



AIDC/3

INTERNATIONAL CIVIL AVIATION ORGANIZATION

REGIONAL PROJECT RLA/06/901

**Third Meeting on AIDC implementation
(ATS interfacility data communication)
in the SAM Region**

(Lima, Peru, 24 to 26 April 2017)

FINAL 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 of its authorities, or concerning the delimitation of its frontiers or boundaries.

ÍNDEX

i -	Index	i-1
ii -	History of the Meeting	i-1
	Place and duration of the Meeting	ii-1
	Opening	ii-1
	Working Languages	ii-1
	Participants and Organization	ii-1
	List of Conclusions	ii-1
iii -	List of Participants	iii-1
	Report on Agenda Item 1	
	Analysis to the availability of flight plans in the SAM Region	1-1
	Report on Agenda Item 2:	
	Follow-up to the performance of AIDC operation and results of the AIDC interconnection trials in the SAM Region.....	2-1
	Report on Agenda Item 3	
	Review to the action plan for AIDC interconnection in the SAM Region.....	3-1
	Report on Agenda Item 4	
	Other matters	4-1

HISTORY OF THE MEETING

ii-1. PLACE AND DURATION OF THE MEETING

The Third Meeting on AIDC implementation (ATS interfacility data communication) in the SAM Region was carried out at the premises of the ICAO South American Regional Office in Lima, Peru, from 24 to 26 April 2017.

ii-2. OPENING

Mr. Franklin Hoyer, Regional Director of the ICAO South American Regional Office, welcomed the participants, pointing out the importance of the topics to be dealt with and wishing success in the deliberations. Thereafter, he inaugurated the meeting.

ii-3. WORKING LANGUAGES

The meeting working language for the discussions and documentation was Spanish.

ii-4. AGENDA

The following Agenda was adopted:

- Agenda Item 1: Analysis to the availability of flight plans in the SAM Region
- Agenda Item 2: Follow-up to the performance of AIDC operation and results of the AIDC interconnection trials in the SAM Region
- Agenda Item 3: Review to the action plan for AIDC interconnection in the SAM Region
- Agenda Item 4: Other business

ii-5. PARTICIPANTS AND ORGANIZATION

The Meeting counted with the assistance of 10 member States (Argentina, Bolivia, Brazil, Chile, Ecuador, Panama, Paraguay, Peru, Uruguay and Venezuela), and the companies Atech from Brazil y Thales from France, making a total of 27 participants, including ICAO officers. The list of participants is being presented in page iii-1.

Mr. Jose Merino acted as President of the meeting and Mr. Onofrio Smarrelli, Communications, Navigation and Surveillance (CNS) Regional Officer, acted as Secretary, assisted by Mr. Fernando Hermoza, ATM/SAR Regional Officer.

ii-6. **LIST OF CONCLUSIONS**

No.	Title	Page
Conclusion AIDC/3-1	Procedure for the mitigation of duality/multiplicity of international flight plans	1-2
Conclusion AIDC/3-2	National Centre for the reception, processing and distribution of flight plans	1-3

LIST OF PARTICIPANTS**ARGENTINA**

Pablo Sebastián Torres
Técnico CNS Especialista en Sistemas Automatizados
EANA S.E.
Aeropuerto Int. Ministro Pistarini, Piso 4, B1802
Ezeiza, Buenos Aires
Argentina

Tel: +5411 44802290 /
+54911 23622317
E-mail: ptorres@eana.com.ar

Osvaldo Oscar Godoy
Jefe Departamento ANS
EANA S.E.
Aeropuerto Int. Ministro Pistarini, Piso 4, B1802
Ezeiza, Buenos Aires
Argentina

Tel: +5411 44802309 / +54911 28836444
E-mail: ogodoy@eana.com.ar

Diego Florencio Agüero
Inspector/Auditor
Administración Nacional de Aeronáutica Civil (ANAC)
Av. Paseo Colón 1400
CA Buenos Aires, Argentina

Tel: +5411 59 43193000 int. 69196
E-mail: daguero@anac.gob.ar

BOLIVIA

Jaime Yuri Álvarez Miranda
Jefe de la Unidad CNS
DGAC Bolivia
Av. Arce 2631, Edif. Multicine Piso 9
La Paz, Bolivia

Tel: +5912 2444450 int. 2651
E-mail: jalvarez@dgac.gob.bo

BRAZIL

Murilo Albuquerque Loureiro
Consultor en Tecnología y Seguridad de la Información
para Sistemas Automatizados de Control de Tránsito Aéreo
Departamento de Control del Espacio Aéreo (DECEA)
Avenida General Justo, 160, Castelo
Rio de Janeiro-RJ, Brasil

Tel: +5521 9938 68904
E-mail: loureiromal@decea.gov.br

Luiz Antonio dos Santos
Asesor ATM
Departamento de Control del Espacio Aéreo (DECEA)
Avenida General Justo, 160, Castelo
Rio de Janeiro-RJ, Brasil

Tel: +5521 983645240
E-mail: luizantoniolas@decea.gov.br

CHILE

Gustavo D. Cáceres
Jefe de Operaciones
Dirección General de Aeronáutica Civil (DGAC)
Clasificador 3 – Correo 9
Providencia, Santiago, Chile

Tel: +5622 8364018
E-mail: gcaceres@dgac.gob.cl

Pedro Pastrían
Ingeniero, Sistema Automatizados ACC
Dirección General de Aeronáutica Civil (DGAC)
Clasificador 3 – Correo 9
Providencia, Santiago, Chile

Tel: +5622 8364011
E-mail: ppastrian@dgac.gob.cl

ECUADOR

Jorge Alfredo Zúñiga Jibaja
Controlador APP Radar
Dirección General de Aviación Civil (DGAC)
Av. 10 de agosto y Buenos Aires
Quito, Ecuador

Tel: + 5932 2947400 ext. 1080
E-mail: jorzu40@hotmail.com

PANAMA

Mario Facey
Técnico del Dpto. de Radar
Autoridad Aeronáutica Civil de Panamá (AAC)
Av. Demetrio Korsi, Calle Héctor Conte Bermúdez
Edificio #646, Albrook
Panamá

Tel: +507 315 9852
E-mail: mfacey@ aeronautica.gob.pa

PARAGUAY

Diego Aldana
Supervisor ATS
Dirección Nacional de Aeronáutica Civil (DINAC)
Centro de Control de área Unificado
Asunción, Paraguay

Tel: +595 961 692104
E-mail: diegoaldana@gmail.com

PERU

Jorge Merino Rodríguez
Controlador de Tránsito Aéreo
Corporación Peruana de Aeropuertos y
Aviación Comercial S.A. (CORPAC)
Av. Elmer Faucett 3400, Callao, Perú

Tel: +51 1 414 1442 /
+51 997377407
E-mail: jmerino@corpac.gob.pe

Raul Anastacio Granda
Supervisor Comunicaciones AMHS-AFTN
Corporación Peruana de Aeropuertos y
Aviación Comercial S.A. (CORPAC)
Av. Elmer Faucett 3400, Callao, Perú
Tel: +51 1 2301018
E-mail: ranastacio@corpac.gob.pe

Jose Luis Yataco Rivasplata
Supervisor Comunicaciones AMHS-AFTN
Corporación Peruana de Aeropuertos y
Aviación Comercial S.A. (CORPAC)
Av. Elmer Faucett 3400, Callao, Perú
Tel: +51 1 2301176
E-mail: joyaplata@hotmail.com

Johnny Ávila Rojas
Jefe Equipo Centro de Control
Corporación Peruana de Aeropuertos y
Aviación Comercial S.A. (CORPAC)
Av. Elmer Faucett 3400, Callao, Perú
Tel: +511 4141000 ext. 1267
E-mail: javila@corpac.gob.pe

Jaime A. Contreras
Coordinador general del Centro de Control
Corporación Peruana de Aeropuertos y
Aviación Comercial S.A. (CORPAC)
Av. Elmer Faucett 5500, Callao, Perú
Tel: +511 6301154
E-mail: jcontreras@corpac.gob.pe

Mario Luis Matos Rivera
Técnico CNS Especialista en Sistemas de Control ATM
Corporación Peruana de Aeropuertos y
Aviación Comercial S.A. (CORPAC)
Av. Elmer Faucett 3400, Callao, Perú
Tel: +511 4141000 ext. 1211
E-mail: mmatos@corpac.gob.pe

Sady Beaumont Valdez
Inspector de Navegación Aérea
DGAC Perú
Jirón Zorritos 1203
Lima 1, Perú
Tel: +511 6157880
E-mail: sbeaumont@mtc.gob.pe

Libio Antero Benites Aéreo
Especialista en Tránsito Aéreo
DGAC Perú
Jirón Zorritos 1203
Lima 1, Perú
Tel: +511 6157880
E-mail: lbenites@mtc.gob.pe

URUGUAY

Gustavo Turcatti
Jefe
Departamento Tránsito Aéreo
DINACIA
Av. Wilson Ferreira Aldunate 5519
Montevideo, Uruguay
Tel: +598 26040408 int. 5111 /
+598 99814166
E-mail: blantur@gmail.com
dota@dinacia.gub.uy

Antonio Lupacchino Vignone
Técnico III B10, Técnico Electrónica
DINACIA
Av. Wilson Ferreira Aldunate 5519
Montevideo, Uruguay

Tel: +598 26040408 int 4520
E-mail: alupacch@yahoo.com.ar
alupacchino@dinacia.gub.uy

VENEZUELA

Jean Carlos Lozano García
Controlador de Tránsito Aéreo – Ingeniero de Sistemas
Instituto Nacional de Aeronáutica Civil (INAC)
Av. José Félix Siosa con Av. Luis Roche
Urb. Altamira Sur
Torre Británica de Seguros, Piso 7
Caracas, Venezuela

Tel: +58416 7226428
E-mail: jclozgar@hotmail.com

ATECH

Mariana Panzarini Marques
Gestora Técnica
Rua Do Rócio, 313 – 5º andar
Sao Paulo, Brasil

Tel: +5511 991556412
E-mail: mmarques@atech.com.br

THALES

Daniel Vert
ATM Program Manager
105 Avenue Eisenhower 31000
Toulouse, Francia

Tel: +33 61 3965892
E-mail: daniel.vert@thalesgroup.com

ICAO

Onofrio Smarrelli
Oficial Regional CNS
Oficina Regional Sudamericana
Av. Víctor Andrés Belaúnde No.147
Centro Empresarial Real, Vía Principal No.102
Edificio Real 4, Piso 4, San Isidro
Lima 27, Perú

Tel: +51 1 611 8686, Ext. 107
Fax: +51 1 611 8689
E-mail: osmarrelli@icao.int

Fernando Hermoza
Oficial Regional ATM/SAR
Oficina Regional Sudamericana
Av. Víctor Andrés Belaúnde No.147
Centro Empresarial Real, Vía Principal No.102
Edificio Real 4, Piso 4, San Isidro
Lima 27, Perú

Tel : +51 1 611 8686, Ext. 106
Fax: +51 1 611 8689
E-mail: fhermoza@icao.int

Agenda Item 1: Analysis to the availability of flight plans in the SAM Region

1.1 Under this Agenda Item the following Working Paper was presented:

- ✓ WP/02 – *Follow-up to the implementation of automated systems for FPL2012 and assessment of error and duplication in flight plans in the SAM Region* (Presented by Secretariat)

Status of implementation of FPL 2012

1.2 Regarding the progress in the implementation of automated systems for FPL 2012 implementation, the Meeting was informed that Bolivia has begun the implementation of ATM automation project called SINDACTA in ATSS La Paz, Cochabamba, Santa Cruz and Trinidad. The automated system to be installed in those ATS units is manufactured by Thales model TopSky and is foreseen to be completed for 2019. By the end of 2017 the FDP of Brazil ACCs would be capable to process FPL 2012, disregarding the use of currently installed converters. Chile have installed nationwide AFTN terminals not AMHS, and these do not have implemented templates compatible with the FPL 2012. Peru, had begun the modernization process of the automated system of Lima ACC (AIRCON 2100 of INDRA) which among other improvements will correct the limitations on the number of characters in item 10 of the FPL 2012, the modernization process is expected to complete by the third trimester of 2017. Finally, Paraguay reported that by the end of 2017 it was expected to have in the ACC Asuncion a version of the automated system software compatible with FPL 2012.

1.3 After the analysis of the status of implementation of automation system in the SAM Region in compliance with Amendment 1 of the 15th Edition of Doc 4444 (FLP 2012), the Meeting concluded that out of all the ACCs (27), 67% updated the flight data processing (FDP); 22% continue using converters and the remaining continue with manual solution due that the automated systems installed in the AACs do not comply with the FPL 2012 or do not have automated systems. With regard to the implementation of AMHS/AFTN with FPL 2012 templates capable detecting errors, 70% of States already have it available.

1.4 In this regard the meeting took note that to date practically there has been no progress in the implementation of the automation for the 2012 FPL with respect to what was reported in the AIDC/2 meeting. In **Appendix A** to this Agenda Item an updated table is presented portraying the automation status of implementation to comply with Amendment 1 of the 15th Edition of Doc 4444.

1.5 The Meeting took note that that the SAM/IG/18 meeting reviewed and approved the guide to avoid errors in the PLs and associated ATS messages that was presented in the Second AIDC implementation meeting and which is included as **Appendix B** to this Agenda Item.

1.6 The Meeting also updated the procedures used by SAM States for filling their flight plans were updated and are presented as **Appendix C** to this Agenda Item, with the inclusion of Bolivia, Chile and Uruguay procedures.

1.7 The Meeting was informed that the SAM/IG/18 meeting review the errors identified during the planning of flight plans, as well as the recommendations to mitigate such errors and proceed to approve it. The list of errors and recommendations for tis mitigation is presented as **Appendix D** to this part of the Report.

1.8 After a deep analysis the Meeting observed that the procedures used by States in the Region when filing flight plans, which were happening in many States, duplicity on international flight plans of commercial airlines in view that most of these are presented in two ways one through the AFTN network direct transmission by the contracted flight planning systems for the (Lido, Jeppesen) airlines that are routed to the FDP of the ACC from the airport of departure and the other through the presentation of the flight plan in printed form in the ARO/AIS offices due to demanding regulatory, which proceeded to the retransmission of the same network AFTN/AMHS to the FDP of the ACC of the airport of departure occurring in this way duplication at the level of the FDP generating a rejection or conflicts in the processing flight plans.

1.9 In order to mitigate the duality of flight plans at the level of the ACC's FDPs of the airport of departure, the Meeting considered that direct transmission by AFTN network of international flight plans carried out by the systems used by airlines, flight planning be addressed to the corresponding ARO/AIS offices of the airport of departure and they retransmit them by AFTN/AMHS to the FDP of corresponding ACC from the airport of departure prior validation. This process would continue for a transition period considered by States and once verified the effectiveness of the flight plans received directly by the AFTN/AMHS hired by the airlines flight planning systems, these could be transmitted directly to the FDP with corresponding to the ARO/AIS office copy.

1.10 In this sense the Meeting agreed on the need to conduct a teleconference on 10 May 2017 between AIDC focal points and AIS personnel of SAM Region States to analyze the process indicated in paragraph 1.9. AIDC focal points would invite the AIS personnel to join the teleconference.

Conclusion AIDC/3-1 Procedure for the mitigation of duality/multiplicity of international flight plans

That, Those SAM Region States that have experienced duality/multiplicity problems with their international flight plans:

- a) Review the procedures established between the State and commercial airlines in the presentation of international flight plans directly by flight planning systems contracted by airlines (Lido, Jeppesen) in order to be addressed to the respective ARO/AIS Office of the airport of departure rather than addressed them to the FDP of the ACCs associated to the airport of departure;
- b) keep the procedure indicated in literal a) the necessary time and once its effectiveness is proven, allow the international flight plan route be addressed to FDP's ACC with a copy to correspondent ARO AIS offices;
- c) participate in teleconferences scheduled by the Secretariat with AIDC focal points and designated AIS personnel to follow-up literals a) and b).

1.11 The Meeting considered that in order to ensure the effectiveness of the flight plan, SAM Region States should evaluate the possibility of implementing a national center for the receiving, processing and distribution of flight plans and associated messages. Flight plans received by this centre would be validated, revised, where is possible, and redistributed to final destinations through AFTN/AMHS network. On this respect, the Meeting formulated the following Conclusion:

Conclusion AIDC/3-2**National Centre for the reception, processing and distribution of flight plans**

That SAM Region States in order to ensure the efficient management of flight plans, evaluate the possibility of implementing a national centre for receiving, processing and distribution of flight plans.

APPENDIX A / APENDICE A

**STATUS OF THE AUTOMATION IMPLEMENTATION TO GIVE EFFECT TO THE
AMENDMENT TO THE FLIGHT PLAN FORMAT/**

**ESTADO DE IMPLANTACION DE LA AUTOMATIZACIÓN PARA DAR CUMPLIMIENTO
DE LA ENMIENDA EN EL FORMATO DEL PLAN DE VUELO**

STATE/ ESTADO	ACC	AFTN/AMHS (Template FPL 2012)	FDP /FPL2012
Argentina	Comodoro Rivadavia	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Automated/Automatización Implemented June 2016/Implementado Junio 2016
	Cordoba	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Automated / Automatizado
	Ezeiza	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Automated / Automatizado
	Mendoza	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Automated/Automatización Implemented June 2016/Implementado Junio 2016
	Resistencia	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Automated/Automatización Implemented June 2016/Implementado Junio 2016
Bolivia	Cochabamba /La Paz	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Manual It is foreseen by the end of 2019 an ATM automated system compatible with FPL/12 in the new Cochabamba ACC and La Paz ACC (back up) / Se tiene previsto para finales del 2019 un sistema automatizado ATM compatible con el FPL/12 en el nuevo ACC de Cochabamba y La Paz. ACC (respaldo)

STATE/ ESTADO	ACC	AFTN/AMHS (Template FPL 2012)	FDP /FPL2012
Brazil / Brasil	Amazónico	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Automated /Automatizado (use of converter) / (uso de convertidor centralizado)
	Atlántico	Implemented (AMHS terminal) / Implantado (terminal AMHS)	An update in Sagitario ATM automated system (from ATECH Brazil) which includes the new FPL/12 flight plan format to deactivate the centralized inverter is scheduled for the end of 2017 in the ACC Amazonico, Atlantico, Brasilia, Curitiba and Recife./ Para finales del 2017 está prevista una actualización en Sagitario (sistema automatizado ATM de Brasil de la empresa ATECH) que incluye el nuevo formato de plan de vuelo FPL/12 y desactivar el convertidor centralizado.
	Brasilia	Implemented (AMHS terminal) / Implantado (terminal AMHS)	
	Curitiba	Implemented (AMHS terminal) / Implantado (terminal AMHS)	
	Recife	Implemented (AMHS terminal) / Implantado (terminal AMHS)	
Chile	Iquique	Not implemented (AFTN terminal) / No Implantado (terminal AFTN)	Automated /Automatizado
	Punta Arenas	Not implemented (AFTN terminal) / No Implantado (terminal AFTN)	Automatizado /
	Puerto Montt	Not implemented (AFTN terminal) / No Implantado (terminal AFTN)	Automated /Automatizado
	Santiago	Not implemented (AFTN terminal) / No Implantado (terminal AFTN)	Automated/Automatizado
	Santiago Oceanico	Not implemented (AFTN terminal) / No Implantado (terminal AFTN)	Automated/Automatizado
Colombia	Barranquilla	Not implemented (AMHS terminal) No implantado (terminal AMHS)	Automated /Automatizado
	Bogotá	Not implemented (AMHS terminal) No implantado (terminal AMHS)	Automated /Automatizado

STATE/ ESTADO	ACC	AFTN/AMHS (Template FPL 2012)	FDP /FPL2012
Ecuador	Guayaquil	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Automated /Automatizado
French Guiana (France) Guyana Francesa (Francia)	Rochambeau	No Implemented (AMHS terminal) / No Implantado (terminal AMHS)	Automated / Automatizado
Guyana	Timehri	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Automated / Automatizado
Panama	Panama	Implemented / implantado (AMHS terminal))	Automated /Automatizado
Paraguay	Asunción	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Manual Automated at the end of 2017 /Automatizado a final del 2017
Peru	Lima	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Update automation system by the end of third quarter 2017/ Actualización Sistema automatizado finales del tercer trimester del 2017
Suriname/Surinam	Paramaribo	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Automated (out of service, working manually) / Automatizado (fuera de servicio, trabajando manualmente)
Uruguay	Montevideo	Implemented (AMHS terminal) / Implantado(terminal AMHS)	Automated / Automatizado
Venezuela	Maiquetia	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Automated /Automatizado (use of converter) / (uso de convertidor) By the end of 2017 it is foreseen a new automation system in Maiquetía ACC/ Para finales del 2017 se estima operación del nuevo sistema automatizado del ACC de Maiquetía

APPENDIX B

GUIDE TO AVOID ERRORS IN FPLs AND ASSOCIATED ATS MESSAGES

1. EFFECTIVE FILING OF FPLs

1.1 An effective and homogeneous air traffic flow through FIR boundaries is achieved, in part, by securing the flight plans, and transmitting, processing, and transferring the associated messages between FIRs in a homogeneous, efficient, and consistent manner.

1.2 The methods and procedures used for filing and/or originating flight plans have a residual effect on the quality of the air traffic services provided. The introduction of duplicated or multiple flight plans, or of flight plans containing erroneous information has a direct impact on flight safety and efficiency within the global airspace system.

1.3 The sources of flight plan errors that have been identified include:

- Lack of quality and consistency in the filing of flight plans
- Inappropriate management in the use of repetitive flight plans (RPLs)
- Utilization of converters to comply with the ICAO 2012 flight plan format due to non-permanent conversion process availability
- Manual entry and processing of FPLs and associated messages

2. DIRECT DELIVERY OF FLIGHT PLAN MESSAGES

2.1. In order to reduce the risk of manual errors, the ANSP, pursuant to Doc 4444, paragraph 11.2.1.1.1, can implement local arrangements to delegate to the operators the responsibility for direct transmission of movement messages *via* the Aeronautical fixed telecommunication network (AFTN) or the air traffic service message handling system (ATS AMHS). Movement messages include FPLs, modification (CHG), delay (DLA), and cancellation of the flight plan.

2.2. If ANSPs have delegated to the airlines the responsibility of originating flight plan messages, then, in accordance with Doc 4444 Appendix 2, page A2-3, part 2.1, airlines will have the responsibility of correctly transmitting the initial FPL, as well as the associated messages to all the ATS units involved, in accordance with Doc 4444, 11.2.1.1.3.

2.3. Before delegating the responsibility for direct filing of flight plan messages, ANSPs must consider conducting a test with new operators, using a central AFTN/AMHS address to receive the messages for an initial manual validation.

2.4. The ANSPs must also specify in local arrangements or in the AIP the deadlines for completing the delivery of movement messages (DLA and CHG) for individual flights, for example, using a time parameter before the estimated off-block time (EOBT).

2.5. It is better to use a CNL and file the FPL again as an alternative to the delivery of multiple modification messages concerning the same FPL or several modifications within the same message.

3. SIMILAR AND MULTIPLE FLIGHT PLAN ERRORS

Similar errors

3.1 Inadequate completion procedures, sending the modified plan to the originator instead of using CHG or DLA, generate similar flight plans for the same flight. This creates confusion among the different ATS units, which will have to select the flight plan (not necessarily the last one considered valid by the airline) to update it with the surveillance information and/or in flight transfer processes.

Multiple errors

3.2 Multiple FPLs are a cause of error when there are 2 different originators of the FPL (whether airlines or ANSPs).

3.3 In order to avoid multiple FPLs in the AFTN/AMHS, airlines will only originate and transmit the FPL if the ANSP has delegated this responsibility in accordance with chapter 2 of this guide.

4. DELAY MESSAGES (DLA)

4.1. The originator will only consider sending the DLA message if the flight is expected to be delayed by more than 30 minutes after the EOBT contained in the previous FPL (refer to Doc 4444, 11.4.2.2.3).

4.2. If the originator does not send a DLA message 30 minutes after the EOBT specified in the FPL, then the FPL will be automatically cancelled.

5. MODIFICATION MESSAGES (CHG)

5.1. If the originator is an airline and needs to send a CHG in less time than that specified in item 2.3 of this guide, then it shall first contact the TWR or the designated ATS unit that will coordinate the proposed changes with the TWR involved.

5.2. Modifications concerning aircraft type and wake turbulence category, cruising speed and/or level shall be notified for each individual flight as soon as possible and no later than 30 minutes after take-off to:

- a) the air traffic services reporting office of the departure aerodrome, and
- b) only if the responsibility for originating the FPL has been delegated as mentioned in paragraph 2.1, the originator of the FPL shall also send the CHG message to the other ATS units considered in the initial FPL.

5.3. If the originator of the FPL wishes to modify the ATS route or the flight level en route, then the CHG message shall contain the whole portion of the route and the different FLs.

5.4. CHG messages shall include a completed field 15, containing the information of the FPL that changes to avoid an incorrect modification.

5.5. If the CHG message has a new ATS route with FIRs that were not considered in the original FPL, then the FPL shall be cancelled with a CNL message and a new FPL sent.

6. AFTN ADDRESSES

6.1 In order to reduce FPL filing discrepancies resulting from incorrect addressing of aeronautical messages, ANSPs must list their AFTN addressing requirements in their aeronautical information publication (AIP). Guidance on the addressing of AFTN messages can also be found in ICAO Annex 10, Volume II, chapter 4, in ICAO Docs 7910 and 8585, and in ICAO regional AFTN routing directories.

7. CENTRAL FLIGHT PLAN PROCESSING UNIT

7.1 ANSPs with multiple ATS centres may consider the installation of a central flight-planning unit for the processing and initial distribution of FPLs. An example of central flight planning is provided in the specifications of the Initial Flight Plan of EUROCONTROL.

7.2 Studies conducted by EUROCONTROL and the European Commission determined that inconsistencies in flight data content in hands of different parties for the processing of the same flight have a negative impact on the efficiency of operations within the European air traffic management system.

7.3 According to the EUROCONTROL website (see the References section), the IFPL specification defines the procedures and requirements for the provision, processing, and distribution of flight plans in the pre-flight phase. Improved consistency in flight plan data has enabled more homogeneous operations, enhanced safety, and has also permitted the definition of the new operational concepts for air traffic flow management (AFTM).

8. PROCEDURES FOR MITIGATING ERRORS

8.1 Appropriate procedures are required for resolving issues derived from messages that are not received. Part of the solution involves ensuring that duplicated or erroneous messages are not fed into the system. For example, if a movement message is received for an unknown FPL, the receiving unit must use the flight plan request message (RQP) to request the FPL from the sending unit instead of creating its own FPL.

8.2 Where the ANSPs provide the possibility of filing FPLs through the Internet, a validation process should be established to prevent the introduction of wrong data from movement messages. NAV CANADA is an example of web-based flight plan filing, using its Collaborative Flight Planning System (CFPA). The application permits direct filing of the flight plan by pilots and/or flight plan filing agencies, and is in full compliance with Flight Plan 2012, verifying errors in full as required by FPL filers in order to correct discrepancies before the flight plan is accepted for processing.

9. REVISION OF STATE REGULATIONS

9.1 The ANSPs are encouraged to cooperate with State regulators in the revision and alignment of existing regulations with emerging technologies. In those cases in which State regulations require that the FPL be delivered personally, together with the electronic FPL, the modification of such regulations may reduce man-induced discrepancies in the filing process.

9.2 If after a revision, State regulations still require operators to personally deliver the filed flight plans, the ANSPs must introduce appropriate quality control measures to reduce the possibility of disparity between electronic and personally delivered FLPs.

10. REPETITIVE FLIGHT PLANS (RPLs)

10.1 The use of the RPL is known to be an important contributor to duplicated flight plans and may result in the provision of less-than-optimal services and erroneous separation by the ANSP.

10.2 The flight plan information contained in the RPL may differ from the actual details considered by the operator for a given day, for example, the type of aircraft to be flown. This type of changes may have an impact on the services provided and on the integrity of the separation or wake turbulence standards applied.

10.3 Consequently, the direct filing of flight plan messages through the AFTN/AMHS must be the method of choice of the operators for filing the flight plan.

11. ALTERNATE AERODROMES

11.1 Some automated ground systems will reject flight plans that do not contain an alternate aerodrome as destination, even if an alternate does not need to be filed for the specific destination. Consequently, some operators file alternate aerodromes where an alternate is not required in order to avoid the rejection of the flight plan, which results in a financial burden, since additional and unnecessary fuel must be carried on board.

11.2 *ICAO Annex 6, Operation of aircraft, Part 2* establishes exceptions to the requirement of filing an alternate aerodrome. The ANSP should make sure that the alternate field is not a mandatory field for automated flight plan processing, especially for flights in transit to a destination in another FIR.

12. DESIGNATION OF DEPARTURE/ARRIVAL PROCEDURES

12.1 The ANSPs should make sure that the name of any published standard instrument departure (SID) or standard instrument arrival (STAR) procedure filed in the flight plan meets the designation requirements of *ICAO Annex 11, Air Traffic Services, Appendix 3*, in order to reduce the number of rejected flight plans.

12.2 The ANSPs should make sure that ATM systems are capable of duly processing filed flight plans that include SIDs and STARs as part of the route.

13. SUPPLEMENTARY FLIGHT PLAN INFORMATION (FPL ITEM 19)

13.1 Supplementary flight plan information should not be considered for transmission for each FPL.

13.2 If, for SAR reasons, this information is required by any ANSP (in accordance with Annex 11, part 5.2.2.1), the sequence for acquiring the information would be as follows:

- a) *via VHF*, requested from the flight crew, if the event is considered by ATC as an appropriate action; or
- b) *by telephone*, contacting the designated 24/7 flight operation/dispatch unit of the airline (specified in the FLP delegation agreement); or
- c) *via the AFTN/AMHS*, from the designated 24/7 flight operation/dispatch unit of the airline (specified in the FLP delegation agreement)

14. CONVERSIONS OF THE ICAO FPL 2012 FORMAT

14.1 During the transition to the ICAO FPL 2012 format, some ANSPs used converters to convert the existing flight plans to the new format.

14.2 The following issues were associated to the continuous use of converters:

- a) The benefits of Amendment 1 are not fully realised; especially, it reduces separation standards associated to performance-based navigation (PBN), and the provision of ADS-B services;
- b) Interoperability in the delivery of AIDC messages would be restricted when using the converter solution.

14.3 Other known issues related to the ICAO FPL 2012 include:

- a) The RVR/ indicator in FPL Item 18. This indicator must be either accepted without processing, or eliminated without rejection by ATM systems;
- b) FPL rejects occur when RMK/unexpected information is entered in Item 18.

14.4 In order to reduce the origin of erroneous messages and maximise the benefits of the new flight plan format, the ANSPs must fully comply with the provisions of ICAO FPL 2012 concerning automation and support systems.

15. FEEDBACK TO THE OPERATOR

15.1 The ANSPs shall consider establishing a reporting mechanism to provide constant feedback to the operators as to the number and causes of rejects and flight plan errors.

15.2 Furthermore, the ANSPs must consider holding periodic user/operator forums to discuss recurrent discrepancies.

16. REFERENCES

- ICAO Annex 6, Operation of aircraft, Part 2 (paragraph 2.2.2.3.5)
- ICAO Annex 10, Aeronautical telecommunications, Volume II, Chapter 4
- ICAO Annex 11, Air traffic services, Chapter 2, Appendix 3 and Appendix 4
- ICAO location indicators (Doc 7910)
- Designators for aircraft operating agencies (Doc 8585)
- ICAO AFTN routing guide, Asia/Pacific Regions, 27th Edition, August 2007
- ICAO PANS ATM (Doc 4444) (paragraph 11.2.1.1.1)

EUROCONTROL IFPL specification:

- <https://www.eurocontrol.int/articles/initial-flight-plan-ifpl-specification>
- <http://www.acac.org.ma/ar/Workshop%20Presentation/IFPS%20in%20Flight%20PlanningV4.pdf>

17. List of acronyms

Abbreviations

ACI	Airports Council International
ADS	Automatic dependent surveillance
ADS-B	Automatic dependent surveillance – Broadcast
ADS-C	Automatic dependent surveillance – Contract
AFTN	Aeronautical fixed telecommunication network
AIDC	ATS interfacility data communication
AIP	Aeronautical information publication
ANSP	Air navigation service provider
AMHS	Air traffic services (ATS) message handling system
APAC	Asia/Pacific
APANPIRG	Asia/Pacific air navigation planning and implementation regional group
ASBU	Aviation system block upgrades
ASIOACG	Arabian Sea/Indian Ocean ATS coordination group
ATFM	Air traffic flow management
ATM	Air traffic management
ATS	Air traffic service(s)
AUSEP	Australian air navigation operations
CHG	Modification
CNL	Flight plan cancellation message
CPDLC	Controller-pilot data link communications
CPL	Current flight plan
DARP	Dynamic air route planning
DLA	Delay message
EOBT	Estimated off-block time
FAA	United States Federal Aviation Administration
FIR	Flight information region
FIRBX	FIR boundary crossing
FPL	Filed flight plan
GANP	Global air navigation plan
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IFPL	Specification for the initial flight plan (EUROCONTROL)
ISPACG	Informal South Pacific Air Traffic Services Co-ordinating Group
LOA	Letter of agreement
RPL	Repetitive flight plan
RQP	Request flight plan
SID	Standard instrument departure
SMS	Safety management system
STAR	Standard instrument arrival
UPR	User preferred route

APPENDIX C

FLIGHT PLAN FILING PROCEDURES IN THE SAM REGION

ARGENTINA

Regarding the processing of FPLs in accordance with national regulations, paper forms can be initially filed at an ARO-AIS office and transmitted *via* AMHS to the units involved, or by phone or in flight through the A/G frequency.

The filing of RPLs is also regulated, as published in the AIP of Argentina. It should be noted that the filing of RPLs is not being used.

Additionally, the ACCs of Argentina have a flight data position, where an air traffic controller receives and controls FPLs through an AMHS channel.

In 2015, coordination started between the service provider and the operators LATAM Argentina and Aerolíneas Argentinas to study the possibility of using the information digitally produced by the flight planning systems hired by said operators, in the communication systems of the service provider, which produced the FPLs of all planned flights, which were then submitted by the operators in hard copy to the ARO/AIS offices involved.

To this end, coordination meetings were held between the aeronautical authority, ANAC, and the aforementioned actors. Personnel of the service provider and the operator conducted tests in early 2016 using the AMHS channel, with the inclusion of the ARO/AIS units of Aeroparque, Ezeiza and the INDRA automated centre at the EZE ACC.

These tests were successful, and use was extended to all ARO/AIS units in charge of planning the flights of the aforementioned companies.

This procedure permits reception of flight plans by the LIDO or JEPPESEN systems up to 4 hours before, with the advantage that they contain the data of the flight that will be actually conducted, significantly reducing errors in the data contained therein.

It should be noted that the aforementioned provision on FPL processing continues to be applied, and the control function of the ARO/AIS operator is not replaced by the systems hired by the operators.

BRAZIL

Brazil has as goal, to implement the centralized treatment of flight plans, as part of the implementation of SIGMA system (Air Movement Integrated System in use by CGNA – Air Navigation Management Centre). Under this concept, SIGMA validates the syntax, based on the analysis of the content of each field of the flight plan form (FPL) and in accordance with MCA 100-11- “*Preenchimento dos Formulários de Plano de Voo*”.

It also validates the semantics, which refers to the consistency among FPL boxes, based on the specifications of each flight, such as preferred routes, restricted aerodromes, enabled and activated airspaces, and others. All this automated process starts with the completion of the flight plan and

ends when clicking on the VALIDATE button. If there is any inconsistency, the user will be informed in order to make corrections as needed.

At present Brazil accepts domestic flight plans through internet in its whole territory, as set by AIC-9N dated 15 May 2016 – “Sending flight plans by internet”. Additionally 6 AIS – CAIS regional centres were implemented in Brasilia, Curitiba, Recife, Rio de Janeiro and Sao Paulo, as well as AIS offices in airdromes of Belo Horizonte, Campinas, Confins and Guarulhos that use SIGMA system in filling flight plans and making the semantic validation. Likewise, flight plans can also be received by phone, fax, or in person at the AIS offices or in CAIS.

In this framework, the FLP filling in AMHS terminals is made only as alternative in case of communication failure between the application and SIGMA system. In this process, the FLP validated will be analysed by SIGMA from a flow management perspective (demand vs. capacity) and, if approved, are directly transmitted to the ACCs, which relay them to the TWRs and APPs involved.

Another on-going project is the integration of automated systems of TWR and ACC/APP, using OLDI protocol and ADEXP messages, which allows more integrity of flight plan data used by centers involved.

Regarding the repetitive flight plan (RPL), Brazil applies this type of procedure for scheduled, charter, and postal flights authorised by ANAC, and is reproduced with the same basic characteristics for at least 10 (ten) flights, for a minimum period of 2 (two) months. RPLs are standardised through ICA 100-11 – Plano de Voo. A basic requirement for using RPLs is that data must be highly stable, so any changes can be easily made.

The RPL is filed using electronic media, the Internet, and, alternatively, by fax, or in person at the repetitive flight plan centre. Non-repetitive flight data, such as an alternate, range, and number of people on board, shall be sent prior to take-off, by radiotelephone, to the control tower, aerodrome of departure, or aeronautical telecommunication station.

Airlines must request the repetitive flight plan at least ten (10) days before the beginning of each of the periods described below:

- a) from the first to the tenth day of the month;
- b) from the eleventh to the twentieth day of the month; and
- c) from the twenty-first to the last day of each month.

Changes, delays, and temporary cancellations can be made to a flight in a planned RPL series. Permanent modifications that involve the addition of new flights, the deletion or modification of flights, in the RPL lists will be presented in the form of a new flight plan with the same advance notice.

CHILE

All flight plans have to be sent to ARO offices via AFTN, e-mail or presenting ATC-1 (FPL) form on ARO fronting desk.

The regulation allows sending a flight plan by any written means. There is also the possibility to present a flight plan at ATC through radio frequency (AFIL).

The process is as follows:

- Flight plan presented by the user (pilot, dispatcher, airline, etc.)
- Flight plan accepted. Review and advisory by ARO office in this part of the process.
- Flight plan transmitted to all ATS dependencies involved in the route.

IFIS system (flight plan presentation through internet) is only available for domestic users of general aviation (small aircrafts). Air operators are not allowed to send FPL via IFIS. Flight plans filled by IFIS are validated by the system and directly registered in FDP of automated systems.

Flight plans send by operators of flight plan service are registered in FDP pf automated system.

ECUADOR

Based on the implementation of Amendment 1 to the Procedures for air navigation services – Air traffic management (PANS ATM - Doc 4444, 15th edition) of the International Civil Aviation Organization (ICAO), the implementation of new procedures and the content of the flight plan and its associated messages in Ecuador are defined as follows:

Procedures for filing a flight plan

- Flight plans will be physically filed at the AIS-AD room of the air navigation services at the aerodrome of departure.
- Filing of flight plans within Ecuadorian territory through the Internet flight information system (IFIS), whether by the pilot-in-command or his/her authorised representative, based on national technical aeronautical regulations on the filing of flight plans within Ecuadorian territory.
- When the operations office of the aircraft operator at the aerodrome of departure uses e-mail as the means to communicate with the AIS-AD room, the filing of the referential flight plan using this medium will be permitted, after which the original forms shall be filed on the same day, no later than 2300 UTC.
- The filing of the flight plan by telephone will not be accepted, nor its submission by individuals other than the pilot-in-command or his/her duly accredited and authorised representative.

PANAMA

Panama has the THALES ANAIS system for flight plan processing.

In accordance with the AIP of Panama (ENR1.10-1), all users must file a flight plan in accordance with the flight plan format contained in Doc 4444, at least one hour before departure.

The user must notify ATM units of any changes (amendments) to the FPL, on a timely basis.

Users that have dispatch offices with a service capable of linking to the AMHS network shall transmit the FPL to the appropriate ATM units once approved by the authority.

Every AIS-AD unit that receives an FPL will immediately transmit it to the ATM services, addressed to MPZLZQZX and the airports and ACCs involved.

PARAGUAY

The operator files the flight plan in writing to the AIS unit.

The AIS unit transcribes the flight plan, which is addressed and transmitted *via* AMHS.

The flight plan is entered in the AMHS and, in turn, addressed to the automated system through a point-to-point connection to the FDP.

The FDP does the processing and sends the flight plan to the flight plan generation and correction position.

Obs: All flight plans entered in the automated system are sent *via* the AMHS.

An IFPL application (flight plan presentation *via* INTERNET) developed by company Radio COM is available for domestic flights.

PERU

The AIS expert in charge receives the FPL, whether in hard copy, *via* AMHS, mail, fax, or telephone, and analyses and verifies its content.

The AIS expert determines if it is authorised (permit from the DGAC).

The authorisation number is recorded in the FPL.

He/she verifies if aeronautical services have been paid for.

He/she stamps the original and the copies to indicate the office, day, and time when the FPL was received.

He/she transmits the FPL to the ATS units involved, using an FDP station. A user agent (AMHS) will send the FPLs in case of failure of the FDP.

The FDP workstation is part of the INDRA AIRCON 2100 system.

URUGUAY

The presentation of FPL is based on AIP Uruguay ENR 1.10-1.

International FPL

The presentation of the flight plan must be made without exception, before departure in the Operations Office (Flight Plan) at the departure airdrome which is responsible of filling the FPL in the system.

FPL reception

The Operations Department of DINACIA of Carrasco International Airport receives flight plans through the following means: 1) in person at the department' office, 2) by Fax # (598) 26040311, 3) by E-mail: plandevuelo@dinacia.gub.uy. All those FPLs are registered in the automated system.

National FPL

For domestic flights and/or when the operations office does not exist/functioning at the departing airdrome, FPL can be routed through the Aeronautical Telecommunications Station (CXK), through telephone 0800 PLAN (0800-7536 or 2604 0251 Ext. 5123).

RPL presentation is based on AIP Uruguay ENR 1.11-4.

The operator first will present by means and addresses indicated in ENR 1.11-5, the list of RPL and/or its corresponding amendments and them will be registered in the system.

FPL forms and RLP Doc 4444

Error types:

- Aircraft not entering FIR and not being alternated
- Duplicated plans
- Plan origin (no route, PBN)
- FPL missing (DEP, EST.)
- Data base (solution in progress)
- FLP form (free text)

VENEZUELA

Every aircraft that files a domestic or international flight plan, whether civilian, commercial, or military, must complete the physical flight plan format established to that end.

This flight plan must be presented to the appropriate AIS authority or unit, which will validate and authorise the flight plan.

Once the flight plan is authorised, the communications office will arrange for the entry of the flight plan into the AMHS or AFTN system so that it will reach the FDP.

Repetitive flight plans also exist in the automated system of the ACC. These flight plans are the commercial itineraries. However, these flight plans are also received by the AIS office (although not obligatory) and, when processed, generate duplication in the FDP system. Venezuela has incorporated Amendment 1 to Edition 15 of Doc 4444 into its flight plan.

APPENDIX D

FLIGHT PLAN ERRORS IDENTIFIED IN THE PLANNING OF FLIGHT PLANS AND RECOMMENDATIONS TO MITIGATE FLIGHT PLAN GENERATION ERRORS

FLIGHT PLAN ERRORS IDENTIFIED IN THE PLANNING OF FLIGHT PLANS:

- Lack of quality and consistency in flight plans
- Inappropriate use of repetitive flight plans (RPLs)
- Conversion due to non-compliance with the ICAO 2012 flight plan format
- Lack of verification of flight plan data by the aircraft operator prior to flight plan filing
- Manual entry and processing of FPLs and associated messages
- Similar errors and multiplicity of flight plans
- Omission of standard ATS messages associated to the flight plan (CHG, CNL....)
- Incorrect addressing of flight plan and associated messages
- Lack of agreement between the user and the flight information service provider regarding the direct delivery to the FDP of flight plans and associated messages by the operators.

RECOMMENDATIONS TO MITIGATE FLIGHT PLAN GENERATION ERRORS

- Train and inform all ARO/AIS personnel on the importance of the flight plan in the AIDC coordination process and ATS systems.
- Review the databases of automated systems, which should be in accordance with the amendments published in each AIP.
- Perform the proper addressing of the flight plans to automated control centres, listing AFTN addressing requirements in the aeronautical information publication (AIP).
- Conduct a complete analysis to determine if the existing automated ATM systems comply with flight plan 2012, especially with regards to the correlation between Items 10 and 18.
- Establish letters of agreement with the operators for the filing of repetitive flight plans (RPLs) for their proper processing and transmission.
- Establish a reporting mechanism to give feedback to operators on the number and cause of flight plan rejects and errors, prior to the establishment of agreements or direct delivery of FPLs to the ARO/AIS office.
- Use as a reference the procedures applied in Brazil and Lima for repetitive flight plans (RPLs) that are properly processed and transmitted, avoiding errors in the distribution to automated

systems. These procedures are based on letters of agreement with the airlines, which must strictly follow the established procedures.

- Conduct an analysis in each unit to see the feasibility of concentrating flight data in flight plan distribution centres, based on available systems.
- If air navigation service providers offer the capability of filing FPLs *via* Internet, a validation process shall be implemented to prevent the introduction of inaccurate movement message data.
- Before delegating the responsibility for direct filing of flight plan messages, air navigation service providers must consider conducting a trial with the new operators, the ARO/AIS office, using a central AFTN/AMHS address for receiving messages for initial manual validation.
- Report to the representatives of aircraft operators and IATA at the next SAMI/IG meeting (SAM/IG/18) those aspects involved in the filing of an erroneous flight plan, which disrupt the AIDC coordination process.

Agenda Item 2: Follow-up to the performance of AIDC operation and results of the AIDC interconnection trials in the SAM Region

2.1 Under this Agenda Item the following Working Papers were presented:

- ✓ WP/03 – *Follow-up to the implementation of conclusions formulated during the AIDC Meetings in the SAM Region* (Presented by Secretariat)
- ✓ WP/04 – *Follow-up to the implementation of activities related to AIDC interconnection between adjacent ACCs in the SAM Region* (Presented by Secretariat)
- ✓ IP/03 - *Corrections on deficiencies for the start-up of AIDC implementation in Panama* (Presented by Panama)

2.2 The Meeting reviewed the implementation status of the conclusions formulated in the past two AIDC Meetings. During these meeting the following conclusions were formulated:

- AIDC/1-1 Development of an Operation Manual of the AIDC
- AIDC/1-2 Update of the Orientation Guide for the AIDC implementation through the interconnection of automated centers.
- AIDC/1-3 Actions to mitigate mistakes in the presentation and processing of flight schedules
- AIDC/1-4 Implementation of recommendations to solve AIDC operation problems in the SAM Region

2.3 As a result of the review, the Meeting found that conclusions AIDC/1-2 and AIDC/1-4 were considered completed and the rest were still valid. The **Appendix A** to this Agenda Item presents a table with the status of conclusions implementation and an explanation of the actions taken.

Update of the Orientation Guide for the AIDC implementation through the interconnection of automated centers

2.4 The Meeting took note that the SAM/IG/18 reviewed the amendments of the Orientation Guide for the AIDC implementation through the interconnection of automated centers proceeding then to its approval. The updated orientation guide was uploaded in the ICAO SAM Region Office website in the section of *e-Documents* in the following e-portal:

http://www2010.icao.int/SAM/Pages/ES/eDocumentsDisplay_ES.aspx?area=CNS.

2.5 The Meeting took note of the recommendation formulated by the SAM/IG/18 so in the next version of the Guide, the main content should be more concise and focused in the relevant information for implementation.

Implementation activities of AIDC interconnection between adjacent ACCs of the SAM Region

2.6 The following is a description of the improvements in the implementation of the AIDC interconnection in each of the States in the Region:

Argentina

2.6.1 The AIDC between the ACC of Cordoba and the ACC of Ezeiza continues in the pre-operational phase. There have been problems with the ABI message in both centers and the company INDRA was consulted for a solution. In this sense, the operational phase would be implemented once this problem is solved estimating to be done during the second semester of 2017.

2.6.2 An AIDC training schedule is planned to carry out during the months of July, August and September 2017 addressed to the controllers of the ACCs of Comodoro Rivadavia, Mendoza and Resistencia. Once these trainings are completed, the pre operational phase of the AIDC between these centers shall be activated.

2.6.3 It is expected that by the end of the second semester of 2017, the national ACCs become in operational phase. The operational phase of the AIDC with the adjacent regional ACCs is expected to be in the period of 2018-2019.

2.6.4 AIDC tests at regional and interregional level would be carried out upon requests. In this respect, teleconference will be carried out for the respective coordination's.

Bolivia

2.6.5 By 2019, is expected that the automatization of the main ATS dependencies of Bolivia becomes operational (ACC of La Paz, New ACC of Cochabamba, APP of Santa Cruz and Trinidad). The automated systems to be installed are from the company Thales - model Top Sky. Once the automatization is operation, Bolivia will start the coordination's with the ACCs of the adjacent States for the AIDC test performance.

Brazil

2.6.6 Significant progress has been made regarding the implementation and entrance of the AIDC operational phase between its internal ACCS. The following AIDC interconnections have been carried out between the months of May and July 2016 and were reported in the AIDC/2 Meeting.

ACC	Date of AIDC implementation
Curitiba – Recife	July 2016
Recife – Brasilia	June 2016
Curitiba – Brasilia	July 2016
Curitiba – Amazónica	July 2016
Amazónica – Brasilia	June 2016
Amazónica – Recife	May 2016

2.6.7 Regarding the implementation of AIDC interconnections between the ACC Atlantico with the national adjacent ACCs, its operation is foreseen to be ready in the second semester of 2017.

2.6.8 AIDC tests were carried out with the ACC of Asuncion, but the results were unsatisfactory. The tests will continue during the 2017. Coordination's will be done between Brazil and Venezuela in order to exchange flight plans data and automated transfer using the messages of Document No. 4444. Likewise, in the second semester of 2017 the AIDC tests between the ACC of Manaus and the ACC of Lima will continue.

2.6.9 Brazil published in 2017 the document CIRCEA 100-75 - "Operação AIDC nos ATS".

Chile

2.6.10 The ATS controller's staff of the ACC of Iquique involved with the AIDC operations have been already trained and would be ready to perform the tests between the ACC of Iquique and the ACC of Lima. In this regard, Peru informed to the ICAO SAM Office (Letter No. MTC CORPAC S.A. GCA.GT.7.2.050.2017/04, dated March 10, 2017) that in view that in the ACC of Lima is being implemented the contract for updating the automated system by the company INDRA Sistema S.A., the AIDC tests between the ACC of Lima and the ACC of Iquique will be carried out from 19 to 23 June, 2017. The Meeting considered the need of beginning the coordination's between Chile and Peru to elaborate a letter of operational agreement that includes the AIDC operations between the ACC of Lima and the ACC of Iquique.

2.6.11 The AIDC between the ACC of Puerto Mont and the ACC of Punta Arena was in pre-operational phase since November 2016.

2.6.12 Provision of Chile to carry out AIDC tests between the ACC of Puerto Mont and the ACC of Punta Arenas with the ACC of Comodoro Rivadavia. The migration to the AIDC pre operational phase between the ACC of Iquique with the ACC of Cordoba will be done by the end of the second semester of 2017. The AIDC operations of the ACC of Santiago with the regional adjacent ACCs will be carried out once the software update of its automated system period 2018-2019 is installed.

Colombia

2.6.13 No progress has been presented since the AIDC/2 Meeting. The AIDC interconnections implemented at the national and intraregional level are still in a pre-operational phase. The amendment of the letter of agreement between the ACC of Bogotá and the ACC of Lima was signed with the inclusion of the AIDC procedure in November 2016.

Ecuador

2.6.14 The operational implementation of the AIDC between the ACC of Guayaquil and the APP of Quito has been given since February 2017, signing an amendment to the operational letter on February 1, 2017. There have been positive tests between the ACC of Guayaquil and CENAMER and coordination's to migrate to a pre-operational phase will continue. In relation to the operation of the AIDC between the ACC of Lima and the ACC of Guayaquil, operations in the operational phase were interrupted until the update of the automated system of the ACC of Lima is completed; scheduled for October 2017. By the end of 2017, is expected to count with the operation of the AIDC between the ACC of Guayaquil and the APP of Manta and Shell. In March 2017, the problems in the exchange of AIDC messages between the automated systems of Ecuador and Colombia were solved, after which the respective coordination's between the focal points of each country and ATM officials of the States for the establishment of a schedule of activities until the third quarter of this year and continuity of the pre - operational phase.

French Guyana

2.6.15 The AIDC implementation with the ACCs of the adjacent States is foreseen to take place in the period of 2017 – 2019.

Guyana

2.6.16 The AIDC implementation with the ACCs of the adjacent States is foreseen to take place in the period of 2017 – 2019.

Panama

2.6.17 In the list of requirements of the AIDC of Panama with the regional dependencies of ATS the implementation of the AIDC with the Rio Negro and the APP of Cali was included. The Panamanian Aeronautical Administration (see IP/03 of this Meeting) signed a technical support contract with the company Thales for the revision and updating of the of automated system software installed in the ACC of Panama which includes the solution to the AIDC problem (Freezing of the application by the accumulation of messages) as well as the operational technical training. This process would be completed by November 2017. By this date, AIDC is expected to be in operational phase with all the adjacent ACCs.

Paraguay

2.6.18 Thanks to the support of the regional project RLA/06/901, during the week of November 28 to December 2, 2016, an AIDC workshop was held for the controllers involved in the ACC of Asunción. Training was provided for 26 (twenty-six) ATCOs and 2 (two) CNS Technicians for the correct use of AIDC as a coordination tool. The course was delivered by AIDC experts from Argentina and Peru. Also during the week of November 28, 2016, AIDC tests were conducted between the ACC of Asunción and the ACC of Resistencia. By the end of 2017 is expected to update the automated system software of the ACC of Asunción.

Peru

2.6.19 The activities of updating the automated system of the ACC of Lima have been initiated, which would be completed by October 2017.

2.6.20 Considering this updating process, Peru would proceed to carry out new AIDC tests with the following ACCs (Information reported through Letter No. MTC-CORPAC-S.A.-GCA.GT.7.2.050.2017/04 dated March 10, 2017):

AIDC Tests Bogotá from 12 to 16 June 2017

AIDC Tests Iquique from 19 to 23 June 2017

AIDC Tests Guayaquil from 26 to 30 June 2017

Surinam

2.6.21 The AIDC implementation with the ACCs of the adjacent States is foreseen to take place in the period of 2017 – 2019.

Uruguay

2.6.22 The AIDC implementation with the ACCs of the adjacent States is foreseen to take place in the period of 2017 – 2019.

Venezuela

2.6.23 The AIDC implementation with the ACCs of the adjacent States is foreseen to take place in the period of 2017 – 2019.

2.7 Based on the information presented in paragraph 2.6, the Meeting proceeded to update the chart with the AIDC interconnection requirements in the SAM Region, its implementation status and expected for the period 2017-2019 which is presented as **Appendix B** of this agenda item.

2.8 The Meeting also reviewed the list of AIDC focal points presented as **Appendix C** to this Agenda Item.

APPENDIX A

FOLLOW-UP TO CONCLUSIONS ADOPTED BY THE AIDC IMPLEMENTATION MEETINGS STATUS OF IMPLEMENTATION

No.	Title	Content	Status	Observations
AIDC 1/1	Preparation of a local AIDC operation Manual	<p>In order to facilitate the use and operation of the AIDC to all ATS personnel involved, to achieve the automatic coordination between adjacent ACCs SAM Region States:</p> <p>a) develop a Manual of operation of the AIDC; and</p> <p>b) take as a reference, if they deem it appropriate, the operating manual prepared by Peru that is presented as Appendix B of this Agenda Item.</p>	<p>a) Valid</p> <p>b) Completed</p>	<p>a) It is expected that delegates from States who attend the third AIDC implementation meeting will report the progress on the drafting of local AIDC operating manual.</p> <p>b) States took note on the AIDC operating manual developed by Peru and if deemed appropriate, will adopt it as model.</p>
AIDC/1-2	Update of the orientation guide for the AIDC implementation through the interconnection of adjacent automated centers	<p>That the AIDC implementation group proceed with the updates of the Guidelines for the implementation of the AIDC document through the interconnection of automated centers, following instructions presented in Appendix C of this Agenda Item and that the members responsible of the guidance updating, send to the ICAO SAM Office the information to be included not later than 2 May 2016.</p>	Completed	<p>The document Guide for the implementation of the AIDC through the interconnection of adjacent automated centers was updated. The SAM/IG/18 meeting approved the updated document which is available at the ICAO SAM Office website, section: Documents http://www2010.icao.int/SAM/eDocuments/GUIA%20AIDC%20Sep%202016.pdf</p>

No.	Title	Content	Status	Observations
AIDC/1-3	Actions to mitigate errors in the presentation and processing of flight plans	<p>In order to mitigate errors in format, content, duplicity/multiplicity of the flight plans and to improve the operation of AIDC:</p> <p>a) That SAM Region States that have not implemented the template for flight plan according to Amendment 1 to the 15TH Edition of Document 4444 (see Appendix A to this Agenda Item) nor the modernization of the flight development system FPL, complete both actions as soon as possible.</p> <p>b) That SAM Region States take the necessary measures to avoid the use of free text in the filling of flight plan.</p> <p>c) That the AIDC implementation group carries out a feasibility study to include automated filling systems FPL interconnected with ATC automation systems on the regulatory framework of each State.</p>	<p>a) Valid</p> <p>b) Valid</p> <p>c) Valid</p>	<p>a) 67% of ACCs in the SAM Region have updated their flight data processing (FDP); 22% continue using converters and the remaining continue with manual solution.</p> <p>b) States took note on the need of using the AMHS templates with the FPL format which allows an initial control in the flight plan filling.</p> <p>c) A guide to avoid errors in the FPL and ATS related messages was prepared by Ecuador. The guide was presented to the second AIDC implementation meeting and was approved by the SAM/IG/18 meeting.</p>
AIDC/1-4	Implementation of recommendations to solve AIDC operation problems in the SAM Region	<p>That, in order to solve AIDC operation problems identified in the Region, such as the exaggerated generation of ABI messages, the information including during delivery, the manual acceptance of EST messages, the CDN amount of messages, the rejection of TOC messages and the not trustable information in PAC messages, SAM Region States take into consideration the recommendations included in paragraphs 3.16 to 3.20 of this Agenda Item.</p>	Completed	<p>States took note on the recommendations in Agenda Item 3, paragraphs from 3.16 to 3.20 of the final report of the first AIDC implementation meeting.</p>

APPENDIX B

(AIDC) GROUND-GROUND DATA INTERCONNECTION LEVEL REQUIREMENTS IN THE SAM REGION

ARGENTINA						
ACC	ACC ADJ	Flight plan				Comments
		Interconnection levels *				
		1 4444 Manual	2 4444 Auto	3 (OLDI)	4 (AIDC)	
CORDOBA (AUT. INDRA AIRCON2100) (2007)	IQUIQUE	XI			X	Positive AIDC tests - March 2016 As a result of the tests, the transmission speed has to be incremented from 2400 to 9600 bit/seg AIDC foreseen to be operational at the end of the second semester of 2018.
	LA PAZ	XI			X	AIDC foreseen for period 2017-2019
	EZEIZA	XI			XI	AIDC in pre-operational phase since December 2015. Operational phase foreseen by the first semester of 2017
	MENDOZA	XI			X	AIDC pre-operational phase by the second semester of 2017
	RESISTENCIA	XI			X	AIDC pre-operational phase by the second semester of 2017
RESISTENCIA (AUT. INDRA AIRCON2100) (May 2016)	ASUNCION	XI			X	Positive AIDC tests were conducted in 2015 between Ezeiza and Asuncion. Tests between Resistencia and Asuncion were conducted in the end of 2016. AIDC foreseen to be operational by the first semester of 2018.
	CORDOBA	XI			X	AIDC pre-operational by the second semester of 2017
	CURITIBA	XI			X	AIDC foreseen by the first semester of 2018
	EZEIZA	XI			X	AIDC pre-operational by the second semester of 2017

	MONTEVIDEO	XI			X	AIDC foreseen by the first semester of 2018
EZEIZA (AUT. INDRA AIRCON2100) (2007)	COMODORO RIVADAVIA	XI			X	AIDC pre-operational by the second semester of 2017
	MENDOZA	XI			X	AIDC pre-operational by the second semester of 2017
	PUERTO MONTT	XI			X	AIDC by the first semester of 2018
	CORDOBA	XI			XI	AIDC in pre-operational phase since December 2015. Operational phase foreseen by the second semester of 2017
	RESISTENCIA	XI			X	AIDC pre-operational by the second semester of 2017
	JOHANNESBURG	XI			X	AIDC tests foreseen by the first semester of 2017
	MONTEVIDEO	XI			X	AIDC foreseen by the first semester of 2018
MENDOZA (AUT INDRA AIRCON2100) (May 2016)	EZEIZA	XI			X	AIDC pre-operational by the first semester of 2017
	SANTIAGO	XI			X	AIDC foreseen for period 2017-2019
	CORDOBA	XI			X	AIDC pre-operational by the second semester of 2017
COMODORO RIVADAVIA (AUT INDRA AIRCON2100) (June 2016)	EZEIZA	XI			X	AIDC pre-operational by the first semester of 2017
	PUNTA ARENAS	XI			X	AIDC by the end of the second semester of 2017
	PUERTO MONTT	XI			X	AIDC by the end of the second semester of 2017

BRAZIL						
ACC	ACC ADJ	Flight plan				Comments
		Interconnection levels				
		1 4444 Manual	2 4444 Auto	3 (OLDI)	4 (AIDC)	
AMAZÓNICO (MANAUS) AUTO. SAGITARIO ATECH	BRASILIA	XI			XI	AIDC implemented June 2016
	BOGOTÁ	XI			X	AIDC operational foreseen by December 2017
	CAYENNE	XI			X	AIDC foreseen for period 2017-2019
	CURITIBA	XI			XI	AIDC implemented July 2016

	GEORGETOWN	XI			X	AIDC foreseen for period 2017-2019
	LA PAZ	XI			X	AIDC foreseen for period 2018-2019
	LIMA	XI			X	AIDC foreseen for December 2017
	MAIQUETIA	XI	X		X	AIDC foreseen for period 2018-2019
	PARAMARIBO	XI			X	AIDC foreseen for period 2017-2019
	RECIFE	XI			X	AIDC implemented since 2 May 2016
	ATLÂNTICO	XI			X	July 2017
	AMAZÔNICO	XI			XI	AIDC implemented June 2016
BRASILIA AUTO. SAGITARIO ATECH	CURITIBA	XI			XI	AIDC implemented July 2016
	RECIFE	XI			XI	AIDC implemented June 2016
	AMAZONICO	XI			XI	AIDC implemented July 2016
CURITIBA AUTO. SAGITARIO ATECH	ASUNCION	XI			X	AIDC foreseen for December 2017
	BRASÍLIA	XI			Xi	AIDC implemented July 2016
	LA PAZ	XI			X	AIDC foreseen for period 2018-2019
	MONTEVIDEO	XI			X	AIDC foreseen for the first semester of 2018
	RECIFE	XI			XI	AIDC implemented July 2016
	RESISTÊNCIA	XI			X	AIDC foreseen by the first semester of 2018
	ATLÂNTICO	XI			X	July 2017
	AMAZÔNICO	XI			XI	AIDC Implemented on 2 May 2016
RECIFE AUTO. SAGITARIO ATECH	BRASÍLIA	XI			XI	AIDC implemented June 2016
	CURITIBA	XI			XI	AIDC implemented July 2016
	ATLÂNTICO	XI			X	July 2017
	AMAZÔNICO	XI			X	July 2017
ATLÂNTICO AUTO. SAGITARIO ATECH	CURITIBA	XI			X	July 2017
	DAKAR	XI			X	AIDC TBD
	JOHANNESBURG	XI			X	AIDC TBD
	LUANDA	XI			X	AIDC TBD
	MONTEVIDEO	XI			X	AIDC foreseen for period 2017-2019
	RECIFE	XI			X	July 2017
	CAYENNE	XI			X	AIDC foreseen for period 2017-2019

BOLIVIA						
ACC	ACC ADJ	Flight plan				Comments
		Interconnection levels				
		1 4444 Manual	2 4444 Auto	3 (OLDI)	4 (AIDC)	
LA PAZ (MANUAL)	AMAZÔNICO	XI			X	AIDC foreseen for period 2018-2019
	ASUNCION	XI			X	AIDC foreseen for period 2018-2019
	CURITIBA	XI			X	AIDC foreseen for period 2018-2019
	CORDOBA	XI			X	AIDC foreseen for period 2018-2019
	LIMA	XI			X	AIDC foreseen for period 2018-2019
	IQUIQUE	XI			X	AIDC foreseen for period 2018-2019

CHILE						
ACC	ACC ADJ	Flight plan				Comments
		Interconnection levels				
		1 4444 Manual	2 4444 Auto	3 (OLDI)	4 (AIDC)	
SANTIAGO (AUTO THALES TOPSKY)	IQUIQUE	XI			X	AIDC foreseen for period 2018-2019
	LIMA	XI			X	AIDC foreseen for period 2018-2019
	MENDOZA	XI			X	AIDC foreseen for period 2018-2019
	PUERTO MONTT	XI			X	AIDC foreseen for period 2018-2019
IQUIQUE (AUTO INDRA AIRCON 2100)	CORDOBA	XI			X	Positive AIDC tests - March 2016. Tests results indicate the requirement of increase transmission speed from 2400 to 9600 bit/sec. AIDC operational foreseen by the first semester of 2018
	LA PAZ	XI			X	AIDC foreseen for period 2018-2019
	LIMA	XI			X	Positive AIDC tests conducted in February 2016. AIDC foreseen to be operational by the second semester of 2017
PUERTO MONTT (INDRA AUTOMATED)	SANTIAGO	XI			X	AIDC foreseen for period 2018-2019
	PUNTA	XI			X	AIDC pre operational since

	ARENAS					November 2016.
	EZEIZA	XI			X	AIDC by the first semester of 2018
	COMODORO RIVADAVIA	XI			X	AIDC by the first semester of 2018
PUNTA ARENAS (INDRA AUTOMATED)	PUERTO MONTT	XI			X	AIDC pre operational since November 2016
	COMODORO RIVADAVIA	XI			X	AIDC by the first semester of 2018

COLOMBIA						
ACC	ACC ADJ	Flight plan				Comments
		Interconnection levels				
		1 4444 Manual	2 444 4 Auto	3 (OLDI)	4 (AIDC)	
BOGOTÁ (AUTO INDRA AIRCON 2100)	AMAZÔNICO	XI			X	AIDC foreseen to be operational for December 2017
	CENAMER	XI			X	AIDC foreseen for period 2017-2019
	GUAYAQUIL	XI			XI	Positive AIDC tests conducted AIDC in pre-operational phase (August 2015).
	LIMA	XI			XI	Positive AIDC tests conducted. AIDC pre-operational (August 2015) Amendment to the operational agreement including the AIDC signed in November 2016.
	MAIQUETIA	XI			X	AIDC foreseen for period 2018-2019
	PANAMA	XI			X	Positive AIDC tests conducted. AIDC foreseen to be operational by second semester 2017.
	BARRANQUILLA	XI			XI	AIDC pre-operational (March 2016)
BARRANQUILLA (AUTO INDRA AIRCON 2100)	MAIQUETIA	XI			X	AIDC foreseen for period 2018-2019
	PANAMA	XI			X	Positive AIDC tests conducted. AIDC foreseen to be operational by second semester 2017.
	BOGOTA	XI			XI	AIDC pre-operational (March 2016)
	KINGSTON	XI			X	AIDC TBD
	CURAÇAO	XI			X	AIDC TBD
APP Rio Negro	PANAMA	XI			X	Tests on second semester 2017

(AIRCON 2100)						
APP Cali (AIRCON 2100)	PANAMA	XI			X	Tests on second semester 2017

ECUADOR						
ACC	ACC ADJ	Flight plan				Comments
		Interconnection levels				
		1 4444 Manual	2 444 4 Auto	3 (OLDI)	4 (AIDC)	
GUAYAQUIL AUTO INDRA AIRCON 2100	BOGOTA	XI			XI	Positive AIDC tests conducted. AIDC pre-operational (August 2015)
	LIMA				XI	AIDC operational implementation (31 March 2016)
	CENAMER	XI			X	Positive AIDC tests conducted. AIDC foreseen for period 2017- 2019

FRENCH GUIANA						
ACC	ACC ADJ	Flight plan				Comments
		Interconnection levels				
		1 4444 Manual	2 4444 Auto	3 (OLDI)	4 (AIDC)	
CAYENNE AUTO ADACEL AIDC not installed	AMAZÔNICO	XI			X	AIDC foreseen for period 2017-2019
	PARAMARIBO	XI			X	AIDC foreseen for period 2017-2019
	PIARCO	XI			X	AIDC foreseen for period 2017-2019
	DAKAR	XI			X	AIDC foreseen for period 2017-2019
	ATLANTICO	XI			X	AIDC foreseen for period 2017-2019

GUYANA						
ACC	ACC ADJ	Flight plan				Comments
		Interconnection levels				
		1 4444 Manual	2 4444 Auto	3 (OLDI)	4 (AIDC)	
GEORGETOWN	AMAZONICO	XI			X	AIDC foreseen for period

AUTO INTELCAN AIDC not installed						2017-2019
	PIARCO	XI			X	AIDC foreseen for period 2017-2019
	MAIQUETIA	XI			X	AIDC foreseen for period 2017-2019
	PARAMARIBO	XI			X	AIDC foreseen for period 2017-2019

PANAMA						
ACC	ACC ADJ	Flight plan				Comments
		Interconnection levels				
		1 4444 Manual	2 444 4 Auto	3 (OLDI)	4 (AIDC)	
PANAMA (AUTO THALES)	BOGOTA	XI			X	Positive AIDC tests conducted. AIDC foreseen to be operational by second semester 2017.
	BARRANQUILLA	XI			X	Positive AIDC tests conducted. AIDC foreseen to be operational by second semester 2017.
	CENAMER	XI			X	Positive AIDC tests conducted. Pre operational phase. AIDC foreseen to be operational by the second semester 2017
	APP CALI	XI			X	Tests on second semester 2017.
	APP RIO NEGRO	XI			X	Tests on second semester 2017.

PARAGUAY						
ACC	ACC ADJ	Flight plan				Comments
		Interconnection levels				
		1 4444 Manual	2 4444 Auto	3 (OLDI)	4 (AIDC)	
ASUNCION AUTO AIRCON 2100 INDRA	CURITIBA	XI			X	AIDC foreseen for December 2017
	LA PAZ	XI			X	AIDC foreseen for period 2018-2019

	RESISTÊNCIA	XI			X	Positive AIDC tests conducted in 2015 between Ezeiza and Asuncion. Tests between Resistencia and Asuncion were held by the end of 2016. AIDC foreseen to be operational by the first semester 2018.
--	-------------	----	--	--	---	--

PERU						
ACC	ACC ADJ	Flight plan				Comments
		Interconnection levels				
		1 4444 Manual	2 4444 Auto	3 (OLDI)	4 (AIDC)	
LIMA AUTO AIRCON 2100 INDRA	AMAZONICO	XI			X	AIDC foreseen to be operational by December 2017
	BOGOTA	XI			XI	Positive AIDC tests conducted. AIDC pre-operational phase (August 2015). Amendment to the operational agreement including the AIDC signed in November 2016.
	SANTIAGO	XI			X	AIDC foreseen for period 2018-2019
	IQUIQUE	XI			X	Positive AIDC tests conducted in February 2016. AIDC foreseen to be operational by the second semester of 2017.
	GUAYAQUIL	XI			XI	AIDC operational (31 March 2016)
	LA PAZ	XI			X	AIDC foreseen for period 2018-2019

SURINAME						
ACC	ACC ADJ	Flight plan				Comments
		Interconnection levels				
		1 4444 Manual	2 4444 Auto	3 (OLDI)	4 (AIDC)	
PARAMARIBO	AMAZÓNICO	XI			X	AIDC foreseen for period

(AUTO INTELSCAN) AIDC not installed						2017-2019
	GEORGETOWN	XI			X	AIDC foreseen for period 2017-2019
	PIARCO	XI			X	AIDC foreseen for period 2017-2019
	CAYENNE	XI			X	AIDC foreseen for period 2017-2019

URUGUAY						
ACC	ACC ADJ	Flight plan				Comments
		Interconnection levels				
		1 4444 Manual	2 4444 Auto	3 (OLDI)	4 (AIDC)	
MONTEVIDEO (AUTO INDRA AIRCON2100)	CURITIBA	XI			X	AIDC foreseen by first semester 2018
	EZEIZA	XI			X	AIDC foreseen by the first semester 201
	RESISTENCIA	XI			X	AIDC foreseen by first semester 2018
	ATLANTICO	XI			X	AIDC foreseen for period 2017-2019
	JOHANNESBURG	X			X	AIDC TBD

VENEZUELA						
ACC	ACC ADJ	Flight plan				Comments
		Interconnection levels				
		1 4444 Manual	2 4444 Auto	3 (OLDI)	4 (AIDC)	
MAIQUETIA (AUTO ATECH X4000) AIDC not installed	AMAZONICO	XI	XI		X	AIDC foreseen for period 2018-2019
	BOGOTA	XI			X	AIDC foreseen for period 2018-2019
	BARRANQUILLA	XI			X	AIDC foreseen for period 2018-2019
	PIARCO	XI			X	AIDC TBD
	CAYENNE	XI			X	AIDC foreseen for period 2018-2019
	CURAZAO	XI			X	AIDC TBD
	SAN JUAN	XI			X	AIDC TBD

* X PLANNED

*XI IMPLEMENTED AND IN PRE-OPERATIONAL OR OPERATIONAL PHASE

APPENDIX C

**NATIONAL FOCAL POINTS/PUNTOS FOCALES NACIONALES
IMPLEMENTATION OF INTERCONNECTION OF AUTOMATED SYSTEMS/IMPLANTACIÓN INTERCONEXIÓN SISTEMAS
AUTOMATIZADOS**

STATE/ ESTADO	ADMINISTRATION/ ADMINISTRACIÓN	NAME/ NOMBRE	POST/ CARGO	TELEPHONE/ TELEFONO	E-MAIL
ARGENTINA	EANA	Javier Schenk	Gerente CNS EANA	(549 11) 5848 6936	Jschenk@eana.com.ar
		Oswaldo Oscar Godoy	Jefe ANS Subregional Ezeiza	Cel (54911) 28836444 5411 44802309	ogodoy@eana.com.ar
		Pablo Torres	Coordinador nacional sistema automatizados	Cel (54911)23622317 (5411) 44802290	ptorres@eana.com.ar
		Mario Correa	Jefe sistemas automatizados ATS	(5411) 43176015	mario_correa@yahoo.com.ar
		Javier Vittor	Especialista CNS	(54 11) 4480-2362 (54 911) 6894-0692	javiervittor@gmail.com
	ANAC	Diego Agüero	Técnico automatización	(54911) 2258-7836 (5411) 5941-3000 Ext.69-128	daguero@anac.gob.ar
BOLIVIA	DGAC	Jaime Yuri Alvarez Miranda	Jefe Unidad CNS	Tel: +5912 2444450 int. 2651	jalvarez@dgac.gob.bo
BRAZIL/ BRASIL	DECEA	Luiz Antonio dos Santos	Asesor ATM	5521 2101 6088	luizantoniolas@decea.gov.br
		Murilo Loureiro	Asesor sistemas automatizados	(55 21) 2101-6658	loureiromal@decea.gov.br
COLOMBIA	UAEAC	Harlen Mejía	Jefe de Aeronavegación		harlen.mejia@aerocivil.gov.co
		Mauricio Ferrer	Especialista ATM sistemas automatizados		mauricio.ferrer@aerocivil.gov.co

STATE/ ESTADO	ADMINISTRATION/ ADMINISTRACIÓN	NAME/ NOMBRE	POST/ CARGO	TELEPHONE/ TELEFONO	E-MAIL
		Pedro Alejandro Velasco	Jefe Grupo de Vigilancia Aeronáutica	(57) 317656-7203	pedro.velasco@aerocivil.gov.co
CHILE	DGAC	Pedro Pastrian	Especialista radar y sistemas automatizados	(56 2) 836-4005 (56 2) 644-8345	ppastrian@dgac.gob.cl
		Christian Vergara	Especialista comunicaciones	(56 2) 836-4005 (56 2) 644-8345	cvergara@dgac.gob.cl
		Gustavo Cáceres Moraga	Controlador Tránsito Aéreo Ofc. Operaciones ACCS	(56 2) 91581853 (56 2) 28364018	gcaceres@dgac.gob.cl
ECUADOR	DAC	Raul Avellan	Especialista CNS coordinador sistema AMHS	(593 4) 269-2829 (593 9) 9530-2735	raul.avellan@aviacioncivil.gob.ec
		Jorge Zúñiga	Programación FDP y coordinaciones	(593 2) 2604477	jorzu40@hotmail.com
		Eugenio Espinoza	Controlador ACC Guayaquil Radar	(593) 981269823	eugenio.espinoza@aviacioncivil.gob.ec
GUYANA					
GUYANA FR./ FRENCH GUIANA	Service de la Navigation Aérienne aux Antilles-Guyane (SNA-AG)	Michel Areno	Head French Guiana ACC	(594) 694455617	michel.arena@aviation-civile.gouv.fr
PANAMA	Autoridad Aeronáutica Civil (AAC)	Mario Antonio Facey Howard	Especialista radar y sistemas automatizados	(507) 315-9852/65	mfacey@aeronautica.gob.pa
PARAGUAY	DINAC	Digno Nelson Cardozo González	Técnico Especialista en Radar y Sistemas Automatizados	(595) 9217585016 Celular: (595) 961779106	nechicar@gmail.com

STATE/ ESTADO	ADMINISTRATION/ ADMINISTRACIÓN	NAME/ NOMBRE	POST/ CARGO	TELEPHONE/ TELEFONO	E-MAIL
		Diego Ramón Aldana Fernández	Supervisor ACC/APP	(595) 21 645-707	diegoaldana@gmail.com
PERÚ	CORPAC	Johnny Ávila	Jefe equipos centro de control	(511) 230-1000 Anexo:1267	javila@corpac.gob.pe
		Jorge Eduardo Merino Rodríguez	Especialista ATM Controlador de Tránsito Aéreo	(51 1) 230-1000 Ext 1158 (511) 5750886 (Centro de Control Lima) (511) 5750995 Mobile: 51 99737407	jmerino@corpac.gob.pe jemr69@yahoo.com
		Jaime Arturo Contreras Benito	Coordinador General del Centro de Control	(511) 630 1154 Celular: (51) 948 463 081	jcontreras@corpac.gob.pe
		Raul Anastacio Granda	Supervisor Comunicaciones AMHS-AFTN Área de Comunicaciones Fijas Aeronáuticas	(511) 230-1018	ranastacio@corpac.gob.pe
	DGAC	Sady Beaumont Valdez	Inspector de Navegación Aérea	Tel: +511 6157880	sbeaumont@mtc.gob.pe
SURINAM/ SURINAME					
URUGUAY	DINACIA	Antonio Lupacchino	Especialista CNS sistemas automatizados	(598) 2604-0408 Ext.4520	alupacch@yahoo.com.ar
		Gustavo Turcatti	Jefe Departamento Operativo de Tránsito Aéreo	(598) 2604-0408 Ext.5111	blantur@gmail.com
VENEZUELA	INAC	Jean Carlos Lozano García	Controlador tránsito aéreo ACC Maiquetía	(58 416) 7226428	jclozgar@hotmail.com

Agenda Item 3: Review to the action plan for AIDC interconnection in the SAM Region

3.1 Under this Agenda Item, the following Working Papers and Information Paper were presented:

- ✓ WP/05 - *Action plan for AIDC interconnection between adjacent ACCs in the SAM Region* (Presented by Secretariat)
- ✓ WP/06 - *Terms of Reference and working plan for the AIDC implementation group* (Presented by Secretariat)
- ✓ IP/04 - *FF-ICE Evolution* (Presented by Secretariat)

Plan of activities for the implementation of the AIDC interconnection between adjacent ACCs

3.2 In view of the activities carried out to date, those scheduled and approved for 2017, and those considered for implementation in the period 2017-2019, the Meeting updated the action plan for the AIDC interconnection implementation presented as **Appendix A** to this Agenda Item.

Terms of Reference and working plan for the AIDC implementation group

3.3 The Meeting reviewed the terms of reference and the working programme for the AIDC implementation amending the last by adding a new task regarding the *Evaluation of an initial implementation plan FF ICE (B1-FICE)*. Both the terms of reference and the amended working programme for the AIDC implementation are presented as **Appendix B** to this Agenda Item.

FF-ICE evolution

3.4 The Meeting noted that global database and system interoperability represents one of four performance improvement areas in the ASBU. This area of improvement contributes to the management of aeronautical information essential for the changes envisaged in the 7 components of the ATM operational concept. The ASBU modules corresponding to this area of improvements are crucial and should be implanted worldwide so as to achieve the vision envisaged in the Operational concept ATM (Doc 9854).

3.5 The AIDC represent the first step to the interoperability of database and systems being the main BO FICE module. The implementation of this module considered crucial in the GANP, should be completed worldwide on 2018 to progress in the next step for increasing the interoperability through the implementation of the concept of flight information and flow in a corporative environment (FF ICE) first phase application before departure, module B1-FICE.

3.6 The meeting took note that the objective of module B1 FICE is to provide Exchange of ground ground data before departure, using the model of flight information exchange FIXM (*Flight Information Exchange Module*).

3.7 The FIXM is a standardized model for global exchange of flight information. In addition to support the concept of the future air transit management, the FIXM also enables interoperability with existing standards and systems inherited during the transition period to FF-ICE.

3.8 The FF-ICE is limited to flight information shared between ATM community members. It begins with the presentation of the flight information by the users of the air space to the ATM system and ends with the filling of information after the flight. The FF-ICE is focused on the global needs to share flight information but also has into consideration regional and local needs.

3.9 The Meeting took note that the FF-ICE solves duality/multiplicity problems of flight plans through the creation of the first notification of flight intention by a unique flight identifier at global scale that enable everyone (those who have the appropriate access rights) to see or modify information regarding the same flight. (This identifier is recognized as GUFID by the FF-ICE identifies), likewise the FF-ICE will provide a globally coherent mechanism and a compatible interface to give and receive flight and flow (FF) information.

3.10 On this respect, the meeting agreed to carry out a seminar to disseminate the concept of flight information and flow in a corporative frame (FF-ICE). In this sense, the SAM/IG/19 meeting will be requested to propose such seminar by mid-2018 in Lima, Peru, to the next Coordination Committee Meeting of RLA/06/901 with the provision of one fellowship for each member States, simultaneous interpretation services and travel expenses for an instructor.

APPENDIX A

PLAN OF ACTIVITIES FOR THE IMPLEMENTATION OF THE AIDC INTERCONNECTION BETWEEN ADJACENTS ACCs

	Start	End	Responsible party	Status
1. Establishment of initial activities for completing the technical implementation of AIDC	10/10/2014	16/10/2014	ICAO	Completed
<p>1.1 Based on the results of AIDC tests conducted from February 2014 to June 2014, the technical documentation of the automated systems installed in the Region, and the SAM AIDC implementation guide, develop:</p> <p>1.1.1 Plan of activities to complete technical feasibility tests for AIDC interconnection between:</p> <p style="padding-left: 40px;">Santiago ACC - Lima ACC Guayaquil ACC - Lima ACC Bogota ACC - Guayaquil ACC</p> <p>1.1.2 Contents of AIDC course for ATS controllers and programmers of AIDC automated system databases, to be conducted in Chile, Colombia, Ecuador and Peru.</p>	10/10/14	16/10/14	ICAO	<p>The initial plan of activities for AIDC implementation is scheduled for 2015. The plan of activities contemplates the conduction of AIDC courses for air traffic controllers working at ACCs and the operational implementation of AIDC between adjacent ACCs.</p> <p>These activities will be conducted in Chile, Colombia, Ecuador and Peru.</p> <p>Interconnection tests between the Lima and Bogota ACCs were added to the list shown in paragraph 1.1.1.</p>
2. Review of activities at the SAM/IG/14 meeting	09/10/14	13/11/14	ICAO and SAM/IG group	Completed
2.1 Submission of the plan of activities and contents of the AIDC course at the SAM/IG/14 meeting	09/10/14	13/11/14	ICAO	The SAM/14 reviewed and approved the plan of activities for AIDC implementation
2.2 Review and approval for submission at the Eighth Coordination Meeting of Project RLA/06/901	09/10/14	13/11/14	SAM/IG	

	Start	End	Responsible party	Status
3. Approval of activities by the RCC/8 meeting	25/02/15	27/02/15	RLA/06/901 member States	Completed The RCC/8 meeting held in Lima on 25-27 February 2015 approved the activities for initial implementation of AIDC interconnection in Chile, Colombia, Ecuador and Peru.
3.1 Submission of activities, with their respective cost, for approval.	25/02/15	27/02/15	RLA/06/901 member States	
4. Search and selection of experts	24/11/14	28/01/15	ICAO	Completed For the performance of the initial activities, three SAM experts with experience in database programming and operation of ACC automated systems were selected: Rubén Silva of Argentina, Mauricio Ferrer of Colombia, and Jorge Merino of Peru.
4.1 Search and selection of 4 experts from SAM States participating in Project RLA/06/901, with experience in the installation, operation and programming of AIDC databases, to perform the activities listed in item 1.	24/11/14	28/01/15	ICAO	
5. Missions to complete AIDC interconnection between States that started tests during the first semester of 2014	06/04/15	01/05/15	3 automation experts ICAO	Completed Missions were conducted for training purposes and to complete tests for AIDC interconnection and operation Chile 6/4 to 10/4/2015 Peru 13/4 to 17/4/2015 Ecuador 20/4 to 24/4/2015 Colombia 27/4 to 1/5/2015

	Start	End	Responsible party	Status
5.1 Mission to Santiago de Chile	13/04/15	17/04/15	3 automation experts ICAO	Completed Implementation of AIDC activities at the Santiago ACC <ul style="list-style-type: none"> • AIDC practical course • AIDC interconnection tests between: <i>Santiago ACC and Lima ACC</i>
5.1.1 Complete AIDC technical implementation between the Santiago and Lima ACCs	13/04/15	17/04/15	3 automation experts ICAO	Two-way communication was established in the AIDC interconnection tests between the Thales Top sky system of the Santiago ACC and the INDRA Aircon 2100 of the Lima ACC. The operational tests did not have positive results due to the AIDC limitations in the Santiago ACC. The practical course on AIDC and database programming was conducted, providing training to 16 controllers of the Santiago ACC and 2 aeronautical technicians.
5.1.2 Conduct AIDC course for ATS personnel of the Santiago ACC	13/04/15	17/04/15		
5.2 Mission to Lima:	13/04/15	17/04/15	3 automation experts	Completed Implementation of AIDC activities in the Lima ACC <ul style="list-style-type: none"> • AIDC practical course • AIDC interconnection tests between:

	Start	End	Responsible party	Status
				<i>Lima ACC - Santiago ACC</i> <i>Lima ACC - Guayaquil ACC</i> <i>Lima ACC - Bogota ACC</i>
5.2.1 Conduct AIDC course for ATS personnel of the Lima ACC	13/04/15	17/04/15	3 Automation experts ICAO	Completed The practical course on AIDC and database programming was conducted, providing training to 44 controllers of the Lima ACC.
5.2.2 Complete AIDC tests between the Lima ACC and the Guayaquil ACC	13/04/15	17/04/15		Completed AIDC tests between the Lima and Guayaquil ACCs were successfully conducted.
5.2.3 Complete AIDC tests between the Lima ACC and the Bogota ACC	13/04/15	17/04/15		Completed AIDC tests between the Lima and Bogota ACCs were successfully conducted.
5.3 Mission to Guayaquil	20/04/15	24/04/15	3 Automation experts of the SAM Region	Completed Implementation of AIDC activities at the Guayaquil ACC <ul style="list-style-type: none"> • Practical course on AIDC • AIDC interconnection tests and pre-operational implementation: Guayaquil ACC - Lima ACC Guayaquil ACC- Bogota ACC

	Start	End	Responsible party	Status
5.3.1 Complete AIDC technical implementation between the Guayaquil ACC and the Lima ACC	20/04/15	24/04/15	3 automation experts of the SAM Region	Completed AIDC technical interconnection was completed, currently in the pre-operational phase.
5.3.2 Complete AIDC technical implementation between the Guayaquil ACC and the Bogota ACC	20/04/15	24/04/15		Completed AIDC technical interconnection was completed, currently in the pre-operational phase
5.3.3 Conduct AIDC course for ATS personnel of the Guayaquil ACC	20/04/15	24/04/15		Completed The practical course on AIDC and database programming was conducted, providing training to 31 controllers of the Guayaquil ACC.
5.4 <i>Mission to Bogota</i>	27/04/15	01/05/15	3 automation experts	Completed Implementation of AIDC activities in the Bogota ACC <ul style="list-style-type: none"> • Practical course on AIDC • AIDC interconnection tests and pre-operational implementation: <i>Guayaquil ACC - Lima ACC</i> <i>Guayaquil ACC - Bogota ACC</i>
5.4.1 Complete AIDC technical implementation between the Bogota ACC and the Guayaquil ACC	27/04/15	01/05/15	3 automation experts of the SAM Region	Completed The AIDC technical interconnection was completed, currently in pre-operational phase

	Start	End	Responsible party	Status
5.4.2 Complete AIDC technical implementation between the Bogota ACC and the Lima ACC	27/04/15	01/05/15		Completed The AIDC technical interconnection was completed, currently in pre-operational phase
6. First meeting of the AIDC operational implementation working group during the SAMIG/15 meeting	11/05/15	15/05/15	RLA/06/901 member States	Completed. As a result of AIDC technical implementation, the SAM/IG/15 established a group of activities to migrate from the pre-operational phase to the operational between the ACC Bogota, Guayaquil and Lima.
6.1 It is proposed that, as a matter of priority, the SAM/IG/15 meeting do the follow-up of AIDC implementation. Accordingly, the AIDC operational implementation working group will hold its first meeting.	11/05/15	15/05/15	RLA/06/901 member States	Additionally the AIDC messages to be used were defined.
7. AIDC operational implementation	18/05/15	31/12/17	Involved States	
7.1 Definition of the parameters of the AIDC database for the to AID operational interconnection between Colombia, Ecuador and Peru	25/05/15	29/05/15	Involved States	Completed.
7.2 Amend letter of operational agreement to include the AIDC for the coordination between the ACC Lima with AAC Bogota, ACC Bogota with ACC Guayaquil and ACC Lima with ACC Guayaquil	15/06/15	31/03/16	Involved States	Valid. Letter of operational agreement between the ACC Guayaquil and ACC Lima was amended and signed. (Oct 2015). On Nov 2016, final review and sign of letter of operational agreement between ACC Lima and ACC Bogota was completed. Pending amendment of letter

	Start	End	Responsible party	Status
				of agreement between ACC Bogota and ACC Guayaquil.
7.3 Teleconferences to coordinate and follow-up the migration from the AIDC pre-operational phase to the operational for Colombia, Ecuador and Peru	June 2014	Monthly Teleconferences at the beginning of each month until end 2017 depending on the progress, teleconference will be conducted upon needs	Involved States ICAO	Valid. Teleconferences are been carried out on monthly basis since June 2014. On 2016 teleconferences were conducted on: 19 January 23 May 19 February 3 June 18 March 6 September For 2017 teleconferences are foreseen for March, (made on 3 March) July, September and December.
7.4 Complete courses for the ACC Lima and Guayaquil, Bogotá ATS staff as well as staff ARO/AIS	18/05/15	29/02/16	Involved States	Completed.
7.5 Preoperational and operational Implementation of AIDC Guayaquil ACC - Lima ACC Bogota ACC - Guayaquil ACC Lima ACC - Bogota ACC Lima ACC – Santiago ACC*	18/05/15	31/12/17	States involved	Valid. Letter of operational agreement with corrections on AIDC between ACC Colombia, Ecuador, Panama and Peru were amended (October 2015). Letter of operational agreement between AAC Lima and Guayaquil with the inclusion of AIDC was signed

	Start	End	Responsible party	Status
				<p>on 23 October 2015. Letter came into force on 31 March 2016.</p> <p>Establishing of a pre-operational period completing the ATS staff training.</p> <p>Operational implementation. AIDC between ACC Lima - ACC Guayaquil in operational phase from August 3, 2015, became operative on 31 March 2016. AIDC operations interrupted on September 2016 due to AIRCON 2100 system problems in Lima ACC. Automated system of Lima is being updated, esteemed to be completed by the beginning of the second semester 2017.</p> <p>The AIDC between the ACC Bogota and the ACC Lima and ACC Guayaquil is in pre-operational phase since May, 2015.</p> <p>* The AIDC operational implementation between the ACC Lima and ACC Santiago has postponed in view of the delay in the modernization of</p>

	Start	End	Responsible party	Status
				the ACC Santiago automated Center (2017-2019).
8. Other AIDC implementations Bogota ACC - Panama ACC Ezeiza ACC - Montevideo ACC Resistencia ACC - Asunción ACC Curitiba ACC – Resistencia ACC Iquique ACC – Lima ACC Cordoba ACC – Iquique ACC Amazonico ACC – Bogota ACC Amazonico ACC – Lima ACC Asuncion ACC – Curitiba ACC	18/05/15	31/12/17	States involved	
8.1 Definition of parameters of the AIDC database for the operational interconnection of the AIDC		29/07/16	States involved	Valid Defined for AIDC between: Bogota ACC-Panama ACC, Iquique ACC-Cordoba ACC and Resistencia ACC-Asuncion ACC.
8.2 Amendment of letter of operational agreement to include the AIDC for coordination between ACCs.		31/12/17	States involved	Valid
8.3 Carry out teleconferences for coordination and follow-up to the migration from the AIDC pre-operational to operational fase		Monthly tele-conferences at the beginning of each month until the end of 2017 Depending on the progress tele-	States involved ICAO	Valid Teleconferences conducted 19 January 23 May 19 February 3 June 18 March 6 September For 2017 teleconferences are foreseen for March, (made on 3 March) July, September and December.

	Start	End	Responsible party	Status
		conferences will be conducted upon need		
8.4 Practical courses addressed to the ATS AIS CNS personnel of the ACC involved, interconnection AIDC		30/11/16	States involved OACI	Completed AIDC Course (Panamá 22 -26 June) 2015 AIDC Course (Paraguay 28 November to 2 December 2016).
8.5 Conduction of AIDC interconnection test between adjacents ACCs		30/12/17	States involved	Valid Successful AIDC interconnection tests between Bogota and Panama. (June 2015). Tests will continue during the first semester 2017 in view of the improvement made in the automated system of Panama ACC. AIDC tests Iquique ACC and Lima ACC were successfully conducted on December 2015 and continued until October 2016. Tests will restart the second semester of 2017 with the Lima automated system update. AIDC tests Iquique ACC and Cordoba ACC were made in February 2016 with positive

	Start	End	Responsible party	Status
				<p>results but the ABI message. Tests will continue one end-2017 since Argentina reported that AIDC domestic operations will be completed first.</p> <p>AIDC tests Amazonico ACC and Lima ACC were conducted in March 2016 with problems with ABI messages at the beginning which were overcome by Atech. Tests will continue on second semester 2017.</p> <p>AIDC tests Ezeiza ACC and Montevideo ACC (first semester 2017).</p> <p>AIDC tests Asuncion ACC and Resistencia ACC were made during the week of 28 November 2016 and will restart at the end of 2017.</p> <p>AIDC tests Curitiba ACC and Resistencia ACC (end of the second semester 2017).</p> <p>AIDC tests Curitiba ACC and Asuncion ACC (second semester 2017).</p>

	Start	End	Responsible party	Status
				AIDC tests Bogota AAC and Amazonico ACC (Second semester 2017)
8.6 Implantation of pre-operational and operational AIDC		31/12/17	States involved	<p>Valid</p> <p>AIDC between Bogota ACC and Panama ACC is in pre-operational phase since October 2015. Operational phase foreseen by end of the first semester 2017.</p> <p>AIDC between Ezeiza ACC and Montevideo ACC in pre-operational phase foreseen by first semester 2018.</p> <p>AIDC between Asuncion ACC and Resistencia ACC in pre-operational phase foreseen by the second semester 2017 and operational by second semester 2018.</p> <p>AIDC between Iquique ACC and Lima ACC will be in pre-operational and operational phases on the second semester 2018.</p> <p>AIDC between Iquique ACC and Cordoba ACC will be in pre-operational and operational</p>

	Start	End	Responsible party	Status
				<p>phases by the second semester 2018.</p> <p>AIDC between Curitiba ACC and Resistencia ACC in pre-operational and operational phases by the first semester 2018.</p> <p>AIDC between Amazonico ACC and Lima pre-operation October 2016, operational by Second Semester 2018.</p> <p>AIDC between Amazonico ACC and Bogota ACC foreseen operational by Second Semester 2017.</p> <p>Remaining interconnections foreseen pre-operational by first semester 2017 and operational by the second semester 2017.</p>
9. Workshop on implementation of ATM automation, ADS B, and multilateration	22/09/15	25/09/15	ICAO	<p>Concluded</p> <p>NAN/CAR/SAM workshop held in Panama (22-25 September 2015). The implementation of inter-regional AIDC interconnections was analysed at the workshop.</p>

	Start	End	Responsible party	Status
10. Second meeting of the AIDC operational implementation working group during SAMIG/16	19/10/15	23/10/15	ICAO	Concluded
10.1 It is proposed, as a matter of priority, the SAM/IG/16 meeting do the follow-up of AIDC implementation. Accordingly, the second meeting of the AIDC operational implementation working group will be held.	19/10/15	23/10/15	ICAO	Concluded Follow-up was made on the operational implementation and programming of activities for operational implementation in 2016.
11. AIDC Implementation meetings	01/01/17	31/12/19	Involved States ICAO	Valid
11.1 Implementation of 12 AIDC interconnections at inter-regional level and 9 interconnections distributed as follows: Colombia (3), Ecuador (1), Panama (1) and Venezuela (4).	01/01/17	31/12/19	Involved States ICAO	Valid
11.2 Inter-regional AIDC interconnections between SAM and AFI Regions: Argentina (1), Brazil (2), French Guiana (1) and Uruguay (1)	01/01/17	31/12/19	Involved States ICAO	Valid
12. Introduction of FF ICE concept Analysis of the application of B1-FICE Module in the Region: Increasing interoperability, efficiency and capability through FF ICE. First stage of application before exit.	24/04/17	01/01/19	SAM Region States and ICAO	Valid
13. Monitoring to the AIDC interconnection implementation	2015	2019	ICAO	
13.1 AIDC Implementation Meeting ✓ First AIDC Implementation Meeting ✓ Second AIDC Implementation Meeting	March 2016	September 2019	ICAO	Valid AIDC/1 (Lima, Peru, 28-30 March 2016) AIDC/2 (Lima, Peru, 21-23 September 2016)

	Start	End	Responsible party	Status
✓ Third AIDC Implementation Meeting				AIDC/3 (Lima, Peru, 24-26 April 2017) Approved by RCC/10
✓ Fourth AIDC Implementation Meeting				AIDC/4 (Lima, Peru, June 2018)
✓ Fifth AIDC Implementation Meeting				AIDC/5 (Lima, Peru, September 2019)

APPENDIX B

TERMS OF REFERENCE AND WORKING PLAN OF THE MEETING FOR THE AIDC IMPLEMENTATION IN THE SAM REGION

1. Terms of reference

Review, improve and complete the planning of the AIDC implementation in ATS units and the AIDC interconnection between them. In addition study, evaluate, propose measures and monitor the implementation of interconnection AIDC between adjacent ACCs at regional and interregional level. Present advances in the implementation of the AIDC and its interconnection between ACCs adjacent, to the group of automation of the SAM implementation group (SAM/IG meetings) and this in turn to the Coordinator of the project C1 *Automation ATM SAM*. The C1 project is part of the ATM automation program and the GREPECAS situational awareness. These terms correspond to the requirements of GANP module B0-FICE and the Plan of implementation of the air navigation system based on performance for the SAM Region (ISPs). Likewise initial requirements of B1/FICE Module from the Global Air Navigation Plan are included.

2. Working plan

Task number	Task description	Responsible	DATE	
			BEGINNING	ENDING
AIDC-1	Monitoring and analyse the flight plan performance (content errors, multiplicity/duplicity, FPL/12).	Focal Points ICAO States	Nov 2012	Dec 2018
AIDC-2	Follow-up and support to the automation implementation in the ATS dependencies as well as its modernization according to regional plans developed in this respect*.	Focal Points ICAO States	Dec 2012	Dec 2019
AIDC-3	Analysis on how the AIDC operational implementation in the region complies with the operational improvements expected**	Focal Points State	Jun 2016	Dec 2019
AIDC-4	Draft a plan of AIDC implementation in ACCs of the Region	Focal Points State to be define	Mar 2016	Sep 2016 Implemented
AIDC-5	Keep updated the supporting documentation for AIDC implementation elaborated in the Region	Focal Points ICAO States	Sep 2016	Dec 2019
AIDC-6	With the support of RLA/06/901, develop and deliver practical courses on AIDC in States of the Region.	Focal Points selected ICAO States	Dec 2013	Dec 2018
AIDC-7	Set and AIDC interconnection schedule in accordance with the AIC implementation plan.	ICAO States	Oct 2014	Mar 2016 Implemented
AIDC-8	Implementation of scheduled AIDC interconnection tests.	States	Jan 2015	Dec 2018
AIDC-9	Implementation of the AIDC pre-operational phase.	States	Jan 2015	Jun 2019

Task number	Task description	Responsible	DATE	
			BEGINING	ENDING
AIDC-10	Implementation of the AIDC operational phase.	States	Jan 2015	Dec 2019
AIDC-11	Report progress to the SAM/IG meetings	AIDC implementation Group of ICAO	May 2016	Dec 2019
AIDC-12	Analyse the initial implementation plan of FF ICE (B1-FICE)	AIDC implementation Group of ICAO	April 2017	Jan 2019
AIDC-13	Monitoring of the AIDC working plan	ICAO	Dec 2012	Dec 2019

3. Settlement

All SAM Region' States and Territories.

The President of AIDC implementation meetings is Mr. Jorge Merino from Peru and the Vice-President is Mr. Mauricio Ferrer from Colombia.

Agenda Item 4: Other matters

4.1 Nil.