

## APPENDIX B

### PROJECT IMPROVE ATM SITUATIONAL AWARENESS IN THE SAM REGION

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>	Improve ATM Situational Awareness in the SAM Region  <i>Project Coordinator: Paulo Vila (Peru)</i> <i>Contributing experts: José Rubira, Marcos Vidal and Jorge Otiniano (Peru); Javier Vittor (Argentina)</i>	October 2011	November 2013
<b>Objective</b>	Develop guidelines supporting the implementation of improvements in the situational awareness of ATS units in the South American Region		
<b>Scope</b>	Guidelines supporting the implementation of various applications, such as common traffic visualization, common meteorological conditions visualization and communications in general <ul style="list-style-type: none"> <li>• Analysis of the current surveillance infrastructure and identification of necessary improvements to support en route and terminal airspaces, airspace classification, PBN and ATFM</li> <li>• Implementation of ADS-B, ADS-c and/or MLAT surveillance systems at selected airspaces</li> <li>• 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</li> <li>• Implement flight plan data process systems (new FPL format) and data communications tools among ACC's</li> <li>• Implement advanced automation support tools to contribute towards the sharing of aeronautical information</li> </ul>		
<b>Metrics</b>	Drafting of following documents: <ul style="list-style-type: none"> <li>• Regional surveillance strategy for the implementation of systems in support of improvement of situational awareness – revised</li> <li>• Evaluation of the surveillance systems coverage in the SAM Region - completed</li> <li>• Guideline on technical/operational considerations for ADS-B implementation – completed</li> <li>• Guideline for the presentation of MET products in graphic format</li> <li>• Guideline on technical/operational considerations for MLAT implementation - completed</li> <li>• Guideline on technical considerations in support of ATFM implementation - completed</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>Improve ATM situational awareness 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>Regional surveillance strategy for the implementation of systems in support to situational awareness improvement for July 2012.</li> <li>Evaluation of SAM surveillance systems coverage for October 2012.</li> <li>Guideline on technical/operational considerations for ADS-B implementation for June 2012</li> <li>Guideline for technical/operational considerations for MLAT implementation for June 2013</li> <li>Guideline for technical considerations in support of ATFM implementation for October 2013</li> </ul>
<b>Justification</b>	<ul style="list-style-type: none"> <li>Improve situational awareness has been identified as a great support for ATM, contributing in the increase of safety and in flight efficiency</li> <li>During the seventh meeting of the SAM Implementation Group (SAM/IG/7), a review was made to the project <i>Improve ATM situational awareness in the SAM Region</i>, considering the nomination of a coordinator for the SAM Region</li> <li>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</li> <li>This project contributes to the implementation of SAM PFF CNS 04, ATM 05, ATM 06 and MET 03 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>Air Navigation Systems in Support of PBN</li> <li>Automation</li> <li>ATFM</li> <li>Implementation of the ICAO New Flight Plan Format</li> <li>ATN Ground-ground and Air-ground Applications</li> </ul>

Project Deliverables	Relationship with Performance Based Regional Plan (PFF)	Responsible	Status of Implementation <sup>1</sup>	Delivery Date	Remarks
<i>Evaluation of surveillance infrastructure and identification of surveillance systems improvements</i>					
Revision to regional surveillance strategy for the implementation of systems in support to improvement of situational awareness	PFF SAM CNS 04 PFF SAM ATM 06	Paulo Vila (Peru)	Yellow	June 2012	An initial revision to the strategy was presented at SAM/IG/8 meeting (Lima, Peru, 10-14 October 2011)
Evaluation of current surveillance systems coverage in the SAM Region	PFF SAM CNS 04	Paulo Vila (Peru)	Green	October 2012	Presented as Appendix 7 to the SAM guideline on technical/operational considerations for ADS-B implementation. Comments from States are being awaited for.
<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 PFF SAM ATM 06	José Rubira (Peru) Marco Vidal (Peru)	Green	June 2012	The preliminary version is presented at SAM/IG/10 meeting for its review. Comments from States are being awaited for.
Guideline on technical/operational considerations for MLAT implementation	PFF SAM CNS 04 PFF SAM ATM 06	Andre Jansen (Brazil)	Gray	November 2013	

<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
Guideline on technical considerations in support of ATFM implementation	PFF SAM CNS 01 PFF SAM ATM 05	Javier Vittor (Argentina)		July 2013	The guideline will base itself on the CAR/SAM ATFM Manual approved through GREPECAS Conclusion 16/35
Guideline for the presentation of MET products in graphical format	PFF SAM CNS 04 PFF SAM ATM 06	Jorge Otiniano (Perú)		October 2012	SAM/IG/10 meeting was informed important progress has been made in the guide, having an initial document to be delivered at SAM/IG/11 meeting (May 2013)
Monitor the implementation of improving ATM situational awareness activities in the SAM Region		ICAO		October 2011- November 2013	
Resources necessary					