



Agenda Item 3: Review of GREPECAS Programmes and Projects

3.3 Projects of the Automation and Situational Awareness ATM Programme

FOLLOW-UP OF ACTIVITIES OF THE AUTOMATION AND SITUATIONAL AWARENESS PROJECTS

(Presented by the Secretariat)

RESUMEN	
<p>This working paper presents the status of implementation of the activities of projects under Programme C: <i>ATM automation and situational Awareness</i> and their deliverables assigned to these projects.</p>	
References	
<ul style="list-style-type: none"> • Report of the First Meeting of the Programmes and Projects Review Committee (PPRC/1) (Mexico City, Mexico, 25 to 27 April 2012); • Seventh Central American Air Navigation Experts Working Group Meeting (CA/ANE/WG/7) (Mexico City, Mexico, 5 to 9 March 2012); • Thirty-Third Eastern Caribbean Working Group Meeting (E/CAR/WG/33) (Christ Church, Barbados, 4 to 8 June 2012); • Ninth Central Caribbean Working Group Meeting (C/CAR/WG/9) (Mexico City, Mexico, 5 to 9 March 2012); • Teleconferences on CAR AMHS and AIDC implementation Teleconferences on CAR AMHS and AIDC implementation; and • Reports of Meetings/Workshops of the SAM implementation Groups (SAM/IG/9 Lima, Peru, 14 to 18 May 2012; SAM/IG/10 Lima, Peru, 1 to 5 October 2012; and SAM/IG/11, Lima, Peru, 13to 17 May2013). 	
Strategic Objectives	<i>This working paper is related to Strategic Objectives A and C</i>

1. Introduction

1.1 The first Meeting of the Programmes and Projects Review Committee (PPRC/1) reviewed the progress on the implementation of the programme C activities, and its three projects C1, C2 and C3, emphasizing its objectives of supporting the optimization of the existent automation capabilities, the interoperation and the increase of the automation level, the improvements implementation of Situational Awareness in the ATS dependencies and implementation of the new ICAO model Flight Plan.

1.2 The PPRC/1 meeting noted the completion with minor delays of several Programme C project activities according to the established schedule, as well as the lack of experts for the SAM Project C2, and a Project coordinator for the SAM Project C3.

1.3 The PPRC/1 praised the work done by the programme coordinators and projects to be developed, recognizing that they can be improved with time. Likewise, it was highlighted that in the projects' description it is necessary to incorporate a field to define the goals expected to be achieved in easily quantifiable terms, and the expected date to achieve them, the PPRC will be able to assess the effectiveness and success of the effort performed in each project and take actions as deemed appropriate.

2. Discussion

2.1 In order to facilitate and optimize the States experts participation in the projects of Programme C in the CAR Region, it was agreed to merge the work and deliverables of Projects C1– *Interoperability of automated Systems in the CAR Region* and C2 – *Improved ATM Situational Awareness in the CAR Region* in one project denoted Project C – *ATM Automation and Situational Awareness*.

2.2 Project activities have been coordinated amongst project members, the project coordinator, and the programme coordinator, mainly through teleconferences and meetings to be held from time to time in accordance with work programme activities, or face-to-face meetings scheduled at the Regional Offices.

2.3 Regarding the PPRC/1 indication concerning the goals definition, in the projects' description documents presented in the Appendices, a field has been added, that defines the project goals additionally to the information about objectives, scope, metrics, strategy, rationale, related projects, deliverables, responsible, resources needed, starting date and ending date.

2.4 **Appendices A and B** describe each of the projects C and C3 for the CAR Region, and **Appendices C, D and E** shown descriptions of each of the projects C1, C2 and C3 of SAM Region, respectively. The description includes the justification for each project, the deliverables, activities, responsible parties, and progress made to date, including the respective work timetable in GANTT format.

2.5 Within the project achievements and difficulties found in the projects execution we can highlight the following:

CAR Region

Project C - ATM Automation and Situational Awareness

2.5.1 The merge of Projects C1 and C2 has delayed several scheduled activities requiring a reassignment of tasks made since 26 April 2013. In spite of this, the following progress dates are reported:

- a) Examples of MoU for the interconnection between States: 3 agreements achieved to implement AIDC;
- b) GREPECAS and NAM/CAR ICD analysis;
- c) Initial assessment of implementation status of alarms and automated systems for the Improvements Proposal;
- d) Regional plan of AIDC implementation with CPL- LAM messages;
- e) Progress in the graphical use of SIGMET tool, so it can be evaluated by States in NAM /CAR Region;
- f) Adoption of ADC-C technology by the superior space of C.A. COCESNA, in the Pacific Region of Central American FIR, which will be tested during 2013; and
- g) Surveys on electronic alarms implemented in the automated systems under its dependency were received by some States, pending for completing of that information more than 50% of States.

2.5.2 Due to the delays in several activities, some deliverables were re-evaluated in accordance with agreements taken in the CAR Region with the adoption of ASBU modules to be made on July 2013.

2.5.3 Similarly, due to the minor progress in the activity of the Guidance Document elaboration for the ADS-B Implementation, it was rescheduled and made to project experts to have the support of the United States of America for its experience in this field.

Project C3 – Implementation of the new ICAO Flight Plan Format

2.5.4 Project C3 conducted its works according to the scheduled action plan allowing to provide the outcomes/deliverables in time and form for its application by States and Service providers in compliance with the transition date, testing and final implementation. 100% of States achieved the transition to the new ICAO Model Flight Plan without incidents or reports. The final status in the transition moment for the 21 States and 17 Territories of the NAM/CAR regions applying the contingency measures agreed was:

- a) AFTN/FPL Terminal: 3 States with manual operations and the others through AFTN/FPL automated terminals compatibles with NFPL; and
- b) Flight Data Processing System (FDP): 50% updated their automated systems and 50 % used converters.

2.5.5 Project C3 finished its deliverables since May 2012, support to transition activities continued until November 2012 and the post-evaluation until December, together with ICAO. The follow-up to this implementation will continue through the Implementation Regional Groups.

SAM Region

Project C1 - Automation

2.5.6 Under the activities expected in this Project, it is pending the elaboration of the Memorandum of Understanding (MoU) between States that have expressed interest in carrying out the automated systems interconnection, as well as the automated systems interconnection in the States that had already elaborated and signed MoU respectively.

2.5.7 It was expected the signing of four MoU in 2012, and 9 in 2013. Since the PPRC/1 meeting until now, only one MoU (Brazil-Peru, October 2012) has been signed and technical – operational coordination works has already begun for completing and signing three MoU (Brazil-Paraguay, Argentina-Paraguay and Ecuador-Peru).

2.5.8 Referring the automated systems interconnection, it was expected to complete by this date the implementation of five interconnections (Argentina-Brazil, Argentina-Chile, Brazil-Peru, Brazil-Uruguay and Brazil-Venezuela). None interconnection has been completed, even though initial works has been made, respectively.

2.5.9 To determine the delays causes in the implementation, the project elaborated a survey that was circulated among all States that had signed the MoU , and based on the answers of the surveys, the visit of two automation experts is expected to the States that had already signed MoU. It is expected that for ending of 2013 two of the four interconnections will be completed.

Project C2 – Improved ATM Situational Awareness in the SAM Region

2.5.10 The project completed the coverage evaluation of the oversight systems in the SAM Region in October 2012, as well as the *Technical/Operational considerations Guide for the ADS-B implementation* in June 2012, completing 100% the expected activities in 2012.

2.5.11 In 2013, it is expected the elaboration of two guides: one for guidance on graphic format SIGMET elaboration, and another for guidance with technical considerations to support the ATFM implementation. An initial document for the guidance of SIGMET graphic elaboration guide is being revised by MET Secretariat. The guide of technical considerations to support the AFTM implementation is expected to be completed by October.

2.5.12 2.5.12 For May 2014, it is expected to complete the MLAT implementation guide.

Project C3 – Implementation of the New Flight Plan Model

2.5.13 The implementation of the New Flight Plan Model was successfully executed. Of the total ACC in the SAM Region, 30% made the changes in their flight plans processing systems, 23% implemented converters and the others consider the manual solution in the new format implementation, 92% have the flight plan generation from AMHS/AFTN terminals through template with capability of detecting errors in the filling.

2.5.14 With the implementation of the new format, Project C3 is completed. The post-implementation activities of the new flight plan model, such as: monitoring in the converters replacements and the implementation of automated system where is operated in manual way, will be made through Project C1.

3. **Suggested Action**

3.1 The Meeting is invited to:

- a) Take note of the information presented in this note;
- b) Analyze the Project description document and the GANTT timetable for each Project described in Appendices A to E, in order to approve planning, progress and execution; and
- c) Analyze other considerations respectively, as deemed appropriate by the meeting

APPENDIX A

CAR Region	PROJECT DESCRIPTION (DP)	DP N° C2	
<i>Programme</i>	Title of the Project	Start	End
<p>AUTOMATION AND ATM SITUATIONAL AWARENESS</p> <p>(ICAO programme coordinator: Julio Siu)</p>	<p>AUTOMATION AND IMPROVED ATM SITUATIONAL AWARENESS IN THE CAR REGION</p> <p>Project coordinator: Carlos M. Jimenez (Cuba) Alejandro Romero (COCESNA)</p> <p>Experts contributing to the project: Carlos Miguel Jimenez, Jorge Centella (Cuba) Julio Cesar Mejia (Dominican Republic) Michael Polchert / Bill Blake (United States) Adriana Mattos (SITA)</p>	October 2011	May 2014
Objectives	<p>Based in the regional performance objectives of the NAM/CAR Regional performance-based Air Navigation implementation plan (RPBANIP NAM/CAR):</p> <p>1.- Support the NAM/CAR States in the implementation of automated systems and its interconnection at a regional level</p> <p>2.- Support the implementation of situational awareness improvements at ATS units in the CAR Region</p>		
Scope	<p>The project contemplates the assessment and identification of the main levels of automation, the production of guides for the use of existing capabilities, proposals of improvement to automation levels to enhance operations and safety, development of studies and guidelines for automation and operational use of capabilities to attain these situational awareness improvements, supporting the implementation of different applications such as common display of traffic, common display of meteorological conditions, and communications in general, through the following deliverables:</p> <ul style="list-style-type: none"> • MoU model for automation between States • Guidelines and considerations for automation agreements • Proposals and guidance for improving the operation and performance of the flight plan data processing system, tools for electronic transmission and automatic exchange of ATS messages • Proposals and guidance for using additional/advanced automation support tools to increase aeronautical information sharing • Guidelines on improvements to electronic ground and airborne alerts, as applicable, for conflict prediction, ground proximity, MSAW, DAIW, surface movement surveillance systems. • Guidelines for operational implementation of ADS-B and data exchange (initial steps for operational implementation of ADS B), ADS-B, ADS-C and/or MLAT surveillance systems in selected airspaces. • Guidance on the use of AIDC to reduce coordination errors, and identification of improvements to situational awareness in support of PBN and ATFM implementation, contributing to decision-making and the respective warning systems • Guidance in support of the implementation of advanced automation support tools for sharing of aeronautical information. 		

Metrics	<ul style="list-style-type: none"> • Number of States/ANSPs participating in regional automation tests • Number of States/ANSPs implementing ATC automation functionalities between systems • Complete proposals and guidance material for the number reduction of operational errors having as a reference before and after the effective date of implementation guides for the CAR/NAM Region. • Number of States/ANSPs reporting a reduction of incidents as a result of the application of improvements in electronic ground and air alerts • Number of States/ANSPs conducting ADS-B data or multilateration trials using the guides developed • Percentage of States/ANSPs participating in ATFM that report improved management as a result of the proposed guidance
Goals	<p>With this Project it is expected to support States in the operational improvements implementation resulting of the ATM automation systems:</p> <ul style="list-style-type: none"> • Promote ADS-B trials among States /ANSP in a 20% for 2014 • Increase in 10% for 2014 the States /ANSP that participate in automation regional tests • That at least three States /ANSP report incidents reduction through the improvements application of electronic ground and air alarms • Expand the AIDC implementation phase 0 (CPL-LAM Messages) among States/ANSP in 10% for 2014. • Increase in 20% FIR participation in the ATFM implementation in the NAM and CAR Region for 2014.
Strategy	<ul style="list-style-type: none"> • Project activities were executed coordinated amongst project members, the project coordinator, and the programme coordinator, mainly through teleconferences and meetings to be held from time to time in accordance with work programme activities. • The project coordinator will coordinate as necessary with the programme coordinator the requirements of other projects and information from NAM/CAR implementation working groups. Additional experts will be included based on tasks and specialised work to be conducted.
Justification	<p>With the appearance of new technologies in the ATM automated systems, as well as the standardization of communication protocols, the data exchange in the ATS Centers is actually viable in different ways. Available protocols in systems such as OLDI and AIDC allows adjacent Centers to an ATS, to establish automated coordination, improving in this way the operations reliability and procedures effectiveness.</p> <p>Likewise, the standardization in ASTERIX format in the processing of surveillance data, allows the easy radar data exchange between FIR. These automated exchanges, will result in a significant reduction of the ATS incidents rates and errors in operations.</p> <p>Likewise, improving the situational awareness facilitates coordination, improve efficiency, safety and ensure that the different members of the ATM community have the same information when adopting decisions collaboratively.</p>
Related projects	This project is related to the projects of Programmes A (PBN), B (ATFM), and D (ATN and its ground-ground and air-ground applications)

Project Deliverables	Relationship with the regional performance-based plan (PFF)	Responsible Party	Status of Implementation ¹	Date of Delivery	Comments
Level of automation existing in the CAR Region	RPO 7 and 9 NAM/CAR RPBANIP	ICAO - Carlos Jimenez, Cuba	Green	Completed	
Sample of MoU for automation between States	RPO 7 and 9 NAM/CAR RPBANIP	Carlos Jiménez, Cuba	Green	November 2013	There are several examples that are going to be reviewed to recommend States in this implementation.
Guidance material and considerations for the drafting of automation agreements	RPO 7 and 9 NAM/CAR RPBANIP	Carlos Jiménez, Cuba	Yellow	October 2013	Rescheduled activity
Proposals or guidelines for improving the operation and performance of the flight plan data processing system, tools for electronic transmission and automatic exchange of ATS messages	RPO 7 NAM/CAR RPBANIP	Alejandro Romero COCESNA	Green	December 2013	
Proposals and guidance on the use and benefits of additional/advanced automation support tools to increase aeronautical information sharing	RPO 7 NAM/CAR RPBANIP	Bill Blake, United States	Yellow	December 2013	
Monitor the implementation of ATM automation and surveillance data exchange – Progress report	RPO 7 NAM/CAR RPBANIP	Alejandro Romero	Green	March 2014	A regional plan of AIDC implementation has been developed as part of the ATM automation.
Review of the Regional Implementation Oversight Strategy for systems in support of situational awareness improvement	RPOs 4 and 9, NAM/CAR RPBANIP	Alejandro Romero	Green	June 2013	It will be reviewed according ASBU methodology.

¹ *Grey* Task not started yet
Green Activity being implemented as scheduled
Yellow Activity started with some delay, but will be implemented on time
Red Activity not implemented on time; mitigation measures are required

Project Deliverables	Relationship with the regional performance-based plan (PFF)	Responsible Party	Status of Implementation ¹	Date of Delivery	Comments
Guidelines for improving electronic ground and airborne alerts	RPOs 4 and 9, NAM/CAR RPBANIP	Carlos Miguel Jimenez, Cuba		February 2014	A progress on electronic alarms within CAR Region was submitted Progress June 2013: Survey on implemented electronic alarms in each State was sent. Surveys of Guatemala, Cuba, Superior space of C.A. –COCESNA and Sint Marteen were received. New date for C.A States pending of submit the survey was established
Guidelines on the operational implementation of ADS-B and data exchange	RPOs 4 and 9, NAM/CAR RPBANIP	Adriana Mattos, SITA / Michael Polchert , Bill Blake, USA		May 2014	Rescheduled due to the lack of experts, new responsible were assigned.
Guidance in support of ATFM implementation	RPOs 4 and 9, NAM/CAR RPBANIP	Michael Polchert/ Bill Blake, USA		May 2014	Rescheduled due to the operational requirements submission of Programme B
Guidance on the use of AIDC to reduce coordination errors	RPOs 4 and 9, NAM/CAR RPBANIP	Julio Cesar Mejia, Dominican Republic		December 2013	The experience that has the data Exchange between Mexico and United States will be a key factor for activities contribution. Progress June 2013: Analysis of ICD for AIDC is being completed (proposed by GREPECAS and implemented in the NAM and CAR Regions)
Guidance on the preparation of SIGMETs in graphic format	RPOs 4, 9 y 12 NAM/CAR RPBANIP	Alejandro Romero, COCESNA		November 2013	Progress June 2013: COCESNA has implemented since May 2013 the SIGMET graphic option by its website. That graphical support can be observed in the following website: http://apps.cocesna.org/eAIM/servlet/metarview . The available alternatives to view SIGMETS are: visible map Shockway and Steam.
Resources needed	<ul style="list-style-type: none"> • Designation of experts for the execution of the deliverables. • Implement required facilities that allows interconnection of automated systems according to the established dates in elaborated and signed MoU, respectively. 				

GRUPO REGIONAL CAR/SAM DE PLANIFICACION Y EJECUCION / CAR/SAM REGIONAL PLANNING AND IMPLEMENTATION GROUP (GREPECAS)

ID	Nombre de la tarea	Start	Finish	2009		2010		2011		2012		2013		2014	
				H1	H2	H1	H2	H1	H2	H1	H2	H1	H2		
1	C AUTOMATIZACIÓN Y MEJORA A LA COMPRESIÓN SITUACION/	Fri 03/04/09	Mon 01/12/14												
2	C1.1 Project management process / Proceso de gerencia del proyecto	Fri 19/03/10	Mon 20/12/10												
9	C1.2 Automated systems interconnection implementation process/Proceso de implantación interconexión sistemas automatizados	Mon 29/11/10	Fri 29/11/13												
10	1.2.1 Identification of States level of automation and modernization plans / C1.1 Identificación de nivel de automatización de los Estados y sus planes de modernización	Mon 29/11/10	Mon 30/05/11												
15	1.2.2 Guidelines for the drafting of MoU for the interconnection of automated systems / C1.2 Orientaciones para la elaboración de MoU para la interconexión de sistemas automatizados	Wed 16/11/11	Fri 29/11/13												
16	C1.2.2.1 Development of an interregional model of Memorandum of Understanding (MoU) / C1.2.1 Desarrollar un modelo de Memorando de Entendimiento (MoU) interregional	Wed 16/11/11	Fri 29/11/13												
17	Deliverable: Region MoU model as draft for CAR and Interregional MoU model final version to ICAO/ Modelo MoU de la Región como borrador MoU para las Regiones CAR y Versión final de modelo de MoU interregional a OACI	Wed 16/11/11	Fri 29/11/13												
18	Analyze MoU applicable for CAR Region, study and critique the draft MoU/Analizar MoU aplicables de la Región CAR, estudiar y realizar críticas al borrador	Wed 16/11/11	Wed 26/06/13												
19	Present Region MoU model as draft for CAR and Delivery of interregional MoU model final version to ICAO/Presentar modelo MoU de la Región como borrador MoU para las Regiones CAR y Entrega de la versión final de modelo de MoU interregional a OACI	Thu 27/06/13	Fri 29/11/13												
20	C1.2.3 Guidelines and considerations for the drafting and agreement on automation / C2.1.2 Orientaciones y consideraciones para la elaboración y acuerdo para la automatización	Wed 01/02/12	Thu 31/10/13												
21	Deliverable: Final guide version to ICAO/ Versión final de orientaciones a OACI	Wed 01/02/12	Thu 31/10/13												
22	Elaborate a draft guide/Elaborar un borrador de orientaciones	Wed 01/02/12	Fri 04/01/13												
23	Present draft guide to Project Coordinator/Presentar borrador de orientaciones al Coordinador el Proyecto	Mon 07/01/13	Fri 29/03/13												
24	Study and critique the draft/Estudiar y realizar críticas al borrador	Mon 01/04/13	Fri 31/05/13												
25	Deliverable: Delivery of final guide version to ICAO/Entrega de versión final de orientaciones a OACI	Mon 03/06/13	Thu 31/10/13												
26	C1.3 Monitor flight plan data process implementation, electronic transmission tools & automatic ATS message exchange / Monitorear implantación sistema proceso datos plan vuelo, herramientas transmisión electrónica e intercambio automático msgs ATS	Fri 24/02/12	Fri 23/08/13												
27	Deliverable: Final guide version to ICAO/ Versión final de orientaciones a OACI	Fri 24/02/12	Fri 23/08/13												
28	Stablish aims to flight plan data process implementation, electronic transmission tools & automatic ATS/Establecimiento de metas Implantación Sistema proceso datos plan vuelo, herramientas transmisión electrónica e intercambio automático msgs ATS	Fri 24/02/12	Fri 28/12/12												
29	Deliverable Inform Aims reached / Entrega Informe metas alcanzadas	Tue 01/01/13	Fri 23/08/13												

GRUPO REGIONAL CAR/SAM DE PLANIFICACION Y EJECUCION / CAR/SAM REGIONAL PLANNING AND IMPLEMENTATION GROUP (GREPECAS)

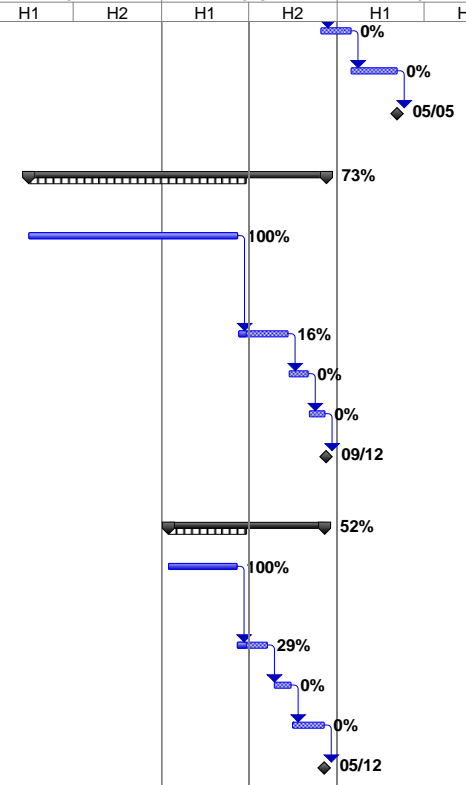
ID	Nombre de la tarea	Start	Finish	2009		2010		2011		2012		2013		2014	
				H1	H2	H1	H2	H1	H2	H1	H2	H1	H2		
30	C1.4 Monitor ATM automation implementaion and exchange of surveillance data/C1.4 Monitorear la implantación de automatización ATM y el intercambio de datos de vigilancia	Mon 01/04/13	Fri 14/03/14												13%
31	Deliverable: Report ATM Automation and Servillance Data Exchange / Reporte de implementación automatización ATM e Intercambio datos Vigilancia	Mon 01/04/13	Fri 14/03/14												13%
32	Stablsh range to implant ATM Automation / Establecer alcance de la Implantacion Automatizacion ATM	Fri 12/04/13	Thu 24/10/13												38%
33	Stablsh range to interchange servillance data / Establecer alcance del intercambio de datos de Vigilancia	Mon 01/04/13	Fri 25/10/13												0%
34	Measuring Progress to the Implantation ATM and Servillance data Exchange / Medicion de avances en la Implantacion ATM	Mon 28/10/13	Fri 14/03/14												0%
35	Regional AIDC implementation initial draft	Mon 28/10/13	Mon 28/10/13												0%
36	Deliverable: Report ATM Automation and Servillance Data Exchange / Reporte de implementación automatización ATM e Intercambio datos Vigilancia	Tue 29/10/13	Tue 29/10/13												29/10
37															
38	C1.5 Monitor implementation of additional/advanced automation support tools/C1.5 Monitorear implantación herramientas de apoyo adicionales/avanzadas de automatización	Fri 03/04/09	Mon 30/12/13												89%
39	C1.5.1 Proposal, guidelines use and benefit additional, advanced automation support tools increase aero info sharing/ Propuesta, orientacion uso y beneficios herramientas apoyo adicional, avanzada automatización incremento compartición info aeronáutica	Fri 03/04/09	Mon 30/12/13												89%
40	Deliverable: Guidelines to Use and benefit, Tools advanced regards to automation support to increase sharing aeronautical information/ Guía Orientacion uso, beneficios Herramientas avanzadas de apoyo para automatización e incremento compartición Inform Ae	Fri 03/04/09	Mon 30/12/13												89%
41	Establish Tools to Suport Automation / Definicion de Herramientas de apoyo automatizacion	Fri 03/04/09	Fri 19/03/10												100%
42	Analysis Aeronautical Information exchange and sharing benefits / Analisis de beneficios intercambio Informacion Aeronautica.	Fri 19/03/10	Fri 04/03/11												100%
43	Presentation use and benefits Proposal additional support tools, advanced automation to increase aircraft sharing inform/ Presentacion Propuesta Uso y beneficios herramientas apoyo adicional/avanzada automatización incremento compartición info aeronáutica	Fri 04/03/11	Fri 30/03/12												100%
44	Final adjustments to document/ Ajustes finales al documento	Fri 30/03/12	Fri 27/12/13												71%
45	Guidelines to Use and benefit, Tools advanced regards to automation support to increase sharing aeronautical information/ Guia Orientacion uso, beneficios Herramientas avanzadas de apoyo para automatización e incremento compartición Inform Aeronautical	Fri 27/12/13	Mon 30/12/13												27/12
46															
47	C1.6 Monitor the implementation development/C1.6 Monitorear el desarrollo de la implementación	Fri 19/03/10	Mon 01/12/14												7
48	C2 IMPROVE ATM SITUATIONAL AWARENESS / C2 MEJORA A LA COMPRESION SITUACIONAL ATM	Mon 31/10/11	Tue 06/05/14												63%
49	C 2.2 Evaluation of surveillance infrastructure and identification of surveillance system improvements / C 2.2 Evaluación de la infraestructura de vigilancia e identificación de mejoras a los sistemas de vigilancia	Wed 27/03/13	Wed 01/01/14												32%
50	DELIVERABLE: Revision and updating proposal to regional surveillance system implementation strategy / ENTREGABLE: Revisión y propuesta de actualización a la estrategia regional para la implantación sistema de vigilancia	Wed 27/03/13	Wed 01/01/14												32%

GRUPO REGIONAL CAR/SAM DE PLANIFICACION Y EJECUCION / CAR/SAM REGIONAL PLANNING AND IMPLEMENTATION GROUP (GREPECAS)

ID	Nombre de la tarea	Start	Finish	2009		2010		2011		2012		2013		2014	
				H1	H2	H1	H2	H1	H2	H1	H2	H1	H2		
51	Gather information related with the regional strategy for the implementation of a surveillance system / Reunir información relacionada a la estrategia regional para la implantación del sistema de vigilancia	Wed 27/03/13	Tue 10/09/13									H1	54%		
52	Delivery of draft proposal / Entrega de propuesta borrador	Wed 11/09/13	Wed 13/11/13									H2	0%		
53	Monitoring or review to draft plan / Supervisión o revisiones del plan borrador	Wed 13/11/13	Tue 31/12/13									H2	0%		
54	Deliverable C 2.2 (final document) / Entregable C 2.2 (Documento Final)	Tue 31/12/13	Wed 01/01/14									H2	31/12		
55															
56	C 2.4 Monitor the implementation of ground and air electronic warnings / C 2.4 Monitorear la implantación de avisos/alarmas electronicas terrestres y aéreas	Thu 01/12/11	Fri 28/02/14										70%		
57	DELIVERABLE: Guidelines for improvement to ground and air electronic warnings / ENTREGABLE: Lineamientos para mejoras en alarmas electrónicas terrestres y aéreas	Thu 01/12/11	Fri 28/02/14										70%		
58	Collect information requirements to be requested / Recolectar requisitos de información a ser solicitada	Thu 01/12/11	Wed 03/07/13									H1	99%		
59	ICAO collection of related information / Recoleccion de Información relacionada por parte de OACI	Fri 05/07/13	Thu 05/09/13									H2	0%		
60	Delivery of draft document / Entrega del borrador del documento	Fri 06/09/13	Thu 07/11/13									H2	0%		
61	Monitoring and review from the Project members / Supervisión y revisiones por parte de miembros del	Fri 08/11/13	Thu 19/12/13									H2	0%		
62	Final adjustments to document/ Ajustes finales al documento	Fri 20/12/13	Thu 27/02/14									H2	0%		
63	Deliverable C 2.4/ Entregable C 2.4	Fri 28/02/14	Fri 28/02/14									H2	28/02		
64															
65	C 2.5 Elaboration of a Regional Plan for the implementation of ADS-C and ADS-B / C 2.5 Elaboración de un plan regional para la implantación del ADS-C y ADS-B	Mon 31/10/11	Tue 06/05/14										65%		
66	DELIVERABLE: Guidelines for an operational ADS-B implementation and data exchange / ENTREGABLE: Lineamientos para la implementación operacional del ADS-B e intercambio de datos	Mon 05/11/12	Thu 19/12/13										61%		
67	Collection of information related with references for the drafting of guidelines for ADS-B and ADS-C implementation and operation / Recolección de información para la elaboración de directrices para la implantación y operación del ADS-B y ADS-C	Mon 05/11/12	Mon 10/06/13									H1	100%		
68	Support in the provision of information related to existing initiatives / Apoyo en el suministro de información referente a las iniciativas existentes	Tue 11/06/13	Thu 05/09/13									H2	17%		
69	Delivery of draft document / Entrega borrador del documento	Fri 06/09/13	Mon 07/10/13									H2	0%		
70	Monitoring or review to draft document / Supervisión o revisiones del borrador del documento	Mon 07/10/13	Fri 08/11/13									H2	0%		
71	Final adjustments to document / Ajustes finales al documento	Thu 05/12/13	Wed 18/12/13									H2	0%		
72	Deliverable C 2.5 / Entregable C 2.5	Thu 19/12/13	Thu 19/12/13									H2	19/12		
73															
74	DELIVERABLE: Guidelines for Orientation and support to establish the ATFM / Guía de orientación en apoyo a	Mon 31/10/11	Tue 06/05/14										66%		
75	Collection of information relevant to the development of guidelines for the implementation of ATFM / Recolección de información relevante para la elaboración de directrices para la implantación del ATFM	Mon 31/10/11	Wed 12/06/13									H1	100%		
76	Delivery of draft document / Entrega borrador del documento	Thu 13/06/13	Wed 27/11/13									H2	8%		

GRUPO REGIONAL CAR/SAM DE PLANIFICACION Y EJECUCION / CAR/SAM REGIONAL PLANNING AND IMPLEMENTATION GROUP (GREPECAS)

ID	Nombre de la tarea	Start	Finish	2009		2010		2011		2012		2013		2014	
				H1	H2	H1	H2	H1	H2	H1	H2	H1	H2		
77	Monitoring or review to draft document / Supervisión o revisiones del borrador del documento	Thu 28/11/13	Wed 29/01/14												
78	Final adjustments to document / Ajustes finales al documento	Wed 29/01/14	Mon 05/05/14												
79	Deliverable C 2 / Entregable C 2	Mon 05/05/14	Tue 06/05/14												
80															
81	Guide for the use of AIDC in order to reduce errors / Guía de orientación para el uso del AIDC con la finalidad de reducir errores	Fri 30/03/12	Mon 09/12/13												
82	Collection of information relevant to the development of guidelines for the use of AIDC messaging standards / Recolección de información relevante para la elaboración de directrices para el uso de la normativa de mensajería AIDC	Fri 30/03/12	Fri 07/06/13												
83	Delivery of draft document / Entrega borrador del documento	Mon 10/06/13	Fri 20/09/13												
84	Monitoring or review to draft document / Supervisión o revisiones del borrador del documento	Mon 23/09/13	Fri 01/11/13												
85	Final adjustments to document / Ajustes finales al documento	Mon 04/11/13	Fri 06/12/13												
86	Deliverable C 2 / Entregable C 2	Mon 09/12/13	Mon 09/12/13												
87															
88															
89	Guidelines for developing SIGMET in graphical format. / Guía de orientación para elaborar SIGMET en formato	Tue 15/01/13	Thu 05/12/13												
90	Collection of relevant information to develop guidelines to implement the SIGMET in Graphical Form / Recolección de información relevante para elaborar las directrices para implementar el SIGMET Grafico	Tue 15/01/13	Thu 06/06/13												
91	Delivery of draft document / Entrega borrador del documento	Fri 07/06/13	Thu 08/08/13												
92	Monitoring or review to draft document / Supervisión o revisiones del borrador del documento	Fri 23/08/13	Thu 26/09/13												
93	Final adjustments to document / Ajustes finales al documento	Mon 30/09/13	Wed 04/12/13												
94	Deliverable C 2 / Entregable C 2	Thu 05/12/13	Thu 05/12/13												



APPENDIX B

CAR Region	PROJECT DESCRIPTION (DP)	DP N° C3	
<i>Programme</i>	Title of the Project	Start	End
ATM AUTOMATION AND SITUATIONAL AWARENESS (ICAO programme coordinator: Julio Siu)	<p style="text-align: center;">IMPLEMENT THE NEW ICAO FLIGHT PLAN MODEL</p> Project coordinator: Mayda Ávila (COCESNA) Experts contributing to the project: Jorge Centella (Cuba) Betty Castaing (Dominican Republic) Raymond Ahlberg (United States) Susan E. Pfingstler (IATA) Miguel Torres/Julio Ruiz (Mexico)	May 2009	April 2012
Objective	Support the implementation of the new ICAO flight plan model based on the regional performance objective of the performance-based plan for the NAM/CAR Regions (NAM/CAR RPBANIP) and in accordance with the CAR/SAM regional strategy for this implementation.		
Scope	The project contemplates the drafting of guidelines for action and the proposal of publications to facilitate the harmonious implementation of the new ICAO flight plan model by NAM/CAR States or organisations: <ul style="list-style-type: none"> • Consolidated analysis of assessments made by States to possible impact of the implementation of the new ICAO flight plan model. • Proposal of considerations for conducting trials between systems capable of processing the new ICAO flight plan model. • Proposal of contingency procedures. • Proposal of technical/operational considerations for the transition. 		
Metrics	<ul style="list-style-type: none"> • Number of States/ANSPs participating in regional tests • Number of States/ANSPs that adopt contingency measures using the guide developed • Updating of agreements and publications in accordance with the technical/operational considerations proposed for the transition 		
Strategy	Project activities were coordinated amongst project members, the project coordinator, and the programme coordinator, mainly through teleconferences and meetings to be held during events scheduled in the work programme, such as the meeting held in September 2012 and the teleconferences related. The project coordinator coordinated with the programme coordinator the deliverables and outcomes, which were applied in the implementation works from the NAM/CAR implementation working groups.		

Goals	<p>With this Project it was achieved the support to the States for a harmonious and effective transition to the new ICAO flight plan model from 15 November 2012:</p> <p>a) 100 % of States /ANSP corresponding to the FIRs, participated in regional tests</p> <p>b) 100 % of States /ANSP adopted contingency measures using the developed guidance and according its implementation status.</p> <p>c) 100 % of States /ANSP updated its agreements and publications according to technical/operational considerations proposed for the transition</p>
Justification	Support the implementation, proposing core documentation to serve as reference to the States for the transition, testing and contingencies related to the new ICAO flight plan model.
Related projects	This project is related to the projects under Programme C:

Project Deliverables	Relationship with the regional performance-based plan (PFF)	Responsible Party	Status of Implementation¹	Date of Delivery	Comments
Guides on the transition to the new ICAO flight plan model	RPO 5, NAM/CAR RPBANIP	ICAO		Completed	
Regional strategy for the transition to the new ICAO flight plan model	RPO 5, NAM/CAR RPBANIP	ICAO		Completed	
Identification of stakeholders and the possible impact of the implementation of the new ICAO flight plan model (FPL/RPL/CPL)	RPO 5, NAM/CAR RPBANIP	NACC WG		Completed	

¹

Grey Task not started yet

Green Activity being implemented as scheduled

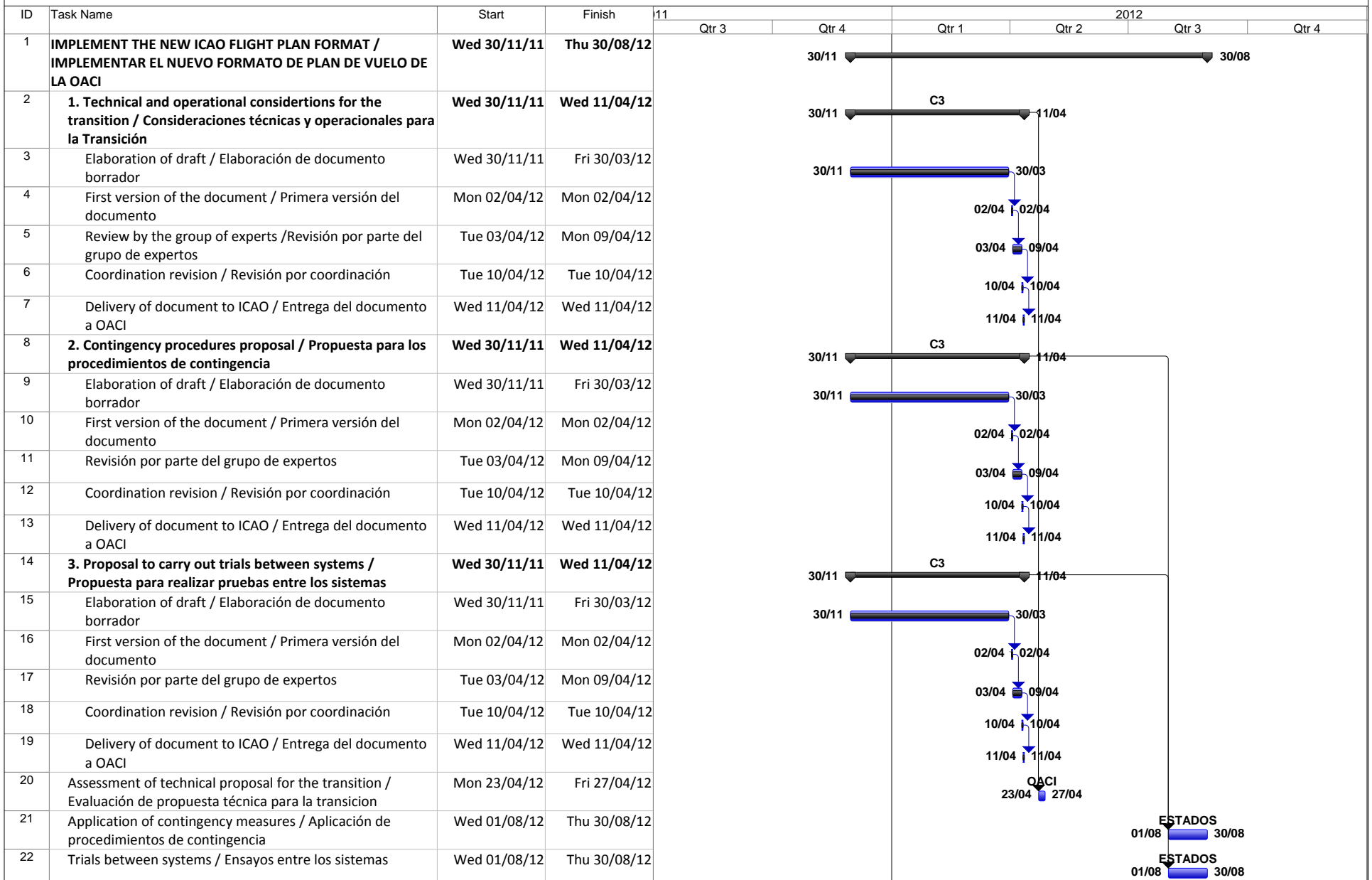
Yellow Actividad started with some delay, but expected to be implemented on time

Red Activity not implemented on time; mitigation measures are required

Project Deliverables	Relationship with the regional performance-based plan (PFF)	Responsible Party	Status of Implementation ¹	Date of Delivery	Comments
Consolidated analysis of the assessments made by States of possible impact of the implementation of the new ICAO flight plan model	RPO 5, NAM/CAR RPBANIP	Project C3		Completed	
Assessment of current/future flight plan processing capabilities with respect to the new ICAO flight plan model	RPO 5, NAM/CAR RPBANIP	ICAO/ NACC WG		Completed	
Proposal of considerations for conducting trials between systems capable of processing the new ICAO flight plan model	RPO 5, NAM/CAR RPBANIP	Project C3		Completed	
Trials between systems capable of processing the new flight plan	RPO 5, NAM/CAR RPBANIP	ICAO/ States/ Territories/ International organisations		Completed	In October and September of 2012, States/ANSP made tests according to the document on considerations to elaborate trials between systems capable of processing the new flight plan
Proposed contingency procedures	RPO 5, NAM/CAR RPBANIP	Project C3		Completed	These procedures were used in the update of the ATM Contingency Plan in each State.
Application of contingency procedures	RPO 5, NAM/CAR RPBANIP	States/ Territories/ International organisations		Completed	These procedures were used in the update of the ATM Contingency Plan in each State.

Project Deliverables	Relationship with the regional performance-based plan (PFF)	Responsible Party	Status of Implementation ¹	Date of Delivery	Comments
Publication of transition actions, trials and other publications for users and stakeholders	RPO 5, NAM/CAR RPBANIP	States/ Territories/ International organisations		Completed	AIC and NOTAM published according the transition actions agreed.
Proposal of technical/ operational considerations for the transition	RPO 5, NAM/CAR RPBANIP	Project C3		Completed	Applied by States /ANSP
Assessment and adjustment of transition actions	RPO 5, NAM/CAR RPBANIP	ICAO		Completed	
Drafting of the transition plan	RPO 5, NAM/CAR RPBANIP	States/ Territories/ International organisations		Completed	Made with teleconferences, before, during and several hours after the transition time
Monitoring of transition activities	RPO 5, NAM/CAR RPBANIP	ICAO		Completed	Post-implementation evaluation was completed
Resources needed	Designation of experts and implementation of activities through the group of experts (WG).				

CAR/SAM REGIONAL PLANNING AND IMPLEMENTATION GROUP / GRUPO REGIONAL CAR/SAM DE PLANIFICACION Y EJECUCION (GREPECAS)



APPENDIX C

SAM Region	PROJECT DESCRIPTION (DP)	PD N° C1	
Programme	Project Title	Starting Date	Ending Date
Automation and ATM Situational Awareness (Programme Coordinator: Onofrio Smarrelli)	Automation <i>Project Coordinator: Alessandro Santoro (Brazil)</i> <i>Contributing experts: Omar Gouarnalusse (Argentina) and SAM/IG ATM Automation Group</i>	May 2008	June 2016
Objective	Support States of the SAM Region in the implementation of automated systems, and in their regional interconnection		
Scope	The scope of the project includes the initial drafting of guidelines, trials for the identification of the automation level required at the Region's ATS units in the short and medium term, and the implementation of automation systems and their interconnection through the VSAT based South American digital network (REDDIG)		
Metrics	<ul style="list-style-type: none"> • Drafting of the following documents: <ul style="list-style-type: none"> ✓ Guidance document on automated systems requirements at ATS units (SSS) ✓ Guideline for the implementation of integrated automated systems ✓ Action plan for the interconnection of automated systems ✓ Preliminary interface control document (ICD) between systems for the interconnection of ACCs in the SAM Region ✓ Memorandum of Understanding (MoU) model for the interconnection of automated systems • Interconnection of automated systems between adjacent ACCs in the SAM Region: • Reduction in number of operational errors, including LHD in the SAM Region 		
Strategy	<ul style="list-style-type: none"> • All tasks will be conducted by experts nominated by States and organizations of the SAM Region members of the Project Automation, and SAM States, 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 • 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 		

Justification	<ul style="list-style-type: none"> • The CAR/SAM air traffic control centres have had difficulties in duly coordinating air traffic, an important factor contributing in air traffic incidents. The air traffic control automated centres' interconnection will permit a coordinated automated air traffic for the transfer of responsibilities between CAR/SAM adjacent area control centres, thus reducing the risk in aeronautical incidents generated by undue coordination activities and improving, at the same time, the planning phases for an efficient control of flights from/to corresponding Flight Information Regions (FIR). • The interconnection of automated systems would be facilitated, in view of REDDIG (SAM VSAT regional network), which has the necessary capability to transport automated systems applications • This project contributes towards the implementation of modules B0 FICE, B0 ASUR and B0 SNET of the <i>Air Navigation System Performance-Based Implementation Plan for the SAM Region (SAM PBIP)</i>
goals	<ul style="list-style-type: none"> • Initial drafting of five guideline documents in support of the implementation of automated systems interconnection for completion in the period (May 2008 – October 2012) • Initial drafting of 18 MoU for the interconnection of automated systems <ul style="list-style-type: none"> 5 MoU period 2009-2011 4 MoU for the end of 2012 9 MoU for the end of 2013 • Implementation of the interconnection of automated systems <ul style="list-style-type: none"> <i>Flight plan</i> 9 OLDI interconnections 2012-2016 1 interconnection considering Doc 44 for 2012 7 AIDC interconnections for period 2012-2016 <i>Asterix protocol radar data</i> 20 radar data exchanges using Asterix protocol period 2011-2016 1 owner exchange for 2012
Related Projects	<ul style="list-style-type: none"> • ATFM • Improve ATM Situational Awareness

Project Deliverables	Relationship with Performance Based Regional Plan (PFF) and ASBU Block 0 Modules	Responsible	Status of Implementation ¹	Delivery Date	Remarks
Regional guideline document for the automation level required according to the ATM service provided in airspace and international aerodromes, assessing <ul style="list-style-type: none"> • operational architecture design, • characteristics and attributes for interoperability, • data bases and software FPL, CPL, CNL, RLA, etc., and • technical requirements. 	PFF SAM CNS 04 PFF SAM ATM 05 PFF SAM ATM 06 B0 ASUR B0 SNET	Project Coordinator and ATM Automation Group		Completed June 2011	The System and Subsystem Specifications (SSS) document has been drafted for the identification of automated requirements necessary at ATS units (ACC), and a revision process has been conducted with the support of RLA/06/901 project and SAM/IG ATM Automation Group. Document published in site www.lima.icao.int .
Guideline for the integration of automated systems and corresponding action plan	PFF SAM CNS 04 PFF SAM ATM 05 PFF SAM ATM 06 B0 ASUR	Project Coordinator and ATM Automation Group		Completed October 2010 Completed May 2012	The following has been drafted: Guideline for the integration of automated systems and revision process. Action plan revision for the integration of automated systems and continuous revision. Both documents drafts with the support of RLA/06/901 project and the SAM/IG ATM Automation Group. Document published in site www.lima.icao.int .

¹ **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) and ASBU Block 0 Modules	Responsible	Status of Implementation ¹	Delivery Date	Remarks
Preliminary interface control document (SICD) between systems for the interconnection of ACCs in the SAM Region	PFF SAM CNS 04 PFF SAM ATM 05 PFF SAM ATM 06 B0 FICE B0 ASUR	Programme Coordinator, Project Coordinator and ATM Automation Group		Completed October 2008 October 2012	Document ICD drafted. Document elaborated with the support of RLA/98/003 and later, RLA/06/901. Document published in site www.lima.icao.int . The document requires updating in view of installation of new automated and surveillance systems in the Region
Guidelines for elaboration of Memorandum of Understanding (MoU) for the implementation of the automation system interconnection	PFF SAM CNS 04 B0 FICE B0 ASUR	Project Coordinator and ATM Automation Group		Completed October 2009	A model MoU for the interconnection of automated systems has been developed, with the support of RLA/06/901 project and SAM/IG ATM Automation Group. The MoU model is published in site www.lima.icao.int .

Project Deliverables	Relationship with Performance Based Regional Plan (PFF) and ASBU Block 0 Modules	Responsible	Status of Implementation ¹	Delivery Date	Remarks
Drafting of Memorandum of Understanding (MoU) for the interconnection of automated systems between adjacent ACCs	PFF SAM CNS 04 PFF SAM ATM 05 PFF SAM ATM 06 B0 FICE B0 ASUR	SAM States, Project Coordinator and ATM Automation Group		October 2013	To date, six MoU have been drafted and signed between the following SAM States: Argentina-Brazil; Argentina-Chile; Argentina-Uruguay, Brazil-Uruguay; Brazil-Peru; and Brazil-Venezuela. 12 additional MoUs are planned to be drafted.

Project Deliverables	Relationship with Performance Based Regional Plan (PFF) and ASBU Block 0 Modules	Responsible	Status of Implementation ¹	Delivery Date	Remarks
Interconnection of automated systems between adjacent ACCs	PFF SAM CNS 04 PFF SAM ATM 05 PFF SAM ATM 06 B0 FICE B0 ASUR	SAM States		June 2016	<ol style="list-style-type: none"> 1. Radar data has been interconnected between Argentina-Uruguay using IP protocol through REDDIG; 2. Flight plan and radar data exchange trials have been conducted between Brazil-Venezuela through REDDIG; 3. Letter LT 12/3.54-SA130 containing a questionnaire was sent to Argentina, Brazil, Chile, Peru and Uruguay with the aim of identifying the causes for the delays and formulate recommendations permitting the completion of the interconnections. Replies were received from Argentina, Brazil and Peru; 4. Replies from Argentina, Brazil, Chile and Peru were analysed upon; 5. A mission was programmed for 6 to 10 May 2013, involving two automation experts with the aim of restarting and concluding the interconnection trials between the Brazil and Venezuela systems. Visits to the remainder States will be scheduled for June-July 2013, with presentation of results at SAM/IG/12. 6. Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, panama, Paraguay, Peru, Uruguay and Venezuela were requested for the updating of the SICD document. SICD updating was received regarding the Brazilian automated systems

Project Deliverables	Relationship with Performance Based Regional Plan (PFF) and ASBU Block 0 Modules	Responsible	Status of Implementation¹	Delivery Date	Remarks
Monitor implementation progress of automation activities in the SAM Region		Programme Coordinator and Project Coordinator		May 2008 – June 2016	
Resources necessary	Implement facilities required by SAM States permitting the interconnection of automated systems in accordance with the dates established in the MoUs drafted and signed to this end				

GRUPO REGIONAL CAR/SAM DE PLANIFICACION Y EJECUCION / CAR/SAM REGIONAL PLANNING AND IMPLEMENTATION GROUP (GREPECAS)

ID	Nombre de tarea	Duration	Start	Finish	2008		2009		2010		2011		2012		2013		2014		2015		2016				
					H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1				
1	Proyecto de automatización ATM / ATM Automation Project	2129.13 days	Mon 05/05/08	Thu 30/06/16	s/05																				
2	Nivel de automatización requerido de acuerdo con el servicio ATM proporcionado en el espacio aéreo y los aeródromos internacionales / Automation level required according to ATM service provided in airspace and international aerodromes	85.88 days	Fri 11/02/11	Fri 10/06/11	<p align="center">11/02 ↔ 10/06</p> <p align="center">Coordinador Proyecto, Estados SAM, OACI/ICAO 11/02 → 24/03</p> <p align="center">A. Santoro (Coordinador Proyecto) 25/03 → 06/05</p> <p align="center">A. Santoro (Coordinador Proyecto) 07/06 → 10/06</p>																				
3	Revisión documento de especificaciones de sistemas y subsistemas (SSS) / Review of System and Subsystem Specifications (SSS) document	29.88 days	Fri 11/02/11	Thu 24/03/11																					
4	Ajustes finales al documento / Final document adjustments	30.88 days	Fri 25/03/11	Fri 06/05/11																					
5	Entrega documento final / Delivery of final document	4 days	Tue 07/06/11	Fri 10/06/11																					
6	Guía de orientación para la implantación de la integración de los sistemas automatizados y plan de acción correspondiente/Guideline for the integration of automated systems and corresponding action plan	1063.88 days	Mon 05/05/08	Thu 31/05/12	<p align="center">A. Santoro (Coordinador Proyecto), Grupo Automatización ATM</p> <p align="center">A. Santoro (Coordinador Proyecto), Grupo Automatización ATM</p> <p align="center">Grupo Automatización ATM, Estados SAM</p> <p align="center">A. Santoro (Coordinador Proyecto), Grupo Automatización ATM</p> <p align="center">A. Santoro (Coordinador Proyecto), Grupo Automatización ATM</p> <p align="center">Grupo Automatización ATM, A. Santoro (Coordinador Proyecto)</p>																				
7	Recolectar información /Collect information	64 days	Mon 05/05/08	Thu 31/07/08																					
8	Entrega de propuesta de borrador / Delivery of draft proposal	39 days	Fri 01/08/08	Wed 24/09/08																					
9	Revisión de la propuesta borrador / Review of draft proposal	22 days	Thu 25/09/08	Fri 24/10/08																					
10	Entrega documento final / Delivery of final document	65 days	Mon 27/10/08	Fri 23/01/09																					
11	Actualización guía de orientación /Updating of orientation guideline	21 days	Fri 01/10/10	Fri 29/10/10																					
12	Modelo de plan acción regional para interconexión sistemas automatizados (planes de vuelo y datos radar) / Regional action plan model for interconnection of automated systems (flight plan and radar data)	44 days	Tue 01/09/09	Fri 30/10/09																					
13	Revisión del plan de acción /Review of action plan	67 days	Wed 29/02/12	Thu 31/05/12	<p align="center">Coordinador Proyecto, Grupo Automatización ATM</p>																				
14	Documento preliminar de control de interfaz (SICD) entre sistemas para la interconexión de los ACC en la Región SAM y actualización de/Preliminary interface control document (SICD) between systems for the interconnection of ACCs in the SAM Region	1433.88 days	Mon 05/05/08	Thu 31/10/13	<p align="center">A. Santoro (Coordinador Proyecto), Grupo Automatización ATM</p> <p align="center">A. Santoro (Coordinador Proyecto), Coordinador Proyecto</p> <p align="center">Grupo Automatización ATM, Estados SAM</p>																				
15	Recolectar información /Collect information	44 days	Mon 05/05/08	Thu 03/07/08																					
16	Entrega de propuesta de borrador / Delivery of draft proposal	43 days	Fri 04/07/08	Tue 02/09/08																					
17	Revisión de la propuesta borrador / Review of draft proposal	8 days	Wed 03/09/08	Fri 12/09/08																					

GRUPO REGIONAL CAR/SAM DE PLANIFICACION Y EJECUCION / CAR/SAM REGIONAL PLANNING AND IMPLEMENTATION GROUP (GREPECAS)

ID	Nombre de tarea	Duration	Start	Finish	2008		2009		2010		2011		2012		2013		2014		2015		2016
					H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1
18	Entrega documento final / Delivery of final document	9 days	Mon 20/10/08	Thu 30/10/08																	
19	Actualización del documento SICD / Updating of SICD document	214 days	Mon 07/01/13	Thu 31/10/13																	
20	Orientaciones para elaboración Memorándum de Entendimiento (MoU) para implantación de la interconexión de sistemas automatizados / Guidelines for elaboration of Memorandum of Understanding (MoU) for implementation of	33.88 days	Tue 01/09/09	Fri 16/10/09																	
21	Elaboracion de un modelo borrador de MoU / Elaboration of a draft MoU model	24 days	Tue 01/09/09	Fri 02/10/09																	
22	Revision del modelo de borrador de MoU / Review of draft MoU model	5 days	Mon 05/10/09	Fri 09/10/09																	
23	Entrega Modelo final de MoU / Delivery of final MoU model	5 days	Mon 12/10/09	Fri 16/10/09																	
24	Monitorear implantación de sistema de proceso de datos de plan de vuelo, herramientas para transmisión electrónica e intercambio automático de mensajes ATS / Monitor implementation of flight plan data processing system and electronic transmission tools	1748.88 days	Mon 19/10/09	Thu 30/06/16																	
25	MoU revisados y firmados para interconexion de sistemas automatizados (plan de vuelo y datos radar) / Reviewed and signed MoUs for interconnection of automated systems (flight plan and radar data)	1053.94 days	Mon 19/10/09	Thu 31/10/13																	
26	Implantacion de la interconexion de sistemas automatizados (Datos radar y datos de plan de vuelo)	1335 days	Fri 20/05/11	Thu 30/06/16																	
27	Monitorear las actividades de implantación del proyecto Automatización ATM / Monitor implementation activities of ATM Automation project	2128.88 days	Mon 05/05/08	Thu 30/06/16																	
28	Monitorear las actividades de implantación del Proyecto Automatización ATM / Monitor implementation activities of ATM Automation project	2129 days	Mon 05/05/08	Thu 30/06/16																	

APPENDIX D

SAM Region	PROJECT DESCRIPTION (PD)	PD N° C2	
Programme	Project Title	Starting Date	Ending Date
ATM Automation and Situational Awareness <i>(Programme Coordinator: Onofrio Smarrelli)</i>	<p>Improve ATM Situational Awareness in the SAM Region</p> <p><i>Project Coordinator: Paulo Vila (Peru)</i></p> <p><i>Contributing experts: José Rubira, Marcos Vidal and Jorge Otiniano (Peru); Javier Vittor (Argentina), André Jansen (Brazil)</i></p>	October 2011	May 2014
Objective	Develop guidelines supporting the implementation of improvements in the situational awareness of ATS units in the South American Region		
Scope	<p>Guidelines supporting the implementation of various applications, such as common traffic visualization, common meteorological conditions visualization and communications in general</p> <ul style="list-style-type: none"> • Analysis of the current surveillance infrastructure and identification of necessary improvements to support en route and terminal airspaces, airspace classification, PBN and ATFM • Implementation of ADS-B, ADS-c and/or MLAT surveillance systems at selected airspaces • Minimum common electronic information and data bases required in support of decision-making process and alert systems towards an interoperable situational awareness among centralized ATFM units • Implement flight plan data process systems (new FPL format) and data communications tools among ACC's • Implement advanced automation support tools to contribute towards the sharing of aeronautical information 		
Metrics	<p>Drafting of following documents:</p> <ul style="list-style-type: none"> • Regional surveillance strategy for the implementation of systems in support of improvement of situational awareness – revised • Evaluation of the surveillance systems coverage in the SAM Region - completed • Guideline on technical/operational considerations for ADS-B implementation – completed • Guideline on technical/operational considerations for MLAT implementation - completed • Guideline on technical considerations in support of ATFM implementation – completed • Guideline for the presentation of MET products in graphic format - completed 		
Strategy	<ul style="list-style-type: none"> • All tasks will be conducted by experts nominated by States and organizations of the SAM Region members of the Project <i>Improve ATM situational awareness in the SAM Region</i>, under management of the project coordinator. Communications among project members, as well as between the project coordinator and programme coordinator, shall be carried out through teleconferences and the Internet. • 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 		

<p>Goals</p>	<ul style="list-style-type: none"> • Regional surveillance strategy for the implementation of systems in support to situational awareness improvement for July 2012 (completed) • Evaluation of SAM surveillance systems coverage for October 2012 (completed) • Guideline on technical/operational considerations for ADS-B implementation for June 2012 (completed) • Guideline for technical/operational considerations for MLAT implementation for May 2014 • Guideline for technical considerations in support of ATFM implementation for October 2013
<p>Justification</p>	<ul style="list-style-type: none"> • Improve situational awareness has been identified as a great support for ATM, contributing in the increase of safety and in flight efficiency • In addition, a close relationship with the other programmes and their respective projects is necessary, with the aim of collecting the operational requirements demanded by the mentioned applications and their respective tentative implementation dates • This project contributes to the implementation of modules B0 ASUR, B0 SURV, B0 NOPS and B0 AMET of the <i>Air Navigation System Performance-Based Implementation Plan for the SAM Region (SAM PBIP)</i>
<p>Related Projects</p>	<ul style="list-style-type: none"> • Air Navigation Systems in Support of PBN • Automation • ATFM • ATN Ground-ground and Air-ground Applications

Project Deliverables	Relationship with Performance Based Regional Plan aligned with ASBU	Responsible	Status of Implementation ¹	Delivery Date	Remarks
<i>Evaluation of surveillance infrastructure and identification of surveillance systems improvements</i>					
Evaluation of current surveillance systems coverage in the SAM Region	PFF SAM CNS 04 B0 ASUR	Paulo Vila (Peru)		October 2012	Presented as Appendix to the Guideline on technical/operational considerations for ADS-B implementation.
<i>Drafting of regional plan for ADS-B and MLAT implementation</i>					
Guideline on technical/operational considerations for ADS-B implementation	PFF SAM CNS 04 B0 SURF B0 ASUR	José Rubira (Peru) Marco Vidal (Peru)		October 2012	The Guideline includes comments from Brazil, Chile and Guyana, presented through SAM/IG/11-WP/06. The Meeting approved the Guide. Peru will later include considerations to determine the values recommended for NIC, SIL and NAC for operational application.
Guideline on technical/operational considerations for MLAT implementation	PFF SAM CNS 04 B0 SURF B0 ASUR	Andre Jansen (Brazil)		May 2014	The Guideline has not been started, as MLAT installation in Brazil is being awaited for.
Guideline on technical considerations in support of ATFM implementation	PFF SAM ATM 05 B0 NOPS	Javier Vittor (Argentina)		October 2013	The guideline will base itself on the CAR/SAM ATFM Manual approved through GREPECAS Conclusion 16/35

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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 aligned with ASBU	Responsible	Status of Implementation ¹	Delivery Date	Remarks
Guideline for the presentation of MET products in graphical format	PFF SAM MET 03 B0 AMET	Jorge Otiniano (Peru)		2013	The document was delivered to the Secretariat (MET) for its review by the corresponding meteorology specialists.
Resources necessary	Experts in the carrying out of the deliverables				

GRUPO REGIONAL CAR/SAM DE PLANIFICACION Y EJECUCION / CAR/SAM REGIONAL PLANNING AND IMPLEMENTATION GROUP (GREPECAS)

ID	Nombre de tarea	Start	Finish	1st Half	2nd Half	1st Half	2nd Half	1st Half	2nd Half	1st Half	2nd Half	1st Half	2nd Half
1	MEJORA A LA COMPRESION SITUACIONAL ATM EN LA REGION SAM / IMPROVE ATM SITUATIONAL AWARENESS IN THE SAM REGION	Fri 28/10/11	Fri 23/05/14										
2	Evaluacion de la cobertura actual en los sistemas de vigilancia / Evaluation of the current surveillance system coverage	Mon 05/12/11	Fri 05/10/12										
3	Collect information / Recolectar información	Mon 05/12/11	Mon 30/04/12										
4	Entrega de propuesta de borrador / Delivery of draft proposal	Mon 30/04/12	Mon 27/08/12										
5	Revision de la propuesta borrador / Review of draft proposal	Mon 27/08/12	Fri 28/09/12										
6	Entrega documento final / Delivery of final document	Mon 01/10/12	Fri 05/10/12										
7	Guía de orientación con consideraciones técnicas/operacionales para la implantación de la ADS-B / Guidelines on technical/operational considerations for ADS	Fri 28/10/11	Tue 02/10/12										
8	Recolectar información / Collect information	Fri 28/10/11	Wed 28/12/11										
9	Apoyo en el suministro de información referente a las iniciativas existentes / Support on the information supply related to current initiatives	Thu 29/12/11	Tue 28/02/12										
10	Entrega de propuesta de borrador/Delivery of draft proposal	Wed 29/02/12	Thu 29/03/12										
11	Revision de la propuesta borrador/Review of draft proposal	Fri 30/03/12	Tue 17/04/12										
12	Ajustes finales al documento/Final document adjustments	Wed 30/05/12	Fri 08/06/12										
13	Entrega documento final/Delivery of final document	Fri 14/09/12	Tue 02/10/12										
14	Guía de orientación con consideraciones técnicas/operacionales para la implantación MLAT / Guideline on technical/operational considerations for MLAT implementation	Mon 06/01/14	Fri 23/05/14										
15	Recolectar información/Collect information	Mon 06/01/14	Fri 28/03/14										
16	Entrega de propuesta de borrador/Delivery of draft proposal	Mon 31/03/14	Fri 18/04/14										
17	Revision de la propuesta borrador/Review of draft proposal	Mon 21/04/14	Wed 30/04/14										
18	Ajustes finales al documento/Final document adjustments	Thu 01/05/14	Fri 16/05/14										
19	Entrega documento final/Delivery of final document	Mon 19/05/14	Fri 23/05/14										
20	Guía de orientación en apoyo a la implantación ATFM / Guideline in support of ATFM implementation	Mon 09/07/12	Fri 18/10/13										
21	Collect information/Recolectar información	Mon 09/07/12	Mon 10/12/12										

GRUPO REGIONAL CAR/SAM DE PLANIFICACION Y EJECUCION / CAR/SAM REGIONAL PLANNING AND IMPLEMENTATION GROUP (GREPECAS)

ID	Nombre de tarea	Start	Finish	1st Half	2nd Half	1st Half	2nd Half	1st Half	2nd Half	1st Half	2nd Half	1st Half	2nd Half
22	Entrega de propuesta de borrador/Delivery of draft proposal	Tue 11/12/12	Mon 11/03/13										
23	Revisión de la propuesta borrador/Review of draft proposal	Tue 12/03/13	Mon 15/04/13										
24	Ajustes finales al documento/Final document adjustments	Wed 31/07/13	Wed 02/10/13										
25	Entrega documento final/Delivery of final document	Thu 03/10/13	Fri 18/10/13										
26	Guía de orientación para elaborar SIGMET en formato gráfico/Guideline for the drafting of SIGMET in graphic format	Mon 06/02/12	Wed 15/05/13										
27	Analizar las diversas ventajas que ofrece el uso del SIGMET gráfico/Analyze advantages offered by the use of graphic SIGMET	Mon 06/02/12	Mon 09/04/12										
28	Entrega de propuesta de borrador/Delivery of draft proposal	Fri 25/05/12	Fri 15/06/12										
29	Supervisión o revisiones del plan borrador/Supervision or revisions to draft plan	Mon 18/06/12	Thu 05/07/12										
30	Ajustes finales al documento/Final document adjustments	Mon 09/07/12	Tue 30/04/13										
31	Documento final de la Guía/Final document Guide	Wed 01/05/13	Wed 15/05/13										
32	Monitorear las actividades de implantación de la mejora a la comprensión situacional en la Región SAM/Monitor the implementation of improving ATM situational awareness activities in the SAM Region	Fri 28/10/11	Mon 18/11/13										
33	Monitorear las actividades de implantación de la mejora a la comprensión situacional en la Región SAM/Monitor the implementation of improving ATM situational awareness activities in the SAM Region	Fri 28/10/11	Mon 18/11/13										

APPENDIX E

SAM Region	PROJECT DESCRIPTION (PD)	PD N° C3	
Programme	Project Title	Starting Date	Ending Date
ATM Automation and Situational Awareness <i>(Programme Coordinator: Onofrio Smarrelli)</i>	Implementation of the New ICAO Flight Plan Model <i>Project Coordinator: Jorge Ávila (Brazil) (March 2010-December 2011)</i> <i>(Currently without project coordinator)</i> <i>Contributing experts: Alessander Santoro (Brazil), Omar Gouarnalusse (Argentina) and Project RLA/06/901</i>	March 2010	November 2012
Objective	Support in the implementation of the new flight plan model in follow-up to the guidelines established in the CAR/SAM regional strategy		
Scope	The scope of the project consists in the implementation of the following main activities: <ul style="list-style-type: none"> • Guidelines on transition to the new flight plan format • Conduct of trials between systems with capability to process the new flight plan • Drafting of contingency measures and decision on technical/operational considerations for the transition 		
Metrics	<ul style="list-style-type: none"> • Guidelines on the transition to the new flight plan format • Identification of automated systems affected by the new flight plan format • Model action plan for States implementation of the new flight plan format • Model AIC for the dissemination of the new flight plan format • Trials between systems with capability to process the new flight plan • Contingency measures and technical/operational considerations for the transition • Guidance document for safety assessment 		
Strategy	<ul style="list-style-type: none"> • All tasks will be conducted by experts nominated by States and organizations of the SAM Region members of the Project <i>Implementation of the New ICAO Flight Plan Model</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 • 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 		

Goals	<ul style="list-style-type: none"> • Guidelines on the implementation of the new flight plan format drafted by May 2010 • Guideline on identification of automated systems affected by the new flight plan format drafted by April 2010 • Model action plan for States implementation of the new flight plan format drafted by May 2010 • Model AIC for the dissemination of the new flight plan format drafted by May 2011 • Trials between systems with capability to process the new flight plan implemented between March and October 2012 • States contingency plans drafted by October 2012 • Guidance document for safety assessment drafted by September 2011
Justification	The implementation of the new flight plan format must be co-ordinately carried out in all States of the Region and, in turn, the Region should be aligned with the implementation at other regions. Therefore, the drafting of a project supporting States in said implementation becomes necessary
Related Projects	<ul style="list-style-type: none"> • Automation • Improve ATM situational awareness

Project Deliverables	Relationship with Performance Based Regional Plan (PFF)	Responsible	Status of Implementation ¹	Delivery Date	Remarks
Guidelines on transition to new flight plan format	PFF SAM ATM 07	ICAO and Project Coordinator		Completed	Guidelines were drafted to: Identify the automated systems affected by the new flight plan format Model action plan for States in the implementation of the new flight plan format Guidelines for the implementation of the new flight plan format during the transition phase
Develop regional strategy for transition to new flight plan format	FF SAM ATM 07	ICAO		Completed	GREPECAS approved the application of the CAR/SAM strategy for the implementation of Amendment 1 to PANS-ATM, 15th Edition (Doc. 4444) through its Conclusion 16/39
Consolidated analysis on assessments made by States on possible impacts in the implementation of the new FPL format	PFF SAM ATM 07	ICAO and Project Coordinator		Completed	All SAM States assessed the impact on the implementation of the new format in their automated systems. The consolidated assessment analysis was presented at SAM/IG/6 meeting (Lima, Peru, 18-22 October 2010)
Proposed considerations to conduct trials between systems with new flight plan processing capacity	PFF SAM ATM 07	Project Coordinator, Omar Gouarnalusse (Argentina) and States		October 2012	All States of the Region conducted regional and interregional trials through a schedule planned to this end, which started in March 2012 and ended on October 2012

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Project Deliverables	Relationship with Performance Based Regional Plan (PFF)	Responsible	Status of Implementation ¹	Delivery Date	Remarks
Development of contingency procedures and determination of operational/ technical considerations for the transition	PFF SAM ATM 07	ICAO, Project Coordinator, RLA/06/901 Project and States		October2012	<p>A safety assessment guideline was drafted, with the purpose of carrying out a qualitative risk analysis from the SAM Region point of view before the validity of Amendment 1 to ICAO PANS-ATM, 15th Edition (Doc. 4444), related with the new flight plan content (NEW format) as of 15 November 2012 and during the transition period starting on 1July 2012, when it is expected that airspace users use both the CURRENT and NEW formats</p> <p>All States of the Region have used this document as orientation in the safety assessment and in the drafting of a contingency plan in this regard</p>

Project Deliverables	Relationship with Performance Based Regional Plan (PFF)	Responsible	Status of Implementation ¹	Delivery Date	Remarks
<p>Technical/operational proposals for the transition</p> <p>Legislation</p> <p>Safety assessment</p> <p>Automated systems</p> <p>Training plan</p>	<p>PFF SAM</p> <p>ATM 07</p>	<p>ICAO, Project Coordinator, Alessander Santoro (Brazil) and States</p>		<p>November 2012</p>	<p><i>Legislation</i> A model AIC for the dissemination of information on the new flight plan format implementation has been drafted. In addition, States national action plans have taken into consideration amending the technical/operational documentation related with the new flight plan format. 30% of the States have started amending their national publication with regard to the new flight plan format</p> <p><i>Safety assessment</i> (refer to information in project deliverable in row above)</p> <p><i>Automated systems</i> 40% of the States would be able to support the NEW and CURRENT flight plan format during the transition period</p> <p><i>Training plan</i> All States of the Region have implemented the training plan for the implementation of the new flight plan format. The training was addressed to ATS, AIS operational personnel, technical personnel and users. Some States have implemented via web courses</p>

Project Deliverables	Relationship with Performance Based Regional Plan (PFF)	Responsible	Status of Implementation ¹	Delivery Date	Remarks
Monitor the implementation of the new ICAO flight plan model activities in the SAM Region		ICAO		March 2010 - 15 November 2012	The implementation of the new flight plan format has been successfully implemented at the established date. Of the total SAM ACCs, 30% had made changes to their flight plan processing systems, 23% had implemented converters, and the remainder implemented the manual solution in the implementation of the new format. As to the generating of the flight plan from AMHS/AFTN terminals through templates with capacity to detect errors in its filling, 92% count with it.
Resources necessary	Funding for the implementation of changes in automated systems (AMHS / AFTN, FDP), adoption of possible contingency measures and training to personnel involved				

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ID	Nome da tarefa	Start	Finish	2010		2011		2012		2013		2014		2015	
				H2	H1	H2	H1	H2	H1	H2	H1	H2	H1		
1	Implantación del nuevo modelo de plan de vuelo de la OACI / Implementaion of the new ICAO Flight Plan Model	Fri 19/03/10	Mon 07/10/13		▶										
2	Project management process / Proceso de gerencia del proyecto	Fri 19/03/10	Mon 14/06/10		▶										
3	Define Project Manager/Definir el Gerente de Proyecto	Fri 19/03/10	Fri 19/03/10		▶										
4	Identify States experts/Identificar expertos de los Estados	Fri 19/03/10	Mon 14/06/10		▶										
5	Guías sobre la transición al nuevo formato de plan de vuelo presentado / Guidelines on transition to new flight plan format	Fri 19/03/10	Tue 25/05/10		▶										
6	Guía sobre identificación de los sistemas afectados con el NUEVO FPL/Guideline to identify the automated system affected by the NEW FPL	Fri 19/03/10	Wed 21/04/10		▶										
7	Modelo de plan de acción para la implanatción del NUEVO FPL por los Estados/Model of action plan for States in the implementaion of the NEW FPL	Fri 19/03/10	Tue 25/05/10		▶										
8	Guía sobre la implanatción del NUEVO FPL durante el periodo de transición/Guidelines for the implementaion of the NEW FPL during the transition phase	Fri 19/03/10	Mon 24/05/10		▶										
9	Elaborar una estrategia regional de transición al nuevo formato de plan de vuelo / Develop regional strategy for transition to new flight plan format	Fri 19/03/10	Fri 01/04/11		▶										
10	Elaboración estrategia regional y aprobación por GREPECAS	Fri 19/03/10	Fri 01/04/11		▶										
11	Análisis consolidado de las evaluaciones realizadas por los Estados de los posibles impactos de la implementación del nuevo formato de FPL/Consolidated analysis on assessments made by States on possible impacts in the implemntation of the new FPL	Mon 24/05/10	Fri 15/10/10		▶										
12	Identificación de los posibles impactos/Posible impact identification	Mon 24/05/10	Thu 24/06/10		▶										
13	Recolectar las evaluaciones/Collect the evaluation	Thu 01/07/10	Tue 31/08/10		▶										
14	Análisis consolidado de las evaluaciones realizadas por los Estados/Consc	Mon 06/09/10	Thu 30/09/10		▶										
15	Elaboración de informe con el análisis consolidado de las evaluaciones realizadas por los Estados/Consolidated analysis on assessments made by States on possible impacts in the implementaion of the NEW FPL	Mon 04/10/10	Fri 15/10/10		▶										
16	Propuesta de consideraciones para realizar los ensayos entre sistemas con capacidad de procesamiento del nuevo plan de vuelo/Proposed considerations to conduct trials between systems with the new flight plan processing capacity	Wed 11/05/11	Mon 07/10/13		▶										
17	Propuesta de consideraciones para realizar los ensayos entre sistemas con capacidad de procesamiento del nuevo plan de vuelo/Proposed considerations to conduct trials between systems with the capacity to process the new flight plan	Wed 11/05/11	Fri 20/05/11		▶										
18	Realización de ensayos /Conduct trials	Thu 15/03/12	Mon 07/10/13		▶										
19	Elaboración de procedimientos de contingencia y determinación de consideraciones técnico/operacionales para la transición/Development of contingency procedures and determination of operational /technical considerations for the transitions	Mon 04/07/11	Mon 02/07/12		▶										
20	Elaboración de una guía con consideraciones para la elaboración de los procedimientos de contingencias/Preparation of a guideline with considerations for the development of contingency procedures	Mon 04/07/11	Fri 09/09/11		▶										
21	Elaboración de los procedimientos de contingencias/Development of contri	Mon 24/10/11	Mon 02/07/12		▶										
22	Propuesta de consideraciones técnicas/operacionales para la transición /Technical/operational proposals for the transition	Fri 19/03/10	Thu 15/11/12		▶										
23	Lista de publicación de acciones de transición, ensayos y otras publicaciones para los usuarios e interesados/Publication lists of the transition actions, trials and other publications for the users and stakeholders	Wed 21/04/10	Wed 19/05/10		▶										

PM = Programme Manager/Gerente Programa
PC = Project Coordinator/Coordinador Proyecto

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ID	Nome da tarefa	Start	Finish	2010		2011		2012		2013		2014		2015
				H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	
24	Elaboracion Modelo AIC /AIC Model Elaboration	Thu 21/04/11	Fri 20/05/11											
25	Publicación de acciones de transición/Publication of transition actions	Mon 23/05/11	Mon 02/07/12											
26	Propuesta de consideraciones técnicas/operacionales para la transición/Proposed technical/operational considerations for the transition	Mon 12/09/11	Mon 24/10/11											
27	Plan de capacitación /Training Plan	Thu 21/04/11	Thu 19/05/11											
28	Implantacion Plan de Capacitación/Training Plan Implementation	Mon 06/06/11	Mon 02/07/12											
29	Plan de transición/Conduct a transition plan	Thu 21/04/11	Tue 24/05/11											
30	Evaluación de las acciones de transición y hacer ajustes/Assessment of the transition actions and make adjustments	Mon 02/04/12	Wed 14/11/12											
31	NUEVO FPL implementado/NEW FPL implemented	Wed 14/11/12	Thu 15/11/12											
32	NUEVO FPL implementado/NEW FPL implemented	Wed 14/11/12	Thu 15/11/12											
33	Monitorear las actividades de implantacion del nuevo formato de plan de vuelo en la Region SAM/Monitor the implemnetation of the new ICAO flight plan model activities in the SAM Region	Fri 19/03/10	Thu 15/11/12											
34	Monitorear las actividades de implantacion del nuevo formato de plan de vuelo en la Region SAM/Monitor the implemnetation of the new ICAO flight plan model activities in the SAM Region	Fri 19/03/10	Thu 15/11/12											