplicate flight plans being detected by the different NAM/CAR FIRs, and analyse this data to suggest mitigation actions.
- 7.2 In accordance with the information provided by the States, the AIDC/FPL Task Force concluded that:
 - Duplicates represent a relatively small percent of all flight plans processed, and nonetheless pose a serious problem. To set an acceptable level, a very low percentage should be considered, much lower than the one currently observed.
 - 2. Operators still contribute a significant number of errors in flight plans, although good collaboration has been achieved in that sense and a reduction of errors reported in teleconferences.
 - 3. Most flight plan duplicates are produced by a single entity, not usually by an operator and ATS unit.
 - 4. Procedures should be revised in those cases of significant generation of flight plan duplicates, and errors in general. A homogeneous and uniform procedure should be established for all actors in flight plan processing.
- 7.3 The participation of every State is important when carrying out the data collection, since it provides more details and data with which a better analysis can be made. The following draft decision was therefore agreed:

DRAFT DECISION AIM/FPL/AIDC/10

DATA FOR ANALYSIS OF THE ERROR IN FLIGHT PLANS

That, States designate a Point of Contact, who is responsible of following-up on data collection and of providing the necessary data for the next analysis. The date of the next analysis will be decided in the first teleconference in January 2018.

Impact of FPL errors in AIDC

7.4 Under the WP/02, United States presented the different problems caused by FPL errors. This WP indicated that aircraft type must be current for the systems that process flight plans and messages using automates FPL processor.

7.5 United States indicated that the information contained in Doc 8643 - *Aircraft Type Designators* is updated by ICAO every month.

DRAFT DECISION AIM/FPL/AIDC/11

MAINTENANCE OF THE AIRCRAFT TYPE DATABASE

That, States:

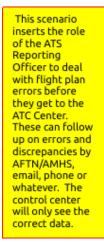
- a) update aircraft type data; and
- b) develop a procedure to allow timely update of this data.

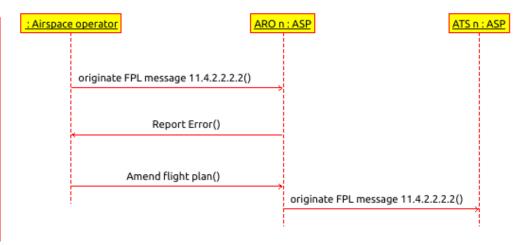
Agenda Item 8: Review AIDC Implementation Regional Plan

- 8.1 The regional plan was presented and updated. The update included a register of the important milestones reached and pending for each implementation. The resulting updated regional plan is presented in the **Attachment 3** to this report.
- 8.2. Important issues regarding AIDC implementation include the acquisition of systems by several States and work in progress for NAM ICD Class III implementation.
- 8.3. In the case of COCESNA, all encompassed States will be in training beginning in January 2018. The systems are Class II and III-capable, but will begin with Class I. COCESNA will work in conjunction with Cuba for the development of the Class II interface between the FIRs.
- 8.4. Jamaica is acquiring a Thales system from the Australian division, which was the same provider for Mexico. The Meeting suggested that the States with Thales systems assist Jamaica in determining if the NAM ICD implementation for the system is adequate.
- 8.5. Dominican Republic has signed the agreement for updating the system, the enable the use of messages according to classes. The estimated date for implementation would be September 2018.
- 8.6. United States informed that they are working with Canada for the development of the Class III interface, and also that this endeavour has brought a series of parameter decisions that are not documented in the ICD. The final implementation is estimated for 2020. United States recommended waiting for this implementation to take place before other States implement it so that the lessons learned and the additional parameters be sorted out, as also using the interface control and heartbeat messages for Class II, and let it run for some time before attempting Class III implementation.

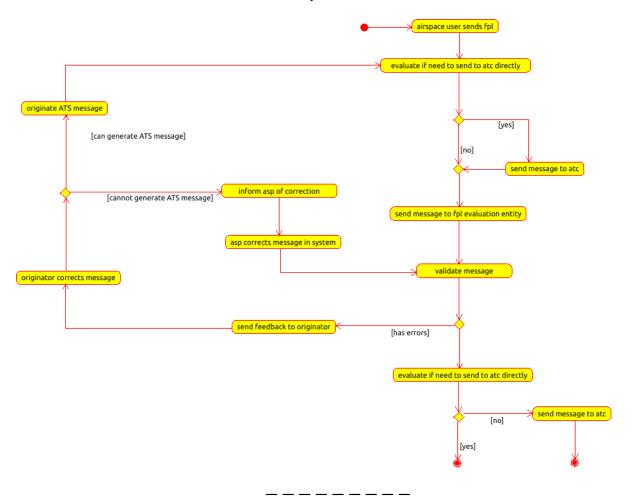
FPL Regional Procedure Proposal

High level diagram





Detailed procedure



AIDC Implementation Performance Metrics Template

Expected Benefit	Performance metric	Calculation
Reduced Controller Workload		
Increased data integrity		
Reduced separations		
Xsector / boundary capacity flow increase		
More frequent offering of flight levels closer to the flight optimum		
Reduced en-route holdings		
Reduced cost of development		
Application of same procedures at boundaries		
More transparent border crossings for flights		
Better knowlege of more accurate flight plan information		
Reduced risk of coordination errors		

_ _ _ _ _ _ _ _ _ _ _ _

AIDC Regional Implementation Plan

State/Organization	System	Point of contact	Network Bandwidth	Comments	Milestones/Obstacles
Bahamas	INDRA AIRCON 2100*	-	-	-	December meeting in coopers
Belize	INDRA AIRCON 2100	Gilberto Torres	AMHS: 64 Kbps	Has class 2 and 3	December – meeting in cocesna January – Training
Canada	CAATS GAATS+ (Gander Oceanic)	Troy Wilton Manager, ATM and ACC Automation (613) 248 6915 wiltont@navcanada.ca	-	-	
COCESNA	INDRA Aircon 2100 Renovado	Luis Manuel Coello (luis.coello@cocesna.org) Jenny Lee (jenny.lee@cocesna.org)	N/A (the current AFTN circuit speed is 1.2 kbps internally and 9.6 kbps the internationals). COCESNA planned to change her AFTN network for a new AMHS network in September 2016	-	Class 2 next year waiting for Cuba Update of system – waiting for Cuba
Costa Rica	No - FDP Server must upgrade – Q1 2017	Warren Quirós navegacionaerea.cns@dgac.go.cr +50622314924	AMHS: 64 Kbps	Has class 2 and 3	December – meeting in cocesna January – Training
Cuba	yes - Oracle Version 9 modified by LITA-CUBA	Joao Vázquez Estrada,email: joao.vazquez@aeronav.avianet.cu	AMHS: 64 Kbps*	We received many mistakes from the users in the FPL, in almost all fields. We have detected changes in the FPL forwarded by ACC's or ANSP offices related to FPL's presented by operators	Class 2. Work in progress
Curacao	-	Jacques Lasten, ATS Manager, DC- ANSP, j.lasten@dc-ansp.org	AMHS: 64 Kbps	-	
Dominican Republic	Yes TopSky-ATC, Thales ATM	Julio Cesar Mejia A. Enc. ATM, jmejia@idac.gov.do, 809 274-4322. Ext. 2103 + Fernando Casso, fernando.casso@idac.gov.do	AMHS: 64 Kbps	-	Signing of phase change agreement - october 2017 Installation of test bed and update operation - September 2018
El Salvador	INDRA Aircon 2100 Renovado	Danilo Ramírez	AMHS: 64 Kbps	-	
Guatemala	INDRA Aircon 2100 Renovado	danilo.ramirez@cepa.gob.sv Sergio Raul Enrique senriquez@gmail.com David Ascoli davidascoli@gmail.com	AMHS: 64 Kbps	-	
Haiti	-	Nadia Leopold nleopold@hotmail.com	-	-	
Jamaica	Thales Topsky In installation	Carl Gaynair – Carl.gaynair@jcaa.gov.jm	64k	85% implementation	Training. Verify if NAM is implemented and how. If classes are as should be. Thales Australia
Mexico	Yes-FDP=Topsky, Producer= THALES ATM, INFO= Four Control Centres, all Mexico covered	Oscar Vargas Antonio ovargasa@sct.gob.mx	19200 bps	Mexico already counts with the implementation of CPL/LAM information exchange between: MZT ≤ ≥ LAX, MZT ≤ ≥ ABQ, MTY ≤ ≥ABQ, MTY ≤ ≥HOU, MID ≤ ≥ HAB	Class 2 not planned in near future
Nicaragua	INDRA Aircon 2100 Renovado	Jorge Saballos jsaballos@eaai.com.ni	AMHS: 64 Kbps	Has class 2 and 3	December – meeting in cocesna January – Training
Trinidad and Tobago	SELEX ATM System	Veronica Ramdath vramdath@caa.gov.tt	64k		Approval phase for upgrade Upgrade will be next year. Continue testing phase afterwards.
United States	Yes - Host Automation / En Route Automation Modernization(ERAM) systems. Lockheed- Martin (LMCO) is the prime contractor for the Host/ERAM system. Ocean21 provides its own FDP processing in the oceanic environment. LMCO is also the contractor for Ocean21.	Dan Eaves, Federal Aviation Administration Air Traffic Control Specialist, Dan.Eaves@FAA.gov, 202-385-8492	US- Mexico: NADIN/AFTN 64 kbps X.25 US- Cuba : MEVA III 19.2 kbps connection to NADIN		Working Class 3 2020 estimated.

AIM/FPL/AIDC Attachment 3 to the Report

State or Organizati	State/Org FIP	Adjacent FIR	Interface Class	Interface Status	Im plementation Da⇔	Bilateral Agreement or l្មើ
Bahamas	Nassau	Miami	N/A	Planned	TBD	NAM-ICD Version D
Canada	Edmonton	Anc horage	Class II	Operational	100	NAM-ICD Version D
Canada	Edmonton	Reykjavik	Class I	Operational		NATICD
Canada	Edmonton	Salt Lake City	Class II	Operational		NAM-ICD Version D
Canada	Edmonton	Seattle	Class II	Operational		NAM-ICD Version D
Canada	Gander	New York	Class II	Operational		NATICD
Canada	Gander	Prestwick	Class II	Operational		NATICD
Canada	Gander	Reykjavik	Class II	Operational		NATICD
Canada	Gander	Santa Maria	Class II	Operational		NAT ICD
Canada	Moncton	Boston	Class II	Operational		NAM-ICD Version D
Canada	Moncton	New York	Class II	Planned	TBD	TBD
Canada	Montreal	Boston	Class II	Operational		NAM-ICD Version D
Canada	Montreal	Cleveland	Class II	Operational		NAM-ICD Version D
Canada	Oakland	Vancouver	Class II	Operational		NAM-ICD Version D
Canada	Toronto	Boston	Class II	Operational		NAM-ICD Version D
Canada	Toronto	Cleveland	Class II	Operational		NAM-ICD Version D
Canada	Toronto	Minneapolis	Class II	Operational		NAM-ICD Version D
Canada	Vancouver	Salt Lake City	Class II	Operational		NAM-ICD Version D
Canada	Winnipeg	Minneapolis	Class II	Operational		NAM-ICD Version D
Canada	Winnipeg	Salt Lake City	Class II	Operational		NAM-ICD Version D
COCESNA	CENAMER	Belize	N/A	Planned	2018	PAC ICD
COCESNA	CENAMER	Bogota	N/A	Testing	2018	PAC ICD
COCESNA	CENAMER	Costa Rica	N/A	Planned	2018	PAC ICD
COCESNA	CENAMER	El Salvador	N/A	Operational	October 2015	PAC ICD
COCESNA	CENAMER	Guatemala	N/A	Operational	December 2015	PAC ICD
COCESNA	CENAMER	Guayaquil	N/A	Testing	TBD	PAC ICD
COCESNA	CENAMER	Havana	Class I	Operational	TDD	NAM-ICD Version E
COCESNA	CENAMER	Kingston	N/A	Planned	TBD	NAM ICD Vanion F
COCESNA	CENAMER	Merida	N/A	Operational Operational	2015 September 2015	NAM-ICD Version E
COCESNA COCESNA	CENAMER CENAMER	Nicaragua Panama	N/A N/A	Operational	September 2015 2016	PAC ICD PAC ICD
COCESNA Costa Rica		CENAMER	N/A N/A	Planned	2016	
Costa Rica Costa Rica	San José San José	Nicaragua Nicaragua	N/A N/A	Planned	2018	PAC ICD PAC ICD
Costa Rica	San José	Panama	N/A	Planned	2018	PAC ICD
Cuba	Havana	CENAMER	Class I	Operational	March/April 2015	NAM-ICD Version E
Cuba	Havana	Kingston	N/A	Planned	TBD	NAME OF VEISION E
Cuba	Havana	Merida	Class I	Operational	March 9, 2012	NAM-ICD Version D
Cuba	Havana	Miami	Class I	Operational	December 15, 2011	NAM-ICD Version D
Cuba	Havana	Port au Prince	N/A	Not planned	TBD	NAM-ICD VEISION D
Curacao	Curacao	Kingston	N/A	Planned	100	NAM-ICD Version D
Curacao	Curacao	Maiquetia	N/A	Planned		NAME OF COSION D
Dominic an Republic	Santo Domingo	Curacao	N/A	Planned	TBD	
Dominican Republic	Santo Domingo	Miami	Class I	Implementing	September 2018	NAM-ICD Version E
Dominican Republic	Santo Domingo	Port au Prince	N/A	Not planned	TBD	TO THE TOTAL PROPERTY.
El Salvador	El Salvador	Guatemala	N/A	Planned	42522	PAC ICD
El Salvador	El Salvador	Nicaragua	N/A	Planned	42491	PAC ICD
Guatemala	Guatemala	Belize	N/A	Planned	2017	PAC ICD
Guatemala	Guatemala	El Salvador	N/A	Planned	42522	PAC ICD
Haiti	Port-au-Prince	Santo Domingo	N/A	Planned	TBD	NAM-ICD Version D
Mexico	Mazatlán	Albuquerque	Class I	Operational	2005	NAM-ICD Version D
Mexico	Mazatlán	Los Angeles	Class I	Operational	2005	NAM-ICD Version D
Mexico	Mazatlán	Monterrey	Class I	Operational	2005	NAM-ICD Version D
Mexico	Mazatlán	Oakland	N/A	Operational	March 2015	PAN ICD V.1
Mexico	Mérida	CENAMER	Class I	Testing	June 2015	NAM-ICD Version D
Mexico	Mérida	Havana	Class I	Operational	2011	NAM-ICD Version D
Mexico	Mérida	Houston	Class I	Operational	2005	NAM-ICD Version D
Mexico	México	Mazatlan	Class I	Operational	2005	NAM-ICD Version D
Mexico	México	Mérida	Class I	Operational	2005	NAM-ICD Version D
Mexico	México	Monterrey	Class I	Operational	2005	NAM-ICD Version D
Mexico	Monterrey	Albuquerque	Class I	Operational	2005	NAM-ICD Version D
Mexico	Monterrey	Houston	Class I	Operational	2005	NAM-ICD Version D
Mexico	Monterrey	Mérida	Class I	Operational	2005	NAM-ICD Version D
Nicaragua	Nicaragua	Costa Rica	N/A	Planned	2017	PAC ICD
Nicaragua	Nicaragua	El Salvador	N/A	Planned	42491	PAC ICD
Trinidad and Tobago	PIARCO	French Guyanne	N/A	Planned	TBD	???
Trinidad and Tobago	PIARCO	Maiquetia	N/A	Planned	TBD	
Trinidad and Tobago	PIARCO	New York	N/A	Planned	Q4 2018	PAN ICD
Trinidad and Tobago	PIARCO	SAL	N/A	Planned	TBD	NAM-ICD Version D
Trinidad and Tobago	PIARCO	San Juan/Miami	N/A	Planned	TBD	NAM-ICD Version D
United States	Albuquerque	Monterrey	Class I	Operational		NAM-ICD Version D
United States	Anchorage	Edmonton	Class II	Operational		NAM-ICD Version D
United States	Anchorage	Vanc ouver	Class II	Operational		NAM-ICD Version D
United States	Boston	Moncton	Class II	Operational		NAM-ICD Version D
United States	Boston	Montreal	Class II	Operational		NAM-ICD Version D
United States	Cleveland	Toronto	Class II	Operational		NAM-ICD Version D
United States	Houston	Merida	Class I	Operational		NAM-ICD Version D
United States	Houston	Monterrey	Class I	Operational		NAM-ICD Version D
United States	Los Angeles	Mazatlan	Class I	Operational	0010	NAM-ICD Version D
United States	Miami	Havana	Class II	Planned	2018	NAM-ICD Version D
United States	Miami	Havana	Class I	Operational	TO 0	NAM-ICD Version D
United States	Miami	Nassau	N/A	Planned	TBD	NAM-ICD Version D
United States	Miami	Santo Domingo	Class I	Planned	September 2018	NAM-ICD Version D
United States	Minneapolis	Toronto	Class II	Operational		NAM-ICD Version D
United States	Minneapolis	Winnipeg	Class II	Operational		NAM-ICD Version D
United States	Oakland	Mazatlán	N/A	Operational	2015	PAN ICD V.1
United States	Oakland	Vancouver	Class II	Operational		NAM-ICD Version D
United States	Salt Lake City	Edmonton	Class II	Operational		NAM-ICD Version D
United States	Salt Lake City	Winnipeg	Class II	Operational		NAM-ICD Version D
				Diagnod	September 2018	MAM ICD Version D
United States United States	San Juan Seattle	Santo Domingo Vancouver	Class II	Planned Operational	Ocptember 2010	NAM-ICD Version D NAM-ICD Version D