

## PROJECT ATN GROUND-GROUND AND AIR GROUND APPLICATIONS IN THE SAM REGION

SAM Region	PROJECT DESCRIPTION (PD)	PD N° D2	
Programme	Project Title	Starting Date	Ending Date
Ground-ground and Air-ground Telecommunications Infrastructure (Programme Coordinator: Onofrio Smarrelli)	ATN Ground-ground and Air-ground Applications in the SAM Region  <i>Project Coordinator: Omar Gouarnalusse (Argentina)</i> <i>Contributing experts: Javier Vittor (Argentina), Andres Jansen (Brazil)</i>	May 2010	June 2016
<b>Objective</b>	Develop the implementation of ATN ground-ground and air-ground applications in the SAM Region		
<b>Scope</b>	Implementation of SAM ATN ground-ground and air-ground applications, including, at least: <ul style="list-style-type: none"> <li>Operational integration of international AMHS connections in the SAM Region</li> <li>Operational integration of international AIDC connections in the SAM Region</li> <li>Guidelines for the implementation of DCL, DATIS, DVOLMET &amp; CPDLC services through VDL in the SAM Region</li> </ul>		
<b>Metrics</b>	<ul style="list-style-type: none"> <li>Number of AMHS interconnections as per CAR/SAM FASID Table 1Bb</li> <li>Number of AIDC interconnections as per CAR/SAM FASID Table 1Bb</li> <li>Drafting of following guidelines: Guideline for the use of AIDC / Guideline for the establishment of ground-air data links in terminal, approach and aerodrome areas / Guideline for the implementation of DCL, DATIS and DVOLMET systems / Guideline for the implementation of CPDLC through VDL in the SAM Region</li> </ul>		
<b>Strategy</b>	<ul style="list-style-type: none"> <li>All tasks will be conducted by experts nominated by States and organizations of the SAM Region members of the project <i>ATN Ground-ground and Air-ground Applications in the SAM Region</i>, under management of the project coordinator, in coordination with the programme coordinator. Communications among Project members, as well as between the Project coordinator and programme coordinator, shall be carried out through teleconferences and the Internet. In addition, the programme coordinator, together with the project coordinator and the contributing experts, can convene at SAM/IG implementation meetings</li> <li>Once studies are completed, the results will be submitted to the ICAO programme coordinator as a final consolidated document for its analysis, review, approval and presentation at the GREPECAS PPRC</li> </ul>		
<b>Goals</b>	<ul style="list-style-type: none"> <li>Complete all AMHS interconnections by December 2015</li> <li>Complete the drafting of MoU for the interconnection of AMHS by mid-2013</li> <li>Complete the migration towards the implementation of AMHS interconnection through IP protocol by December 2015</li> <li>Complete AIDC installation between adjacent ACCs by mid-2016</li> <li>Complete the drafting of MoU for AIDS systems interconnection by the end of 2013</li> <li>Complete AIDC installation between adjacent FIRs by mid-2016</li> </ul>		

	<ul style="list-style-type: none"><li>• Complete the drafting of guideline material for the use of AIDC; for the establishment of ground/air data links in terminal, approach and aerodrome areas; and for the implementation of DCL, DATS and DVOLMET.</li></ul>
<b>Justification</b>	<ul style="list-style-type: none"><li>• The implementation of ground-ground and air-ground data communications infrastructure will contribute to the reduction of air traffic control incidents, increasing the capacity of the transition of information with regard to the currently analogue based applications</li><li>• This project contributes to the implementation of the SAM PFF SAM CNS 01, CNS 02, ATM 05, ATM 06, MET 03, MET04 and AIM 02 of the <i>Air Navigation System Performance-Based Implementation Plan for the SAM Region (SAM PBIP)</i></li></ul>
<b>Related Projects</b>	<ul style="list-style-type: none"><li>• Automation (systems interconnection)</li><li>• ATFM</li><li>• Improve ATM Situational Awareness</li><li>• Implementation of the ICAO New Flight Plan Format</li></ul>

Project Deliverables	Relationship with Performance Based Regional Plan (PFF)	Responsible	Status of Implementation <sup>1</sup>	Delivery Date	Remarks
Document on regional strategy for the implementation of ground-ground and air-ground applications in the SAM Region	PFF SAM CNS 01 PFF SAM CNS 02	Omar Gouarnalusse (Argentina)		June 2012	An initial review to the strategy was presented at SAM/IG/8 meeting (Lima, Peru, 10-14 October 2011) In July 2012, the Project Coordinator presented a preliminary version of the guideline, which is being examined by the programme Coordinator, and will be presented at SAM/IG/10 meeting for its review and approval.
Guideline for the use of AIDC with the aim of reducing coordination errors	PFF SAM CNS 01 PFF SAM ATM 06	Javier Vittor (Argentina)		November 2012	The guideline will be based on the Argentinean experience in the IP AIDC implementation between the Cordoba and Ezeiza ACCs. The GREPECAS-approved <i>Interface control document</i> (ICD) for data communications among ATS units in the Caribbean and South American Regions will be reviewed.
Guideline for the establishment of ground-air data links in terminal, approach and aerodrome areas	PFF SAM CNS 02 PFF SAM ATM 06	Programme Coordinator		October 2012	An initial plan for data link implementation was drafted, and presented at SAM/IG/8 meeting. Pending is the designation of an expert for the conduct of this activity
Guideline for the implementation of DCL, DATIS, DVOLMET systems	PFF SAM CNS 02 PFF SAM ATM 06 PFFs SAM MET 03 y 04	Andrés Jansen (Brazil)		June 2013	The guideline will be based on the Brazilian experience in the implementation of these systems This activity has still not started

<sup>1</sup>

**Gray:** Activity has not started

**Green:** Activity has or will deliver planned milestone as scheduled

**Yellow:** Activity is behind schedule on milestone, but still within acceptable parameters to deliver milestone on time

**Red:** Activity has failed to deliver milestone on time, mitigation measures need to be identified and implemented

Project Deliverables	Relationship with Performance Based Regional Plan (PFF)	Responsible	Status of Implementation <sup>1</sup>	Delivery Date	Remarks
Operational integration of AMHS among States	PFF SAM CNS 01 PFF SAM ATM 05 PFF SAM ATM 06 PFF SAM MET 03, PFF SAM MET 04 PFF SAM AIM 02	States / Project Coordinator / Programme Coordinator		December 2015	Of all the AMHS installed in the Region, the following are interconnected in AMHS (P1 Protocol) Peru-Colombia, Guyana-Suriname, Argentina-Paraguay Other States are in the process of implementation, having drafted and signed MoUs to this end Follow-up to the implementation of AMHS integration is carried out at SAM/IG meetings
Operational integration of AIDC service between adjacent ACCs	PFF SAM CNS 01 PFF SAM ATM 06	States / Project Coordinator / Programme Coordinator		June 2016	To date no AIDC interconnection trials have been held between the Ezeiza and Cordoba ACCs. The integration is still not being used operationally Many States of the Region have drafted and signed MoUs to carry out the integration
Monitor the implementation of ATN ground-ground and air-ground applications activities in the SAM Region		ICAO		March 2010- June 2016	
Resources necessary	Designation of experts for the conduct of some of the deliverables				

**GRUPO REGIONAL CAR/SAM DE PLANIFICACION Y EJECUCION / CAR/SAM REGIONAL PLANNING AND IMPLEMENTATION GROUP (GREPECAS)**  
**APLICACIONES TIERRA-TIERRA Y AIRE-TIERRA DE LA ATN EN LA REGION SAM / ATN GROUND-GROUND AND AIR-GROUND APPLICATIONS IN THE SAM REGION**

ID	Task Name	Duration	2010		2011		2012		2013		2014		2015
			H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H1
1	Aplicaciones Tierra–tierra y Aire–tierra de la ATN en la Región SAM/ ATN Ground-ground and Air-ground Applications in the SAM Region	1190 days											
2	Documento de estrategia regional para la implantación de aplicaciones tierra - tierra y aire – tierra de la Región SAM/ Regional strategy document for the implementation of ground-ground and air-ground applications in the SAM Region	240 days											
3	Recolectar información /Collect information	50 days	<p>OACI/ICAO ,Omar Gouarnalusse / Argentina ( CP)</p>										
4	Entrega de propuesta de borrador / Delivery of draft proposal	103 days	<p>Omar Gouarnalusse / Argentina ( CP) ,OACI/ICAO</p>										
5	Revision de la propuesta borrador / Review of draft proposal	82 days	<p>Omar Gouarnalusse / Argentina ( CP) ,OACI/ICAO ,Estados SAM</p>										
6	Entrega documento final / Delivery of final document	5 days	<p>Omar Gouarnalusse / Argentina ( CP)</p>										
7	Guía de orientación para el uso del AIDC con la finalidad de reducir errores de coordinación/Guideline for the use of AIDC with the aim of reducing coordination errors	247 days											
8	Recolectar información /Collect information	47 days	<p>Javier Vittor (Argentina)</p>										
9	Entrega de propuesta de borrador / Delivery of draft proposal	84 days	<p>Javier Vittor (Argentina)</p>										
10	Revision de la propuesta borrador / Review of draft proposal	85 days	<p>Omar Gouarnalusse / Argentina ( CP) ,OACI/ICAO</p>										
11	Entrega documento final / Delivery of final document	5 days	<p>Javier Vittor (Argentina)</p>										
12	Guía de orientación para el establecimiento de enlaces de datos tierra-aire en área terminal, aproximación y aeródromo/Guideline for the establishment of ground-air data links in terminal, approach and aerodrome areas	287 days											
13	Recolectar información / Collect information	27 days	<p>OACI/ICAO</p>										
14	Entrega de propuesta de borrador / Delivery of draft proposal	5 days	<p>OACI/ICAO</p>										
15	Revision de la propuesta borrador / Review of draft proposal	79 days	<p>Omar Gouarnalusse / Argentina ( CP) ,Estados SAM</p>										
16	Seminario/Taller de Aplicaciones Tierra/Tierra y Tierra Aire de la ATN / Seminar Workshop of Ground Ground and Ground Air ATN Applications	5 days	<p>OACI/ICAO</p>										

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ID	Task Name	Duration	2010		2011		2012		2013		2014		2015
			H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	
17	Entrega documento final / Delivery of final document	5 days							01/10	05/10			
18	Guía de orientación para la implantación de sistemas DCL, DATIS, DVOLMET / Guideline for the implementation of DCL, DATIS, DVOLMET systems	435 days					10/10				07/06		
19	Recolectar información /Collect information	155 days											
20	Preparación y entrega de propuesta de borrador / Preparation and delivery of draft proposal	101 days											
21	Revisión de la propuesta borrador / Review of draft proposal	104 days											
22	Preparación documento final / Preparation of final document	66 days											
23	Entrega documento final / Delivery of final document	5 days											
24	Integración operacional del servicio AMHS entre Estados / Operational integration of AMHS among States	1071 days	10/05									16/06	
25	Implantación de la integración operacional de sistemas AMHS	1071 days	10/05									16/06	
26	Integración operacional del servicio AIDC entre ACC's adyacentes / Operational integration of AIDC service between adjacent ACCs	816 days					14/10						28/11
27	Implantación de la integración operacional del AIDC	816 days					14/10						28/11
28	Monitorear las actividades de implantación de las aplicaciones tierra-tierra y aire-tierra de la ATN en la Región SAM / Monitor the implementation of ATN ground-ground and air-ground applications activities in the SAM Region	1190 days	10/05										28/11
29	Monitorear las actividades de implantación de las aplicaciones tierra-tierra y aire-tierra de la ATN en la Región SAM / Monitor the implementation of ATN ground-ground and air-ground applications activities in the SAM Region	1190 days	10/05										28/11