



Agenda Item 1: Follow up to conclusions and decisions adopted by SAM/IG meetings

**REVIEW OF THE STATUS OF COMPLIANCE OF CONCLUSIONS FORMULATED BY
SAM/IG MEETINGS AND PENDING ACTIVITIES**

(Presented by the Secretariat)

Summary	
This working paper has the intention that the Meeting may proceed with the revision on the application by SAM States of valid conclusions and pending activities formulated by SAM Implementation Group Workshop/Meetings (SAM/IG).	
Reference:	
- SAM/IG Workshop/Meetings Reports	
ICAO Strategic Objectives:	<i>A - Safety C - Environmental Protection and Sustainable Development of Air Transport</i>

1. History

1.1 The Workshops/Meetings of the SAM Implementation Group have timely produced a series of agreements translated into conclusions, that indicate the actions to be carried out by the Implementation Group and/or States, as well as activities assumed by the Working Groups.

1.2 This working paper presents a revision of the valid conclusions, and pending activities of the SAM Implementation Group (SAM/IG) workshops/meetings.

2 Analysis

2.1 During previous SAM/IG meetings, some conclusions were formulated and a series of activities were adopted, oriented towards the implementation of different functions that will enable the Region to evolve in a sustainable manner towards the application of the global ATM operational concept.

2.2 The implementation programmes foreseen for the application of the global ATM Operational Concept in the SAM Region have been initially focused in the following:

- a) SAM ATS routes network optimisation.
- b) Performance Based Navigation (PBN) both for en-route, terminal area and approach areas.
- c) Air Traffic Flow Management (ATFM).
- d) CNS systems improvements;

- e) Automation; and
- f) Implementation of the new flight plan format

Summary of the status of implementation of tasks and conclusions

2.3 To show the status of implementation of the conclusions and actions adopted, the list shown in **Appendix A** to this working paper has been prepared. The information attached refers to the information available in the Secretariat with each one of the agenda items.

2.4 The list of conclusions and actions comprises:

- a) Tasks to develop and/or the corresponding conclusion in the areas under analysis;
- b) Specific tasks which will lead to compliance of the main task;
- c) Expected results in each task;
- d) Finalization dates;
- e) Responsible persons for its execution;
- f) Supporting members for each task; and
- g) Status of implementation of the same, and when necessary, for a better understanding, an explanatory comment on the status of implementation is included.

2.5 The Meeting should analyse each task identified and make the comments on specific tasks resulting, evaluate, and if necessary, modify the finalisation date, as well as the status of implementation of each specific task. The meeting may also wish to complete the chart shown in **Appendix B** to this working paper, showing the tasks in charge of the States, in order to make a follow-up of the same.

3 Suggested action

3.1 The meeting is invited to:

- a) request the working Groups, to analyse the tasks in the corresponding areas in **Appendix A** to this working paper, and evaluate each one of the tasks and its status of compliance, and complete the information, as applicable;
- b) request States to complete the chart shown in **Appendix B** to this working paper, in order to follow-up on those tasks under the responsibility of their respective administrations;
- c) if necessary, adopt the pertinent courses of action in relation to each one of such tasks; and
- d) analyse other considerations to this respect that the Meeting may deem pertinent.

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APPENDIX A

STATUS OF APPLICATION OF CONCLUSIONS AND/OR TASKS ORIGINATED IN SAM/IG MEETINGS

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
1. ATS Routes Implementation							
1-1	That States examine: a) Impact of RNAV routes implementation in the airspace b) Aircraft fleet c) Air traffic services, and d) Establish pertinent coordination so as to enable integrated, harmonious and timely implementation of more direct RNAV routes.	Analyse airspace Evaluate national and international fleet Evaluate ATS Coordinate with authorities involved Coordinate with adjacent States, if necessary	Adequate information will be available to execute PBN action plan. A new ATS routes network will be available, based on RNAV with necessary PBN values, so as to respond to current requirements of airspace users	SAM/IG/7	States	RO/ATM RO/AIM	Completed
1-2	Route RNAV VOR CRR/VOR FNO (UM 661)	Coordinate the implementation. Issue AIC. Train personnel. Amend CAR/SAM ANP	Route implemented	TBD Information from Brazil is pending	States Secretariat	RO/ATM RO/AIM	Completed
1-3	UM 662 Guayaquil – Madrid	Coordinate the implementation. Issue AIC. Train personnel. Amend CAR/SAM ANP	Route implemented	Agreement with FAV Venezuela is pending	States Secretariat	RO/ATM RO/AIM	Valid (see SAM/IG/5, Agenda Item 2)

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
1-4	UM 527 Lima – Madrid	Coordinate the implementation. Issue AIC. Train personnel. Amend CAR/SAM ANP	Route implemented	Implementat ion agreement on 24 September 2009	States Secretariat	RO/ATM RO/AIM	Completed 24/09/09
1-5	Santiago-Miami	Coordinate the implementation. Issue AIC. Train personnel. Amend CAR/SAM ANP	Route implemented	Finalise coordination with States involved and IATA	States IATA Secretariat	RO/ATM RO/AIM	Completed SAM/IG/5 Appendix A to Agenda Item 2, was modified. An analysis will continue within the SAM ATS routes network optimization programme.

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
2. Optimisation of ATS routes in the SAM Region							
2-1	<p>Conclusion SAM/IG/3-1 ATS Route Network Optimising in the South American Region</p> <p>That the ICAO SAM States take relevant action to follow the guidelines and meet the target dates established in the ATS Route Network Optimising Programme in the South American Region that appears in Appendix B to this part of the report. (Action adopted in SAM/IG/2)</p> <p>Optimize the airspace structure, reorganizing the red or implementing new routes based on strategic objectives of the airspace, taking into consideration “airspace modelling”, ATC simulations (accelerated time and/or real time), life trials, etc.</p>	See action plan from the ATS routes network optimisation programme (Appendix B, Attachment 1 to SAM/IG/3 Meeting Report on Agenda Item 2)	Optimised ATS routes network	As per action plan	States RLA/06/901 IATA Regional Office	RO/ATM RO/AIM	<p>Completed</p> <p>Conclusion and action adopted in SAM/IG/2 are oriented towards achieving the same results.</p> <p>The Action plan was updated (see Appendix B on Agenda item 2 of SAM/IG/4.</p>
2-2	Prepare the preliminary evaluation of airspace safety	Collect necessary data. Carry out safety assessment applying the methodology adopted.	PBN will be implemented showing that agreed safety levels will be kept or maintained	SAM/IG/6	CARSAMMA	RO/ATM	<p>Completed</p> <p>The SAMRA Workshop was carried out with the assistance of an expert.</p>

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
2-3	Flexibility in special use airspace.	ANSPs will Establish coordination mechanism with military authorities Discuss matters such as location, altitudes, and validity periods of special use airspaces.	Obtain the efficient use of the airspace in terms coordinated and agreed between civil and military authorities, contemplating the benefit of all users	SAM/IG/8	States	N/A	Valid The SAM civil/military seminar/ workshop was carried out from 16 to 19 August 2011.
2-4	Handling of air transport environmental problems	Obtaining of objective data over benefits that will be reached in terms of reduction of harmful gas emissions into the atmosphere.	Known data Availability of information required for monitoring of environmental protection.	SAM/IG/9	States	N/A	Valid Check fuel savings estimate chart. Permanent task.
2-5	Prepare a measurable plan of performance, including gas emissions safety, efficiency, etc.	Check available tools to carry out this task Prepare a measurable plan	A measurable plan will be available which will permit a clear vision of the current and future status of performance regarding gas emissions, safety and efficiency	SAM/IG/9	RLA/06/901	RO/ATM	Valid This task was included in the optimisation programme of the action plan.

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
2-6	<p>Conclusion SAM/IG/3-2 Data Collection That SAM States:</p> <p>a) collect data on all flights carried out in the SAM Region upper airspace (FL 245 or above) in national and international routes in the period 1-31 July 2009 and send them to the SAM Regional Office before 30 September 2009.</p> <p>b) use a sample consistent with the form and the instructions for completing the form, contained in Attachment 2 to Appendix B to this part of the report, using the EXCEL format.</p>	<p>The Secretariat should send a letter to States</p> <p>States should collect information as agreed.</p> <p>States should send information to the Regional Office.</p> <p>Information received must be assessed</p>	<p>A data base containing:</p> <ul style="list-style-type: none"> - movement in ATS routes per FIR - movement between pairs of cities, - peak hours - movement in TMA - FL most used - air operators and type of aircraft used. 	SAM/IG/5	Regional Office States RLA/06/901	RO/ATM RO/AIM CARSAMM A	<p>Completed Letter LT 2/3A.13- LN 3/24.6.1- SA364 dated 8 June 2009</p> <p>Except for French Guyana and Suriname, all States replied this survey.</p>
2-7	Determine entry/exit points of main TMAs in the SAM Region	States shall determine entry/exit points of main TMAs Shall present information at SAM/IG/4	Adequate information will be available to prepare Version 1 of ATS routes network	SAM/IG/4	States	RO/ATM	Completed States informed that they will not carry out changes in their TMA.
2-8	Determine and obtain necessary tools for the development of Version 1 of routes network (aeronautical charts, specific software)	Evaluate necessary tools	Basic elements will be available for the development of Version 1 of ATS routes network.	SAM/IG/6	SAM PBN RLA/06/901	RO/ATM	Completed The ATSRO/2 was held in August 2010. Proposal for amendment was presented in WP/06.

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
2-9	Interphase between ATS routes network of the CAR and SAM Regions	Evaluate interphase options in the ATS routes network in the CAR and SAM Regions	Develop Version 1 of ATS routes network to respond to users requirements	SAM/IG/5	SAM PBN TF Regional Office	RO/ATM	Completed
2-10	Carry out a detailed study of the ATS routes network, with a view to prepare Version 1 of routes network (ref 2.2.2 of the Action plan of the ATS routes optimization programme of the SAM Region.	Carry out a workshop among SAM experts, in order to review and validate the study of item 2.2.5 of the action plan of the ATS routes optimization programme of the SAM Region.	Initial draft of proposal Version 1 of routes network ready	March 2010	RLA/06/901 Regional Office IATA	RO/ATM	Completed
2-11	Prepare safety assessment required applying a qualitative methodology through the use of SMS (Ref 2.2.3 of the Action Plan – Programme for optimisation of the ATS Routes Network of the SAM Region)	Carry out safety assessment	Version 1 of ATS routes network will be implemented; demonstrating that agreed safety level will be maintained or improved.	October 2010	RLA/06/901	RO/ATM CARSAMM A	Completed Safety plans for RNAV5 and ATSRO are presented in WP/13 and 03, respectively.
2-12	Conclusion SAM/IG/4-1 – SAM routes network point of contact That SAM States designate a point of contact to support the development of task 2.2.5 of the Action Plan for optimisation of the SAM Routes Network, and send the corresponding data (email and telephone) until 31/01/10	Data base completed	The list of contacts will be available to coordinate ATS routes network optimisation.	SAM/IG/5	States	RO/ATM	Completed

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
2-13	Ref para. 2.1 of SAM/IG/5 Report The meeting noted the status of implementation of RNAV routes as approved by the First SAM Workshop on ATS Routes Network Optimisation (SAM ATSRO/1), as well as other routes that were reviewed and agreed to implement during bilateral or multilateral meetings.	Deliver information to process ANP amendment.	ANP amendment with Version 01 of the ATS routes network processed.	August 2010	States	RO/ATM	Completed The meeting was carried out as programmed and the amendment is being processed to circulate it among States and international organizations (See 2-8).
2-14	Ref Para. 2.7 SAM/IG/5 Report Also, the meeting agreed that the routes that have not been included in Version 01, will be part of Version 01, to be dealt with during the Second SAM Workshop on ATS Routes Network Optimisation (SAM ATSRO/2).	Routes not agreed on time will be incorporated into Version 02 of the routes network	Version 01 of the ATS routes network finalised. Version 02 of the routes network in process of revision	August 2010	States	RO/AIM RO/ATM	Completed ATS routes network that were not coordinated or that required further coordination were transferred to Version 02 of the ATS routes network.
2-15	Ref Para. 2.8 SAM/IG/5 Report The following routes be implemented in advance, since these routes have been coordinated for several years. UM661: UM532, UM403, Lima/Miami, UM662; UM400.	Implement route as agreed	Implemented routes	August 2010	States	RO/AIM RO/ATM	Completed Mentioned routes were implemented or incorporated in Version 01.

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
2-16	Ref Para. 2.10 SAM/IG/5 Report Coordination for ATS routes should be carried out in a bilateral or multilateral manner among involved; the use of e-mails is recommended for the exchange of information and other communication tools, such as Skype or similar, among focal points.	Previously coordinate ATS routes trajectory among parties involved.	ATS routes presented to implement, realign or eliminate are duly coordinated and ready to be introduced in the respective amendments.	2012	States and Focal points	RO/AIM RO/ATM	Completed The process of coordination of Phase 1 was completed and Version 01 of the ATS routes network was implemented in March 2011
2-17	Ref. para. 2.13 SAM/IG/5 Report. Update letters of operational agreement (LOAs) and ATS Contingency Plans	Review and coordinate with adjacent States and contingency plans	LOAs agreed before the implementation of new ATS routes, contingency plans duly updated	2012	States and Focal points	RO/AIM RO/ATM	Completed. The process was made during implementation of Version 01 of the ATS Routes network.

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
2-18	<p>Conclusion SAM/IG/6-1 Application of further actions to reduce the risk and risk rate resulting from the SAM ATS routes network optimisation safety plan</p> <p>That States, ATS providers and aircraft operators, take the necessary measures to apply recommendations and further actions in order to reduce the risk and resulting risk rate as shown in Appendix 1 to Chapter 4 of the Safety Plan for the SAM Region ATS routes network, as shown in Appendix A to this part of the report.</p>	Implement ulterior actions as required	Safe implementation of Version 01 of the ATS routes network.	March 2011	States	RO/ATM	Completed
2-19	<p>Conclusion SAM/IG/7-1 ATS routes network optimisation programme of the South American Region, Phase 3, Version 02</p> <p>That ICAO SAM States take pertinent actions to follow the guidelines and comply with established deadlines to continue with Phase 3, Version 02 of the ATS routes network optimisation programme of the South American Region, shown in Appendix A to this part of the report.</p>	See ATS routes network optimisation programme (version 02 SAM/IG/7)	Version 02 ATS routes network optimisation	As per action plan	States RLA/06/901 IATA Regional Office	RO/ATM RO/AIM	Valid

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
3. Implementation of Performance Based Navigation (PBN) in the SAM Region							
3-1	SAM/IG/1-1 CAR/SAM PBN Roadmap That ICAO SAM States, in implementing RNAV/RNP, take the pertinent actions to follow guidelines contained in the CAR/SAM PBN Roadmap as shown in Appendix C to this part of the report.	Shall facilitate implementation at a regional level Each State should comply with the actions agreed in the PBN Roadmap	States will have a National en-route, TMA and APP PBN implementation Plan.	SAM/IG/3	States	N/A	Completed. States adopted the PBN roadmap.
3-2	Conclusion SAM/IG/2-1 PBN implementation Programme for en-route operations That the ICAO SAM States take appropriate actions to follow the guidelines and comply with the targets established in the PBN implementation for en-route operations, which is shown in Appendix B to this part of the Report.	Execution of the action plan	RNAV 5 implemented in the SAM Region	SAM/IG/6	PBN focal points of the States.	RO/ATM	Valid

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
3-3	Conclusion SAM/IG/2-4 PBN Implementation Model for TMA and Approach That States/Territories and International Organizations use the PBN Implementation Model for TMA and Approach in the preparation of their PBN implementation programmes for TMA and Approach, shown in Appendix E to this part of the Report.	Prepare action plans for PBN implementation in TMA and approach	Action plans accompanying regional implementation	SAM/IG/6	PBN focal points of the States	RO/ATM	Completed States have received the action plan models for TMA and approach, except for 4 States of the Region have prepared their national implementation plans
3-4	Evaluate regulations for the use of GNSS, and if such were the case, proceed to its publication	Review information available.	All SAM States with regulations for the use of GNSS available	SAM/IG/3	Secretariat	RO/CNS	Completed

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
3-5	<p>Conclusion SAM/IG/3-3 PBN Implementation National Plans</p> <p>That States of ICAO South American Region, present their PBN Implementation National Plans to SAM/IG/4 Meeting, using PBN Implementation Plan Model, shown in Appendix B of this part of the Report, as well as using the action plan models and information contained PBN Implementation Project TMA Operations and Short Term Approximations of SAM Region, approved by SAM/IG/2 Meeting.</p>	Prepare national PBN plans	All SAM States will have a PBN implementation plan aligned with the regional PBN plan	SAM/IG/6	States	RO/ATM	<p>Valid</p> <p>10 States in the SAM Region presented their national PBN plan for its harmonization. States that have updated their plans will send them to the Regional Office. It is expected that the 4 remaining States (Ecuador, French Guiana, Panama and Suriname) send their national plans as soon as possible. The Secretariat must encourage their submission</p>

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
3-6	<p>Conclusion SAM/IG/2-3 Survey on the Fleet Navigation Capacity</p> <p>That States conduct a survey on the fleet navigation capacity, using, to that end, the form contained in Appendix D to this part of the Report, and send the information collected to the ICAO South American Regional Office, on the following dates:</p> <p>a) Aircraft operating commercial flights, which have more than 5 700 kg. of MTOW – 15 February 2009</p> <p>b) Aircraft operating commercial flights, which have less than 5 700 kg. of MTOW – 15 May 2009;</p> <p>c) Other aircraft registered in the Region – 15 August 2009.</p>	<p>States must carry out this survey.</p> <p>Secretariat should upload Form of SAM/IG/2 Appendix 2 on Agenda item 2.</p>	Fleet navigation capacity flying in the SAM Region	It was re-programmed and unified the date for delivery of literals a), b) and c) until 31 July 2009	<p>Focal points designated by States</p> <p>RO</p>	<p>RO/ATM RLA/99/901 RO/FLS</p> <p>RO/ATM RLA/99/901 RO/FLS</p>	Superseded by Conclusion SAM/IG/4-3).
3-7	Analyse aircraft fleet navigation capacity	Prepare data base	Aircraft fleet capacity analysed	SAM/IG/4	RLA/99/901	RO/ATM RLA/99/901 RO/FLS	Completed Regarding a) Pending b) and c).
3-8	Collect air traffic data to understand air traffic flows in a specific airspace.	States shall collect air traffic flow data	States will have a clear view of the type of traffic operating in a specific airspace	SAM/IG/4	States PBN focal points	RO/ATM RO/AIM	Completed

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
3-9	Analyse communications, navigation means and surveillance (VOR, DME) ground to attend navigation specifications and reverse navigation	Prepare a CNS data base (geographical DME DME coverage to support RNAV5)	Navigation specification and reverse navigation mode	SAM/IG/6	RLA/06/901	RO/CNS and SAM States (Brazil, Peru)	Completed CNS task. Geographical DME DME coverage to support RNAV5 was completed. Information is presented in WP/16. In addition, a VOR/DME data base was created, which was presented at SAM/IG/5 meeting

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
3-10	Design procedures training - RNP Approach with required authorization (AR)	Prepare SIP to have FAA instructors	Experts from States duly qualified in RNP, APCH AR matters	SAM/IG/4	Regional Office SIP RLA/06/901	Brazil/Chile RO/ATM	Completed. RNAV/RNP courses were dictated: RNAV/RNP and ARNP AR APCH. Brazil and Chile provided the instructors. Support was obtained from a SIP and from Regional Project RLA/06/901 for the participation of the students. Also, the APV Baro VNAV was provided.

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
3-11	Conclusion SAM/IG/2-2 Initial AIC That States of ICAO SAM Region using as model the AIC presented in Appendix C to this part of the Report: a) publish in the AIRAC date of 9 April 2009 an Aeronautical Information Circular (AIC) informing the aeronautical community on their intention to implement RNAV 5 on 18 November 2010; b) reflect in this AIC the specific situations within the airspace under their jurisdiction.	Prepare AIC Publish AIC	Aeronautical community duly informed on States plans for RNAV 5 implementation.	SAM/IG/6	States	RO/ATM RO/AIM	Completed at 23 October 2009. French Guyana, Guyana, Panama, Suriname had not implemented yet.
3-12	Ref. para. 3.9 of SAM/IG/5 Report Develop an AIP Supplement model containing applicable standards and procedures, including the corresponding flight contingencies	Request RLA/06/901 to estimate hiring of an expert for the preparation of the SUPP AIP Model	SUPP AIP Model available to be used as reference by SAM States	SAM/IG/6	RLA/06/901	RO/ATM RO/AIM	Completed SUPP AIP Model was prepared and submitted for consideration of the meeting through WP/08.

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
3-14	Ref. 3.11 of SAM/IG/5 Report. Develop a training and documentation programme for air traffic controllers and AIS operators	Request RLA/06/901 to estimate hiring of an expert for the preparation of the Amendment to Doc 7030.	Regional documentation duly approved	SAM/IG/6	RLA/06/901	RO/ATM	Completed Amendment to Doc 7030, Regional Supplementary Procedures was prepared and has been circulated among States and submitted to the consideration of the meeting through WP/08.
3-15	Conclusion SAM/IG/5 - Training programme and documentation for air traffic controllers and AIS operators That SAM States use the material shown in Appendix A to this part of the report as guidance material for air traffic controllers and AIS operators.	States should provide training required to staff in order to prepare them for implementation.	States and personnel trained for RNAV5 implementation in the dates agreed	18 November 2010	States	Focal points	Completed
3-16	Ref. 3.15 of SAM/IG/5 Report. That the RLA/06/901 develops a post-implementation monitoring programme for en-route operations.	Develop a monitoring programme and pertinent forms to collect lateral deviation information.	Monitoring programme and corresponding forms available to be used by States.	SAM/IG/6	CARSAMM A	RO/ATM	Completed See WP/04.

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
3-17	Conclusion SAM/IG/5-4 Implementation of Continuous Descent Operations That, recognizing the efficiency and environmental benefits of Continuous Descent operations, and the need to harmonize these operations in the interest of safety, States are encouraged to include the implementation of Continuous Descent operations (CDO) as part of their PBN implementation plans and to implement CDO in accordance with the ICAO CDO Manual.	States should include in their PBN programmes the CDO concept.	CDO implemented as per national requirements.	SAM/IG/8	States	RO/ATM	Valid Some States introduced CDO in their national plans.
3-18	Conclusion SAM/IG/6-2 Application of subsequent actions to reduce the RNAV5 safety plan risk and the resulting risk rate That States, ATS providers and aircraft users take the necessary measures to apply further action to reduce the RNAV5 safety plan risk and the resulting risk rate, as shown in Appendix 1 to Chapter 4 of the safety plan for RNAV5 implementation in the SAM Region, shown in Appendix I to this part of the report.	Assess and apply ulterior measures	Safe implementation of RNAV5	September 2011	States	RO/ATM	Valid States assessed ulterior actions and an analysis was made and is shown in Appendix B of Agenda Item 3.

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
3-19	Para3.9 SAM/IG/6 To coordinate planning and implementation needs with air navigation service providers, users, aircraft operators and military authorities.	Coordinate with air navigation service providers, regulatory bodies, users, aircraft operators and military authorities.	Safe RNAV5 implementation	September 2011	States	RO/ATM	Valid
3-20	Para 3.10 SAM/IG/6 To published national regulations to implement RNAV5 navigation specification.	Carry out publications	Safe RNAV5 implementation	September 2011	States	RO/ATM	Completed
3-21	Para 3.11 SAM/IG/6 Establish and maintain updated an approved an aircraft operators registry	Submit the information to CARSAMMA as aircraft and operators are approved	Safe RNAV5 implementation	First Phase September 2011	States	RO/ATM	Valid It is considered a permanent task.
3-22	Para 3.11 SAM/IG/6 Establish and maintain updated an approved an aircraft operators registry	Carry out approvals	Safe RNAV5 implementation	First Phase September 2011	States	RO/ATM	Superseded (see Conclusion SAM/IG/6-3) States should implement procedures to keep data base updated.

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
3-23	Conclusion SAM/IG/6-3 That SAM States take pertinent action in order to apply forms CMA F5 and CMA F6, attached as Appendices A and B to this part of the report, and send them to CARSAMMA as soon as the PBN approval of aircraft and operators is established.	Use Forms CMA F5 and CMA F6	Safe RNAV5 implementation	First Phase September 2011	States	RO/ATM	Valid States should implement procedures to keep data base updated.
3-24	Conclusion SAM/IG/6-4 ENR 3.3 – Table model of the AIPs That SAM States, in publishing in their AIPs RNAV routes, use the ENR table model shown in Appendix D to this part of the report.	Publish amendment in AIP	Safe RNAV5 implementation	First Phase September 2011	States	RO/ATM	Superseded by Conclusion SAMIG/7-3 ENR 3.3 Table was modified and the new version was submitted for the consideration of States for its application.
3-25	Conclusion SAM/IG/6-5 Lateral navigation deviation reporting form That SAM States take the corresponding action in order to use the monitoring programme and particularly lateral navigation deviation reporting form attached as Appendix F to this part of the report, and send it to CARSAMMA on the tenth day of each month.	Collect information of lateral deviations and send it to CARSAMMA	Safe RNAV5 implementation	SAMIG/10	States	RO/ATM/	Valid

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
3-26	Conclusion SAM/IG/6-6 Publication of an AIC/NOTAM announcing the postponement of the RNAV5 implementation date in the SAM Region That SAM States take the corresponding action in order to publish an AIC/NOTAM announcing the postponement of the RNAV5 implementation date in the SAM Region for 22 September 2011.	Publish AIC/NOTAM	ATM Community, duly informed	December 2010	States	RO/ATM	Completed States published the postponement
3-27	Para. 3.41 SAM/IG/6 Carry out at least once a month a TELCON through the use of the SAM Office's GO TO MEETING tool	Carry out virtual meetings	Appropriate follow-up for RNAV5 implementation	September 2010	States Task Rapporteur PBN Implementation	RO/ATM	Valid So far, 4 TELCONs have been carried out. Information on the result is presented at the SAM/IG/7. Information on the result was presented at the SAM/IG/7 meeting. This task is included in the RNAV5 action plan.

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
3-28	Conclusion SAM/IG/7-2 Implementation of RNAV-5 That SAM States implement RNAV-5 in continental airspace routes, on 20 October 2011, at 09:01 UTC.	Adequate compliance of the action plan for RNAV5 implementation.	RNAV5 implementation.	20 October 2011	States	RO/ATM	Valid
3-29	Conclusion SAM/IG/7-3 Documentation to be published for the implementation of RNAV-5 That SAM States publish the following documentation no later than 22 September 2011, effective on 20 October 2011: a) Amendment to the AIP or AIP Supplement containing the applicable standards and procedures, including the corresponding in-flight contingencies, the model of which appears in Appendix C to this part of the report; and b) The ENR 3.3 Tables that correspond to RNAV routes, using the model shown in Appendix D to this part of the report. Note: Appendix E contains 4 examples that may be used as a reference by the States.	<ul style="list-style-type: none"> - prepare and control publication of AIP supplement - prepare tables ENR 3.3, as per approved model, and publish them. 	Supplement AIP and tables ENR 3.3 published	22 September 2011	States	RO/ATM RO/AIM	Valid

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
3-30	<p>Conclusion SAM/IG/7-4 Publication of the trigger NOTAM</p> <p>That SAM States publish the trigger NOTAM no later than 13 October 2011, using the following model: In keeping with AIC xx and AIP Supplement xx, RNAV-5 will start to be applied on RNAV routes of the continental airspace in the xx FIR at 09:01 UTC of 20 October 2011.</p>	Prepare and publish Trigger NOTAM, as per approved model	Trigger NOTAM published	13 October 2011	States	RO/ATM RO/AIM	Valid

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
4. Standards and procedures for performance based navigation operations approval							
4-1	Analyse aircraft approval requirements and operators (pilots, dispatchers, and maintenance personnel) as established in PBN manual, and develop necessary documentation. Note: See Agenda Item 3, SAM/IG/2 and SAM/IG/3 Agenda Item 4.	Develop LAR with regard to PBN approvals	Guidelines at States disposal	SAM/IG/3 SAM/IG/4	Regional Project RLA/06/901	RO/ATM RLA/99/901 RO/FLS	Completed In charge of RLA/99/901. CAs were completed on RNAV 10, RNAV 5, RNAV 1 and 2, Basic RNP 1, RNP APCH, RNP AR APCH and APV Baro VNAV. A new working plan has been established for the development of the CA on RNP4, RNP2 and RNP1, in progress.

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
4-2	<p>Conclusion SAM/IG/3-4 Advisory Circulars CA 91-008, CA 91-009 and CA 91-010</p> <p>That States of the SAM Region:</p> <p>a) use as acceptable means of compliance in aircraft approval and exploiters for RNP APCH, RNP AR APCH and APV/baro-VNAV operations, Advisory Circulars CA 91-008, CA 91-009 and CA 91-010, shown in Appendices B, C and D, respectively to this part of the report; and</p> <p>b) publish the corresponding national regulations until 5 October 2009.</p>	Develop the procedures related to aircraft and users approval regarding RNP, APCH, RNP AR APCH and APV/Baro-VNAV operations	National regulation ready for approval of aircraft and users	SAM/IG/4	States Regional Project RLA/06/901	RO/ATM RLA/99/901 RO/FLS	Replaced by Conclusion SAM/IG/4-2

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
4-3	<p>Conclusion SAM/IG/4-2 Advisory Circulars for Aircraft approval and operators for RNP 10 operations, RNAV 5, RNAV 1 and 2, Basic RNP 1, RNP APCH, RNP AR APCH and APV/baro-VNAV That States of ICAO South American Region, according to the PBN implementation plans:</p> <p>a) use the Advisory Circulars (AC), in developing their acceptable means of compliance of approval of aircraft and operators for RNP 10 operations, RNAV 5, RNAV 1 and 2, Basic RNP 1, RNP APCH, RNP AR APCH and APV/baro-VNAV, that are shown in Appendices A1, A2, B1, B2, C1, C2, D1, D2, E1, E2, F1, F2, G1 and G2 of this part of the report; and</p> <p>b) that job aids of aforesaid circulars be incorporated into Inspector's manuals of Operations and airworthiness.</p>	Publish Advisory circulars for aircraft and operators approval	Advisory circulars and Work Aids used for aircraft approval	SAM/IG/5	State	N/A	Completed
4-4	<p>Conclusion SAM/IG/4-3 Continued data collection about PBN Fleet Capacity in the South American Region The Meeting considered that:</p> <p>a) efforts should be continued in order that each State, through its PBN Focal</p>	Complete data collection on PBN fleet capacity in SAM	Data base available	SAM/IG/6	States	N/A	<p>Valid See Conclusion SAM/IG/2-3. Data base has been modified since beginning. No additional</p>

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
	<p>Points, conduct such actions to send, as soon as possible, information, about its PBN fleet capacity to ICAO Regional Office. The information collected by States should, as far as possible, be sent to the Regional Office in a file with Excel format.</p> <p>b) that each State is responsible for providing data and, as time passes, updates or further details on the submitted data should be made;</p> <p>c) to facilitate the updating of data, the file of the survey of each state be posted on the website of the SAM Office, in order that each State, through a code, can have access to information on its fleet , and thus can perform the update of the data entered, and send it, via e-mail, to the Regional Office.</p>						information has been received by States.
4-5	<p>Ref Para. 3.8 of SAM/IG/5 Report.</p> <p>Establish and keep up to date a record of approved aircraft and operators</p>	<p>Contact CARSAMMA to verify if it is possible to have available a PBN data base.</p> <p>Review and present form for PBN approval and cancellation of approval</p>	<p>Data base coordinated with CARSAMMA</p> <p>Form for PBN approval and cancellation of approval implemented</p>	SAM/IG/6	CARSAMMA Secretariat	RO/ATM Expert RLA/99/901	<p>Completed</p> <p>The form was evaluated and sent to States for its use through LT 11/30.2-SA455 dated 8 July 2010 (See WP/18).</p>

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
4-6	Conclusion SAM/IG/5-2 PBN/RNAV5 seminars for operators That SAM States, in view of the few operators that have requested the approval, and the need to encourage them to start this process, conduct PBN seminars in which operators are informed about the corresponding approval procedures.	States must provide seminars to operators	Operators trained to comply with necessary tasks for RNAV5 implementation	SAM/IG/6	States	Focal points	Valid States initiated their guidance programme to operators, task to be maintained active. Note: general aviation does not participate in these events.
4-7	Conclusion SAMIG/5-3 Data Collection That: a) SAM States collect data on flights conducted on domestic and international routes in the upper airspace (FL 245 or above) of the SAM Region during the period 1 to 15 July 2010, and send them to the SAM Regional Office before 13 August 2010; and b) That the sample be consistent with the form and the guidelines for completing the form described in Appendix B to this part of the Report, using the Excel format.	States collect data in the indicated date	Data collected and analysed	SAM/IG/6	States	RO/ATM	Completed

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
4-8	<p>Conclusion SAM/IG/4-5 Prediction Program for the FDE Availability</p> <p>That:</p> <p>a) Progress be made in the study and application of the tool AUGUR (EUROCONTROL) by the States of the region.</p> <p>b) Considering that AUGUR tool (EUROCONTROL), incorporates the Airports and Nav aids in the SAM, it is suggested that through the Regional Office of ICAO, make contact with EUROCONTROL in order to establish the feasibility of extending the validity of calculating prediction made with the AUGUR tool for the different stages of flights, in the SAM Region.</p> <p>c) to establish the feasibility of extending the validity of calculating prediction made with the AUGUR tool for the different stages of flights, in the SAM Region.</p> <p>d) Through the ICAO Regional Office, establish contact with the FAA, in order to receive guidance on the procedures for approval of a prediction program for the FDE availability and the procedures used by their operators when performing operations such as RNAV based in GNSS out of</p>	<p>That ICAO contact Eurocontrol, FAA and other organizations in order to evaluate application of forecast FDE tools and related procedures</p> <p>Evaluate the possibility to lead a forecast development programme for FDE availability</p>	<p>Information related with FDE availability available</p> <p>Regional forecasting FDE availability programme</p>	SAM/IG/7	Regional Office	RO/CNS	<p>Valid</p> <p>The Meeting took note of three implementation options for RAIM prediction availability, and their respective costs (provided by Volpe). With the aim of completing the task, the Meeting deemed it convenient to request for another quotation from another company providing RAIM prediction availability. (See Agenda Item 4, para. 4.3, 4.11 to 4.13, SAM/IG/7.</p>

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
	United States; and e) ICAO Regional Office evaluate the possibility to lead a development process for development of an availability forecasting FDE programme for the SAM Region for its use in all flight phases.						
4-9	Conclusion SAM/IG/5-6 Application of national standards for approval of operators and aircraft for PBN operations That the Secretariat, through their official channels, encourage those States to publish national standards for approval of operators and aircrafts for PBN operations and, in particular, for RNAV 5 navigation specification, as well as to send to the ICAO Regional Office, details on the potential capacity of their fleets, if still not done.	States must publish national standards for approval of operators and aircraft for PBN operations and send this information to the Regional Office	National standards published for its application	SAM/IG/6	States	RO/ATM	Completed States are completing the publication process of the corresponding national regulations
4-10	Para 4.20 SAM/IG/5 Report Course for aircraft and operators approval during 2010.	Airspace users prepared for aircraft and operators approval in PBN issues	Airspace users duly prepared for PBN approval and operators and aircraft	SAM/IG/6	RLA/99/901	RO/ATM	Completed Courses were provided at a regional and national level in PBN approval.

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
4-11	Para 4.9 SAM/IG/6 Establish standard criteria for the Regional System on ground and flight validation of flight procedures through satellite-based PBN instruments	Prepare standardised criteria	Uniform application of validation criteria on ground and flight procedures with	SAM/IG/9	RLA/99/901	RO/FS	Valid The draft CA 91-012 – Flight Validation (FV) of satellite-supported instrument flight procedures (IFP) of performance based navigation (PBN) was presented during the SAM/IG/6. To this respect, the Meeting requested the Secretariat to send a survey of flight inspection experts for comments and further approval.

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
5-1	Conclusion SAM/IG/2-6 ATFM Roadmap That, a) the ATFM Roadmap in Appendix B to this part of the Report be adopted, with the aim of providing orientation to the ATFM community with regard to ATFM applications to be implemented in the short and medium term in the SAM Region; and b) the ICAO Secretariat send the ATFM Roadmap to the GREPECAS ATFM Task Force for the analysis and actions deemed pertinent.	States must adopt ATFM Roadmap sheet and inform on the intentions to national aeronautical community	Aeronautical Community in knowledge of regional and national activities related to ATFM ATFM roadmap shall be presented to the ATFM/5 Meeting	SAM/IG/3	States ATFM Focal points ATFM Rapporteur	ATFM Rapporteur/ RO/ATM RO/AIM	Completed
5-2	Carry out the tasks to be developed by Regional Project RLA/06/901. See SAM/IG/3 Report	Hire experts through Regional Project RLA/06/901	Tasks identified by the meeting to be executed by Regional Project RLA/06/901 carried out.	SAM/IG/4	RLA/06/901 Experts	RO/ATM RO/FLS	Completed
5-3	Publish initial AIC ATFM using the model prepared by SAMIG	States publish AIC	Community informed on States plans regarding ATFM		States	RO/ATM	Completed Except for Suriname.
5-4	ATFM Manual – First Part	Continue developing ATFM manual	States will have a manual for its harmonized application in the SAM Region	SAM/IG/8	RLA/06/901 Expert	RO/ATM RO/AIM	Completed (SAM/IG/4-WP/10)

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
5-5	<p>Conclusion SAM/IG/3-5 Runway capacity of an international airport and ATC associated sector</p> <p>SAM States are encouraged to carry out at least an exercise to determine the runway capacity of an international airport and ATC sector, associated or another one selected for each State, to present the results to the SAM/IG/4 Meeting, providing the following information:</p> <ul style="list-style-type: none"> a) Amount of personnel trained for the exercise b) Methodology applied c) Result of the exercise, providing the declared capacity for each runway and ATC selected sector. d) Identification of problems found in the methodology applied. 	Carry out estimate capacity in an airport and its associated ATC sector	States shall put into practice the course dictated on this matter and shall obtain the necessary experience to evaluate capacity at a national level.	SAM/IG/4	States	RO/ATM	<p>Valid</p> <p>Bolivia, Brazil, Colombia, Paraguay, Peru and Venezuela presented its preliminary exercise. A second course on airport capacity and ATC sectors was dictated in Brazil from 21 to 25 March 2011.</p>
5-6	Guidance document for the application of a common methodology for the estimation of airport capacity and ATC sectors for the SAM Region	Prepare a guidance document for the application of a common methodology for the estimation of airport capacity and ATC sectors for the SAM Region	States will have a guide for the application of a common methodology for the estimation of airport capacity and ATC sectors for the SAM Region	SAM/IG/4	RLA/06/901 Expert	JF/AO	Completed (SAM/IG/4-WP/05)

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
5-7	Conclusion SAM/IG/4-5 Guidance for the application of a common methodology for calculating airport and ATC sector capacity The Guidance for the application of a common methodology for calculating airport and ATC sector capacity, shown in Appendix C to this part of the report, which recommends that SAM States apply the Brazilian methodology for calculating airport and ATC sector capacity, is approved.	Use of guidelines for application of a common methodology for calculating airport and ATC sector capacity.	Calculating airport and ATC sectors capacity carried out	SAM/IG/6	States	ATFM/WG	Completed Guidelines were approved. SAM States have guidelines to carry out the corresponding calculation.
5-8	Para 5.4 SAM/IG/5 Report Development of the second part of ATFM Manual for the SAM Region	Prepare second part of ATFM Manual	ATFM Manual improved	SAM/IG/6	RLA/06/901	RO/ATM	Completed With the assistance of Colombia and RLA/06/901 the ATFM manual was revised.
5-9	Para 5.4 SAM/IG/5 Report ATFM course	Carry out second ATFM course	Personnel from AAC trained in ATFM	SAM/IG/6	RLA/06/901	RO/ATM	Completed Course was dictated in November 2010.
5-10	Para 5.4 SAM/IG/5 Report Workshop related with Collaboration in decision making oriented towards ATFM	Carry out CDM workshop	Personnel from AAC trained in CDM concept	SAM/IG/6	RLA/06/901	RO/ATM	Completed The course was dictated in November 2010.

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
5-11	Conclusion SAMIG/5-7 ATFM Teleconferences in the SAM Region That SAM States continue to hold weekly ATFM teleconferences between flow management units or flow management positions (FMU / FMP) to improve the exchange of information among participating States.	Implement ATFM teleconferences	Coordination between FMU/FMP carried out	SAM/IG/6	States	RO/ATM	Valid States maintain web conferences due to communication problems in TELCONs held. The use of SKYPE is planned.
5-12	Para. 5.28 of SAM/IG/5 Report The Secretariat is requested to consider in year 2011, under Project RLA/06/901, the inclusion of the Course Runway Capacity Calculation and ATC Sector, to be held in the first semester.	Request RLA/06/901 to carry out a new course on runway capacity and ATC sectors for the first semester of 2011	AAC personnel trained to carry out a runway capacity and ATC sectors	SAM/IG/8	Secretariat RLA/06/901	RO/ATM	Completed The course was dictated in March 2011.
5.13	Para. 5.4 SAM/IG/6 Present an ATFM Manual during the CNS/ATM/SG/2 Meeting for analysis and approval	Present ATFM Manual to the CNS/ATM/SG/2	Manual approved for its application in the CAR and SAM Regions	June 2011	RO/ATM	RO/CNS	Completed The manual was presented to the CNS/ATM/SG/2 and its application in the CAR and SAM Regions was approved.

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
5-14	Para. 5.5 SAM/IG/6 Inclusion of ATFM messages exchange in the ATFM Manual	Once the analysis is concluded, include procedures for its revision to the SAM/IG/7 Meeting	Procedures for ATFM Messages exchange included in the Manual	SAM/IG/7	ATM Implementation Group	RO/ATM	Completed It was agreed at SAM/IG/7 to establish a MOU between States for ATFM messages exchange and the MOU should be handled as attachments to the ATFM Manual
5-15	Conclusion SAM/IG/6-7 Manual on Collaborative Decision-Making (CDM) for ATFM That SAM States adopt the Manual on Collaborative Decision-Making (CDM) for ATFM shown in Appendix B to this part of the report.	Adopt CDM Manual	States will apply CDM in the Region in a harmonised manner	September	States	RO/ATM	Completed CDM Manual was presented in the CNS/ATM/SG/2 Meeting and its use was also approved for CAR States.
5-16	Conclusion SAM/IG/6-8 ATFM AIP SUPP/AIC MODEL That the States of the ICAO South American Region, when preparing their national AIC, use as a reference the ATFM AIP SUPP/AIC model shown in Appendix E to this part of the report.	Prepare AIC	Harmonised publications in the SAM Region	December 2012	States	RO/ATM	Valid

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
5-17	That Secretariat consider the inclusion in Regional Project RLA/06/901 for the last week of October 2011, a runway capacity and ATC sectors course in Lima.	Plan the runway capacity and ATC sectors course in Lima.	Course carried out in Lima, from 24 to 28 October 2011	28 October 2011	Regional Project RLA/06/901	RO/ATM RO/AGA	Valid
5-18	Message exchange in the ATFM manual be prepared as a MOU among States to be included in the ATFM Manual	Preparation of MOU for ATFM messages exchange among States	MOU prepared and approved.	SAM/IG/9	States Regional Project RLA/06/901	RO/ATM RO/CNS	Valid
5-19	Preliminary exercise on runway capacity and ATC sectors. The remaining States are encouraged to present their studies for SAM/IG/8	Carry out a preliminary study on runway capacity and ATC sectors	Present studies on exercises carried out	SAM/IG/8	States	RO/ATM	Valid

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
6. Assessment of operational requirements in order to determine the implementation of communications and surveillance (CNS) capabilities improvement for en-route and terminal area operations							
6-1	SAM/IG/1-5 - Adoption of Action Plan Models for the improvement of communications and surveillance systems for en-route and terminal area operations When carrying out activities for the improvement of communications and surveillance systems for en-route and terminal area operations, the action plan models are to be taken into account for the improvement of ground-air, ground-ground communications and surveillance systems being presented as Appendices D, F and I to the report of this agenda item.	Action plans for the improvement of CNS systems	Improvement of the communications, navigation and surveillance systems	Jun 2010	SAM States/ Territories and ICAO SAM Regional Office	RO/CNS	Completed States, upon elaborating their national action plans, took under consideration the action plans for the improvement of communications, navigation and surveillance systems.

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
6-2	<p>SAM/IG/4-7 - Drafting of pending Action Plans for the Improvement of CNS Systems to meet Short- and Medium-Term Operational Requirements for En Route and Terminal Area Operations</p> <p>That the aeronautical administrations of Colombia, French Guiana and Panama draft their respective action plans for the improvement of CNS systems, following the model action plan presented at the SAM/IG/3 meeting (Appendix A to agenda item 6) and send them to the ICAO SAM Regional Office no later than 30 November 2009.</p>	National action plan for the improvement of CNS systems	National action plan for CNS improvements	30 Nov 2009	SAM States/ Territory	RO/CNS RLA/06/901 project CNS experts	<p>Completed</p> <p>All SAM States, with the exception of French Guiana (France) and Panama, have elaborated their action plans for the improvement of CNS systems.</p> <p>The action plans have been published in this Regional Office's website.</p>

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
6-3	<p>SAM/IG/4-8 - Updating of the Action Plans for the improvement of CNS Systems to meet Short- and Medium-Term Operational Requirements for En Route and Terminal Area Operations</p> <p>That SAM States, with the aim of keeping updated the Action Plans for the improvement of CNS Systems to meet Short- and Medium-Term Operational Requirements for En Route and Terminal Area Operations, present their updated versions twice a year, if any, in the dates corresponding to the holding of SAM/IG meetings.</p>	Updating of the national plans for the improvement of CNS systems	Updating of the action plans for SAM CNS national improvements updated	Continuous	SAM States/ Territory ICAO SAM Regional Office	RO/CNS	Valid

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
6-4	<p>SAM/IG/4-10 - AMHS interconnection between Argentina-Chile, Argentina-Peru, Brazil-Colombia, Brazil-Peru, Chile-Peru and Colombia-Peru</p> <p>The respective administrations are urged to operationally interconnect AMHS between Argentina-Chile, Argentina-Peru, Brazil-Colombia, Brazil-Peru, Chile-Peru and Colombia-Peru, and that, to that end, they:</p> <ul style="list-style-type: none"> a) Use the model Memorandum of Understanding (MoU) shown in Appendix B to this part of the report; b) Complete the information in the MoU, taking into account the action plan for AMHS interconnection in Appendix C to this part of the Report; c) Present the MoU to the ICAO SAM Regional Office by 15 December 2009; and d) Sign the model MoU at the SAM/IG/5 meeting. 	Interconnection of AMHS	MoU for the implementation of AMHS systems between Argentina-Chile, Argentina-Peru, Brazil-Colombia, Brazil-Peru, and Colombia-Peru	15 Dec 2010	SAM States/Territory ICAO SAM Regional Office	RO/CNS RLA/06/901 project CNS experts	<p>Valid</p> <p>To date, AMHS has been interconnected between Colombia and Peru through REDDIG. It is expected that remaining AMHS will be interconnected by the end of 2011. Following MoUs have been drafted and signed: Argentina-Brazil; Argentina-Chile; Argentina-Paraguay; Argentina-Peru; Brazil-Paraguay; Brazil-Peru; and Colombia-Peru.</p>

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
6-5	Study for the regional implementation of a new communications network	Improvement in the communications systems	a) Study for a SAM ATN network b) Technical specifications for an IP ATN network	a) Jun 2011 b) Dec 2011	SAM/IG Group	RO/CNS RLA/06/901 project CNS experts	a) Completed b) Valid
6-6	Conclusion SAMIG/5-8 - Review of the SAM VOR/DME stations line-of-sight coverage database That the SAM States/Territory: a) Review the information in the database delivered during the Meeting containing line-of-sight diagrams of the VOR/DME stations corresponding to their State; b) Send the comments corresponding to the database to the ICAO South American Regional Office no later than 30 June 2010; c) Use the calculated line-of-sight coverage data as an element for the PBN operations feasibility study (RNAV 5, RNAV 1 and RNAV 2).	CNS infrastructure available with corresponding coverage	Line of site coverage at VOR/DME stations	30 Jun 2012	SAM States/ Territory ICAO SAM Regional Office	RO/CNS RLA/06/901 project CNS experts	Completed VOR/DME coverage study was presented during SAM/IG/5 meeting

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
6-7	<p>Conclusion SAM/IG/6-9 - Actions required for AMHS interconnection</p> <p>That SAM States, in view of the delays in the interconnection of the AMHS, proceed with the following actions:</p> <ul style="list-style-type: none"> a) Require from their AMHS providers the necessary support to successfully end the necessary interconnections; b) Make necessary arrangements to train personnel in the interconnection tasks, with the aim of minimizing the dependency with their providers; c) Maximize pertinent coordination; and d) States that have not yet done so, complete the drafting and signature of the MoU. 	Interconnection of CNS systems	Interconnection of AMHS	End of 2011	SAM States	SAM States AMHS providers RO/CNS	<p>Valid</p> <p>Coordination has been carried out with providers to complete the interconnection AMHS MoU have been drafted and signed – see WP/12</p>

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
6-8	Conclusion SAM/IG/6-10 - Review to the study for a new SAM digital network That SAM States analyze the study for the implementation of a new digital network for the SAM Region shown in Appendix B to this part of the Report, and send their comments to the ICAO SAM Regional Office by 31 January 2011.	Review of the study for the implementation of a new digital network for the SAM Region	Study examined	31 Jan 2011	SAM States	CNS experts and SAM RO/CNS	Completed Many SAM States have examined the study and sent comments of the ICAO SAM Office. In addition, the study was reviewed during REDDIG RCC/14 meeting
6-9	Conclusion SAM/IG/7-5 Review of the DME DME coverage in support of RNAV5 in the SAM Region That the SAM States examine the DME DME coverage study in support of RNAV5 presented as an KMZ file during SAM/IG/7 meeting, as well as the DME DME coverage analysis for each RNAV route segment shown in Appendix F to this part of the report, and send their comments to the ICAO SAM Regional Office no later than 30 June 2011.	Review the DME/DME coverage study	Send comments to the SAM Regional Office	30 June 2011	States	RO/CNS	Valid

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
6-10	Conclusion SAM/IG/7-6 Updating of the DME DME study That SAM States, when making any changes to DME systems, inform the ICAO SAM Regional Office so that it may update and distribute the DME DME coverage study to support RNAV5.	Inform of any change in the current geometry change of DME systems.	Inform the Regional Office with sufficient time in advance	Permanent	States	RO/CNS	Valid

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
7. Operational implementation of new ATM automated systems and integration of the existing systems							
7-1	SAM/IG/3-8 - Preparation of specific implementation plans for the interconnection of automated systems That States of the SAM Region start the development of specific plans for the implementation of automated systems interconnection, considering the implementation dates indicated in Regional Interconnection Plan for Automated Systems in adjacent ACCs, specified in Appendix B of this part of the Report, and information contained in the following documentation: a) Memorandum of Understanding for the implementation of automated systems interconnection between two States having adjacent ACCs, Interface Control Document (ICD) for data communication between ATS dependencies in Caribbean and South	Operational implementation of ATM automated systems and interconnection of automated systems installed between adjacent ACCs	Memorandum of Understanding (MoU) between SAM pairs of States for the interconnection of automated systems	2012	SAM States	RO/CNS RLA/06/901 project CNS experts	Valid To date, the following MoUs for the interconnection of automated systems have been drafted and signed: Argentina-Brazil, Argentina-Chile; Argentina-Uruguay; Brazil-Uruguay; and Brazil-Venezuela

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
	<p>American Regions (CAR/SAM ICD);</p> <p>b) Interface control document (ICD) for data communications between ATS units in the Caribbean and South American Regions (CAR/SAM ICD);</p> <p>c) System Interface Control Document (SICD); and</p> <p>d) Regional interconnection initial plan for ACC automated systems.</p> <p>e) Preliminary reference system/ subsystem specification for the air traffic control automation system (SSS).</p>						

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
7-2	<p>SAM/IG/4-11 - Action plan for the implementation of Amendment 1 to Doc. 4444</p> <p>That SAM States, taking into account the actions indicated in the strategy document for the implementation of Amendment 1 to ICAO PANS ATM, 15th Edition (Doc. 4444), contained in Appendix D to this part of the Report, draft their respective action plans for the implementation of the amendment, and send them to the ICAO SAM Regional Office by 30 March 2010, for their presentation at SAM/IG/5 Meeting.</p>	Implementation of the new flight plan format	National Action plans for implementation of Amendment 1 to the 15th Edition of the PANS ATM (Doc 4444).	30 Nov 2012	SAM States	RO/CNS RLA/06/901 project CNS experts	Superseded Superseded by Conclusion SAM/IG/6-12

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
7-3	<p>Conclusion SAM/IG/5-9 - Analysis on the impact of Amendment 1 to the PANS/ATM on the automated systems</p> <p>That the SAM States, through their national committees, take into account the contents of Appendix B, with views that it serve as reference for an initial analysis on the impact it will have on the automated systems involved in the flight plans process, in view of the implementation of the new flight plan format in accordance with Amendment 1 to the PANS/ATM, and that they send the results to the ICAO SAM Regional Office by 30 August 2010, for their presentation at the Seminar/Workshop for the Implementation of Amendment 1 to the 15th Edition of the a PANS/ATM, to be held in Lima from 13 to 15 September 2010.</p>	Implementation of the new flight plan format	Analysis to the impact of the implementation of the new FPL on automated systems	30 Aug 2010	SAM States/ Territory	RO/CNS RLA/06/901 project CNS experts	<p>Completed</p> <p>Most SAM Sates have analyzed the impact of the new FPL implementation in automated systems</p>

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
7-4	<p>Conclusion SAM/IG/6-12 - Action plan for the implementation of Amendment 1 to Doc. 4444</p> <p>That SAM States, taking into account the actions indicated in the strategy for the implementation of Amendment 1 to the 15th Edition of the ICAO PANS/ATM (Doc 4444), and using as reference the action plan model presented by the Secretariat and the action plan presented by Brazil during the Seminar/Workshop, which appear as Appendices E and F to this part of the report, draft their action plans for the implementation of the Amendment and send it to the ICAO SAM Regional Office no later than 30 November 2010.</p>	States' drafting of action plan for the implementation of Amendment 1 to Doc 4444, 15 th Edition	Action plan for the implementation of Amendment 1 to Doc 4444, 15 th Edition	30 Nov 2011	SAM States	RO/CNS	<p>Valid</p> <p>Until SAM/IG/6 meeting, the following States have drafted action plans for the implementation of Amendment 1: Argentina, Brazil, Chile, Guyana, Panama, Paraguay, Peru, Uruguay and Venezuela.</p>

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
7-5	<p>Conclusion SAM/IG/6-13 Establishment of the Implementation Group for the New flight Plan Format</p> <p>That SAM/IG establish a new group, to be named Implementation Group for the New Flight Plan Format, which would be in charge of the analysis on the actions to take for the implementation of the new flight plan format in the SAM Region, in order that in each SAM/IG meeting to be held in 2011 and 2012, the Group will have the opportunity of having a specific forum for the follow-up of this activity.</p>	Establishment of Implementation Group for the New Flight Plan Format	Implementation Group for the New Flight Plan Format	SAM/IG/7	Implementation Group Coordinator for amendment 1 to 15 th edition of Doc 4444 in the SAM Region.	RO/CNS RO/ATM	Completed Implementation in SAM/IG/7

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
7-6	<p>Conclusion SAM/IG/7-7 Publication of an AIC for a broad dissemination of Amendment 1 to the 15th Edition of ICAO PANS ATM (Doc 4444)</p> <p>That SAM States, taking into account the regional strategy for the implementation of Amendment 1 to the 15th Edition of ICAO PANS ATM (Doc 4444), take the corresponding measures to publish an AIC announcing the implementation, and disseminating the content, of Amendment 1 to the PANS-ATM, including the main dates agreed upon, no later than 1 August 2011.</p>	Prepare and publish AIC	AIC published	1 August 2011	States	RO/CNS RO/AIM	Valid

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
7-7	<p>Conclusion SAM/IG/7-8 Safety assessment for the implementation of Amendment 1 to the 15th Edition of ICAO PANS ATM (Doc 4444)</p> <p>That SAM States, taking into account the regional strategy for the implementation of Amendment 1 to the 15th Edition of ICAO PANS ATM (Doc 4444), adopt the corresponding measures to conduct a safety assessment for the implementation of Amendment 1 to the PANS-ATM, and send it to the ICAO SAM Regional Office no later than 30 November 2011.</p>	Carry out safety assessment for the implementation of the content of amendment 1 to the PANS-ATM, based on the guidelines prepared during the SAM/RA/02 Meeting.	Report of the safety assessment for the implementation of FPL 2012	30 November 2011	States	RO/ATM RO/AIM RO/CNS	Valid

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
7-8	<p>Conclusion SAM/IG/7-9 Development of the training programme for the implementation of Amendment 1 to the 15th Edition of ICAO PANS ATM (Doc 4444)</p> <p>That SAM States, taking into account the regional strategy for the implementation of Amendment 1 to the 15th Edition of ICAO PANS ATM (Doc 4444), adopt the corresponding measures to draft a training programme for the personnel that needs to be familiar with, and know how to apply, the modified concepts, especially air traffic controllers and ARO/AIS operators, for the implementation of Amendment 1 to the PANS-ATM, and send it to the ICAO SAM Regional Office no later than 31 October 2011.</p>	Prepare a human resources training programme to learn and apply modified concepts for the implementation of FPL 2012, to consider ATCOs, ARO/AIS operators and telecommunication operators.	Training carried out	31 October 2011	States	RO/ATM RO/CNS RO/AIM	Valid

APPENDIX B

FOLLOW-UP OF CONCLUSIONS AND PENDING TASKS OF THE SAM/IG MEETING

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
1-1 SAM/IG/1-1 CAR/SAM PBN Roadmap That ICAO SAM States, in implementing RNAV/RNP, take the pertinent actions to follow guidelines contained in the CAR/SAM PBN Roadmap as shown in Appendix C to this part of the report.	YES	YES	YES	YES	YES	OG	--	YES	OG	YES	OG	YES	YES	YES	PER: Dec 2009
1-1 That States examine: a) Impact of RNAV routes implementation in the airspace Aircraft fleet, Air traffic services, and b) Establish pertinent coordination so as to enable integrated, harmonious and timely implementation of more direct RNAV routes.	OG	OG	OG	YES	YES	OG	--	OG	OG	OG	OG	OG	YES	YES	COL: June ECU: Local coordination with corresponding area. PAR: SAM/IG 5 PER: Dec 2009 VEN: Mar.2010
2-1 Implementation of RNAV routes	YES	YES	YES	YES	YES	YES	--	YES	YES	YES	OG	YES	YES	OG	ECU: Missing pronouncement of Venezuela in regard of the effective date for the

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
															implementation of the route Guayaquil / Madrid. PER: Chile and Peru in agreement with the part corresponding to their FIRs. RNAV5 Nov 2010.
2-3 Conclusion SAM/IG/2-1 PBN implementation Programme for en-route operations That the ICAO SAM States take appropriate actions to follow the guidelines and comply with the targets established in the PBN implementation for en-route operations, which is shown in Appendix B to this part of the Report.	YES	YES	YES	YES	YES		--	YES	YES	YES	OG	YES	YES	YES	PER: Nov 2010
2-10 Conclusion SAM/IG/2-2 Initial AIC That States of ICAO SAM Region using as model the AIC presented in Appendix C to this part of the Report: a) publish in the AIRAC date of 9 April 2009 an Aeronautical Information Circular (AIC)	YES	YES	YES	YES	YES	YES	--	YES	OG	YES	YES	OG	YES	YES	GUY: Nov. 2009 SUR: Will inform Nov.15,2009

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
informing the aeronautical community on their intention to implement RNAV 5 on 18 November 2010; b) reflect in this AIC the specific YESituations within the airspace under their jurisdiction.															
2-12 Conclusion SAM/IG/2-3 Survey on the Fleet Navigation Capacity That States conduct a survey on the fleet navigation capacity, using, to that end, the form contained in Appendix D to this part of the Report, and send the information collected to the ICAO South American Regional Office, on the following dates: a) Aircraft operating commercial flights, which have more than 5 700 kg. of MTOW – 15 February 2009; b) Aircraft operating commercial flights, which	YES	YES	YES	YES	YES	YES	--	YES	OG	YES	YES	OG	YES	YES	COL: Initially had same problem as Venezuela but after holding PBN seminars we have started the approval process. PAR: completed a) pending b) and c). VEN: fruitless surveys have been carried out in view of the few knowledge that operators and aircraft owners have on PBN concept. A dissemination campaign is being carried to, to enable the improvement of data provided by the same.

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
have less than 5 700 kg. of MTOW – 15 May 2009; c) Other aircraft registered in the Region – 15 August 2009.															
2-13 1.2 1.2 Collect air traffic data to understand air traffic flows in a specific airspace	YES	NO	YES	YES	YES	YES	--	YES	OG	YES	YES	YES	YES	YES	PER: carried out Jul 2009. Delivered to SAM Office.
2-14 Conclusion SAM/IG/2-4 PBN Implementation Model for TMA and Approach That States/Territories and International Organizations use the PBN Implementation Model for TMA and Approach in the preparation of their PBN implementation programmes for TMA and Approach, shown in Appendix E to this part of the Report	YES	OG	YES	YES	YES	OG	--	YES	OG	YES	OG	OG	YES	OG	ECU: Developing PER: Dec 2009, this model is being used SUR: 15 Nov 2009 VEN: 18 Nov 2010
3-1 Conclusion SAM/IG/2-5 Advisory Circular CA 91-002 and Job Aid for Aircraft and operators	YES	YES	YES	YES	YES	OG	--	OG	OG	YES	YES	--	YES	YES	BRA and PAN: publication is being harmonized with CA LAR. ECU: Coord. with OPS COL: Information circular was

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
RNAV 5 operational approval That States of ICAO South American Region: a) Use as an acceptable compliance source in aircraft and operators RNAV 5 operational approval Advisory Circular CA 91-002 and Job Aid for Aircraft and operators RNAV 5 operational approval, presented in Appendices A and B , respectively, to this part of the Report. b) Publish respective national regulations up to April 2009.															published and may be seen at the hyperlink: CL5102-082-002 PAR: signature pending Oct. 2010 PER: Dec 2009
3.5 Conclusion SAM/IG/3-3 PBN Implementation National Plans That States of ICAO South American Region, present their PBN Implementation National Plans to SAM/IG/4 Meeting, using PBN Implementation Plan	YES	YES	YES	YES	YES					YES	YES		YES	YES	BOL: delivered Dec. 2009 VEN: finalised and delivered.

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
Model, shown in Appendix B of this part of the Report, as well as using the action plan models and information contained PBN Implementation Project TMA Operations and Short Term Approximations of SAM Region, approved by SAM/IG/2 Meeting.															
4-2 Conclusion SAM/IG/2-6 ATFM Roadmap That, a) the ATFM Roadmap in Appendix B to this part of the Report be adopted, with the aim of providing orientation to the ATFM community with regard to ATFM applications to be implemented in the short and medium term in the SAM Region; and b) the ICAO Secretariat send the ATFM Roadmap to the GREPECAS ATFM Task Force for the analyses and	OG	OG	YES	YES	YES	OG	--	OG	OG	YES	NO	OG	YES	YES	ECU: ATFM PER: Mar 2010

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
actions deemed pertinent															
4-5 INITIAL ATFM AIC Model	YES	YES	N/A	NO	YES	YES	--	YES	OG	YES	YES	OG	YES	YES	BRA: information published in the AIP. GUY: 22 Oct 2009
Conclusion SAM/IG/3-1 ATS Route Network Optimising in the South American Region That the ICAO SAM States take relevant action to follow the guidelines and meet the target dates established in the ATS Route Network Optimising Programme in the South American Region that appears in Appendix B to this part of the report.		YES	YES	YES	NO					YES	YES		YES	YES	VEN: pertinent actions taken
Conclusion SAM/IG/3-4 Advisory Circulars CA 91-008, CA 91-009 and CA 91-010 That States of the SAM Region: a) use as acceptable means of compliance in aircraft approval and exploiters for RNP APCH, RNP AR APCH and APV/Baro-VNAV operations, Advisory	OG	YES	OG	YES	YES	OG	OG	OG	OG	YES	YES	OG	YES	YES	BOL: published in RAB91 COL: published the following information circular: CI-5102-082-008 CI-5102-082-009 CI-5102-082-010 PAR: in final process of publication. VEN: published in September 2010 CA RNAV5, RNP-1, RNP AR APCH and APV-BARO/VNAV

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
<p>Circulars CA 91-008, CA 91-009 and CA 91-010, shown in Appendices B, C and D, respectively to this part of the report; and</p> <p>b) publish the corresponding national regulations until 5 October 2009.</p>															
<p>3-5 Conclusion SAM/IG/3-5 Runway capacity of an international airport and ATC associated sector</p> <p>SAM States are encouraged to carry out at least an exercise to determine the runway capacity of an international airport and ATC sector, associated or another one selected for each State, to present the results to the SAM/IG/4 Meeting, providing the following information:</p> <p>a) Amount of personnel trained for the exercise</p> <p>b) Methodology applied</p> <p>c) Result of the exercise, providing the declared capacity</p>	OG	OG	YES	YES	YES	YES				YES	YES		NO	YES	<p>ECU: has trained personnel and calculation Quito and Guayaquil airports</p> <p>PAR: has trained personnel and Airport calculation in Asunción airport.</p> <p>VEN: exercise requested was made, personnel from Venezuela has participated in ATFM training workshops</p>

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
for each runway and ATC selected sector. d) Identification of problems found in the methodology applied.															
Conclusion SAM/IG/4-1 – SAM routes network point of contact That SAM States designate a point of contact to support the development of task 2.2.5 of the Action Plan for optimisation of the SAM Routes Network, and send the corresponding data (email and telephone) until 31 January 2010.	YES	YES	YES	YES	YES					YES	YES		YES	YES	BOL: César Varela URU: Adriana San Germán Tel.5982 604 0408 Int 5204 asangerman@gmail.com VEN: Carlos Gonzalez and Pablo Rattia
Conclusion SAM/IG/4-2 Advisory Circulars for Aircraft approval and operators for RNP 10 operations, RNAV 5, RNAV 1 and 2, Basic RNP 1, RNP APCH, RNP AR APCH and APV/baro-VNAV That States of ICAO South American Region, according to the PBN implementation plans:	OG	YES	OG	YES	YES	OG	OG	OG	OG	YES	YES	OG	YES	YES	BOL: published in RAB 91. COL: Following information circulars: CI-5102-082-001 CI-5102-082-002 CI-5102-082-003 CI-5102-082-008 CI-5102-082-009 CI-5102-082-010 PAR: in final process of publication. VEN: RNP10, RNAV2, RNP APP AR pending.

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
a) use the Advisory Circulars (AC), in developing their acceptable means of compliance of approval of aircraft and operators for RNP 10 operations, RNAV 5, RNAV 1 and 2, Basic RNP 1, RNP APCH, RNP AR APCH and APV/baro-VNAV, that are shown in Appendices A1, A2, B1, B2, C1, C2, D1, D2, E1, E2, F1, F2, G1 and G2 of this part of the report; and b) that job aids of aforesaid circulars be incorporated into Inspector's manuals of Operations and airworthiness.					YES										COL: Airworthiness inspector guide can be consulted at hyperlink: Guía inspector Aeronavegabilidad
Conclusion SAM/IG/4-3 Continued data collection about PBN Fleet Capacity in the South American Region The Meeting considered that: a) efforts should be continued in order that each	OG	OG	OG	YES	YES	OG	OG	OG	OG	OG	NO	OG	YES	YES	COL: Had the same difficulties as Venezuela, and finally the information was collected. However, we believe this item should be considered as completed since it was pre-assessment and we are now in the implementation

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
<p>State, through its PBN Focal Points, conduct such actions to send, as soon as possible, information, about its PBN fleet capacity to ICAO Regional Office. The information collected by States should, as far as possible, be sent to the Regional Office in a file with Excel format.</p> <p>b) that each State is responsible for providing data and, as time passes, updates or further details on the submitted data should be made;</p> <p>c) to facilitate the updating of data, the file of the survey of each state be posted on the website of the SAM Office, in order that each State, through a code, can have access to information on its fleet , and thus can perform the update of the data entered , and send it, via e-mail, to</p>															<p>process.</p> <p>VEN: fruitless surveys have been carried out in view of the poor knowledge that operators and aircraft owners have. A dissemination campaign is being carried out to enable improvement of data provided by the same.</p>

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
the Regional Office.															
Conclusion SAM/IG/4-5 – Guidance for the application of a common methodology for calculating airport and ATC sector capacity The Guidance for the application of a common methodology for calculating airport and ATC sector capacity, shown in Appendix C to this part of the report, which recommends that SAM States apply the Brazilian methodology for calculating airport and ATC sector capacity, is approved.	YES	YES	YES	YES	YES	NO				YES	YES		YES	YES	BOL: adopted Brazilian method. VEN: there is no sufficient personnel yet to comply this task in 100%, currently working on data collection.
Conclusion SAM/IG/4-11 Action plan for the implementation of Amendment 1 to Doc. 4444 That SAM States, taking into account the actions indicated in the strategy document for the implementation of Amendment 1 to ICAO PANS ATM, 15th Edition (Doc. 4444), contained in	YES		YES	YES	YES			YES	YES	YES	YES	YES	YES	YES	BRA: Superseded by Conclusion SAM/IG/6-12 COL: training is being provided to controllers and flight plan staff. There will be a transition period, since this amendment is effective as of April 2012.

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
Appendix D to this part of the Report, draft their respective action plans for the implementation of the amendment, and send them to the ICAO SAM Regional Office by 30 March 2010, for their presentation at SAM/IG/5 Meeting.															
Conclusion SAM/IG/5-1 Training programme and documentation for air traffic controllers and AIS operators That SAM States use the material shown in Appendix A to this part of the report as guidance material for air traffic controllers and AIS operators.	OG	YES	YES	YES	YES			OG		YES	NO		YES	YES	BOL: PBN and ATC recurrent seminars were held. COL: Training for controllers and flight plan personnel has already started. There will be a transition period, since this amendment is effective as of April 2012. URU: August 2011 VEN: final training phase at the IUAC
Conclusion SAMIG/5-2 PBN/RNAV5 seminars for operators That SAM States, in view of the few operators that have requested the approval, and the need to encourage them to start this process, conduct PBN seminars in which operators are informed about the	OG	YES	YES	YES	YES	OG	OG	OG	OG	YES	YES	OG	YES	YES	BOL: PBN seminars were carried out at all levels. COL: Several seminars were conducted for operators and several commercial operators have already started the process. It is suggested that the restrictions to be applied to uncertified operators as of 22 Sep 2011, be published.

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
corresponding approval procedures.															URU: August 2011 VEN: continuously.
Conclusion SAMIG/5-3 Data Collection That: a) SAM States collect data on flights conducted on domestic and international routes in the upper airspace (FL 245 or above) of the SAM Region during the period 1 to 15 July 2010, and send them to the SAM Regional Office before 13 August 2010; and b) That the sample be consistent with the form and the guidelines for completing the form described in Appendix B to this part of the Report, using the Excel format.	YES	YES	YES	YES	NO			OG		YES	YES		YES	YES	VEN: sent to the regional office and delivered during SAM/IG/6 Meeting
Conclusion SAM/IG/5-4 Implementation of Continuous Descent Operations That, recognizing the efficiency and	OG	OG	OG	YES	NO			OG		YES	NO		YES	NO	

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
environmental benefits of Continuous Descent operations, and the need to harmonize these operations in the interest of safety, States are encouraged to include the implementation of Continuous Descent operations (CDO) as part of their PBN implementation plans and to implement CDO in accordance with the ICAO CDO Manual.															
Conclusion SAM/IG/5-5 Prediction Program for the FDE Availability That: a) Progress be made in the study and application of the tool AUGUR (EUROCONTROL) by the States of the region. b) Considering that AUGUR tool (EUROCONTROL), incorporates the Airports and Navaids in the SAM, it is suggested that through the Regional Office of ICAO, make contact with EUROCONTROL	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO	NO	COL: Working with the SAPET software and in the process of validating the prediction. It is submitted to consideration whether process is correct for its application in PBN.

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
in order to establish the feasibility of extending the validity of calculating prediction made with the AUGUR tool for the different stages of flights, in the SAM Region. c) Through the ICAO Regional Office, establish contact with the FAA, in order to receive guidance on the procedures for approval of a prediction program for the FDE availability and the procedures used by their operators when performing operations such as RNAV based in GNSS out of United States; and															
d) ICAO Regional Office evaluate the possibility to lead a development process for development of an availability forecasting FDE programme for the SAM Region for its use in all flight phases															
Conclusion SAMIG/5-7	YES	YES	YES	YES	YES	NO	NO	NO	YES	YES	YES	NO	YES	YES	Web

[illegible]

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
of-sight coverage data as an element for the PBN operations feasibility study (RNAV 5, RNAV 1 and RNAV 2).															
Conclusion SAM/IG/5-9 Analysis on the impact of Amendment 1 to the PANS/ATM on the automated systems That the SAM States, through their national committees, take into account the contents of Appendix B, with views that it serve as reference for an initial analysis on the impact it will have on the automated systems involved in the flight plans process, in view of the implementation of the new flight plan format in accordance with Amendment 1 to the PANS/ATM, and that they send the results to the ICAO SAM Regional Office by 30 August 2010, for their presentation at the Seminar/Workshop for the Implementation of Amendment 1 to the	YES	N/A	YES	YES	NO	YES	--	YES	YES	YES	YES	YES	YES	YES	

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
15th Edition of the a PANS/ATM, to be held in Lima from 13 to 15 September 2010.															
Conclusion SAM/IG/6-1 Application of further actions to reduce the risk and risk rate resulting from the SAM ATS routes network optimisation safety plan That States, ATS providers and aircraft operators, take the necessary measures to apply recommendations and further actions in order to reduce the risk and resulting risk rate as shown in Appendix 1 to Chapter 4 of the Safety Plan for the SAM Region ATS routes network, as shown in Appendix A to this part of the report.			YES	O/G	NO					O/G	NO		YES	YES	
Conclusion SAM/IG/6-2 Application of subsequent actions to reduce the RNAV5 safety plan risk and the resulting risk rate That States, ATS providers and aircraft users take the			YES	O/G	NO					O/G	O/G		YES	YES	

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
necessary measures to apply further action to reduce the RNAV5 safety plan risk and the resulting risk rate, as shown in Appendix 1 to Chapter 4 of the safety plan for RNAV5 implementation in the SAM Region, shown in Appendix I to this part of the report.															
Conclusion SAM/IG/6-3 Forms CMA F5 and CMS F6 That SAM States take pertinent action in order to apply forms CMA F5 and CMA F6, attached as Appendices A and B to this part of the report, and send them to CARSAMMA as soon as the PBN approval of aircraft and operators is established.			YES	YES	YES					O/G	NO		YES	YES	
Conclusion SAM/IG/6-4 ENR 3.3 – Table model of the AIPs That SAM States, in publishing in their AIPs RNAV routes, use the ENR table model shown in Appendix D to this part of the report.			YES	YES	--					YES	YES		YES	--	CHI: As defined in SAM/IG/7

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
Conclusion SAM/IG/6-5 Lateral navigation deviation reporting form That SAM States take the corresponding action in order to use the monitoring programme and particularly lateral navigation deviation reporting form attached as Appendix F to this part of the report, and send it to CARSAMMA on the tenth day of each month.			YES	YES	NO					YES	YES		YES	--	
Conclusion SAM/IG/6-6 Publication of an AIC/NOTAM announcing the postponement of the RNAV5 implementation date in the SAM Region That SAM States take the corresponding action in order to publish an AIC/NOTAM announcing the postponement of the RNAV5 implementation date in the SAM Region for 22 September 2011.			YES	YES	NO					YES	YES		YES	----	CHI: NOTAM

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
Conclusion SAM/IG/6-7 Manual on Collaborative Decision-Making (CDM) for ATFM That SAM States adopt the Manual on Collaborative Decision-Making (CDM) for ATFM shown in Appendix B to this part of the report.			YES	YES	NO					YES	NO		O/G		
Conclusion SAM/IG/6-8 ATFM AIP SUPP/AIC MODEL That the States of the ICAO South American Region, when preparing their national AIC, use as a reference the ATFM AIP SUPP/AIC model shown in Appendix E to this part of the report.			N/A	YES	NO					YES	YES		YES		
Conclusion SAM/IG/6-9 – Actions required for AMHS interconnection That SAM States, in view of the delays in the interconnection of the AMHS, proceed with the following actions:													YES		
a) Require from their AMHS providers the necessary support to	YES	N/A	YES	YES	NO	N/A	N/A	YES	NO	YES	YES	YES	YES	YES	

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
successfully end the necessary interconnections;															
b) Make necessary arrangements to train personnel in the interconnection tasks, with the aim of minimizing the dependency with their providers;	YES	N/A	YES	YES	NO	N/A	N/A	NO	NO	YES	YES	YES	YES	YES	
c) Maximize pertinent coordinations; and	YES	N/A	YES	YES	NO	N/A	N/A	YES	YES	YES	YES	YES	YES	YES	
d) States that have not yet done so, complete the drafting and signature of the MoU.	YES	N/A	O/G	O/G	NO	N/A	N/A	O/G	O/G	YES	O/G	O/G	YES	O/G	
Conclusion SAM/IG/6-10 Review to the study for a new SAM digital network That SAM States analyze the study for the implementation of a new digital network for the SAM Region shown in Appendix B to this part of the Report, and send their comments to the ICAO SAM Regional Office by 31 January 2011.	YES	YES	YES	YES	NO	YES	YES	YES	YES	YES	YES	YES	O/G	YES	
Conclusion SAM/IG/6-11 Changes in the AMHS systems and in the FDP for the implementation of	NO	NO	OG	NO	NO	NO	NO	NO	NO	YES	YES	NO	YES	NO	

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
Amendment 1 to the PANS/ATM That SAM States take into account the contents of Appendix D to this Agenda Item, with the aim that by 1 July 2012 they operate with the NEW flight plan format, in addition to the CURRENT format, States that have identified problems in their AMHS must make the corresponding changes before 31 December 2011. Also, the changes to make in the FDP installed at the various ATS units should be effected by the end of March 2012.															
Conclusion SAM/IG/6-12 Action plan for the implementation of Amendment 1 to Doc. 4444 That SAM States, taking into account the actions indicated in the strategy for the implementation of Amendment 1 to the 15th Edition of the ICAO PANS/ATM (Doc 4444), and using as reference the action plan model presented by	YES	NO	YES	YES	YES	NO	NO	YES	YES	YES	YES	YES	YES	YES	COL: Training for ATC and FPL has started. There will be a transition period, since the amendment is effective only as of November 2012.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
the 15th Edition of ICAO PANS ATM (Doc 4444) That SAM States, taking into account the regional strategy for the implementation of Amendment 1 to the 15th Edition of ICAO PANS ATM (Doc 4444), adopt the corresponding measures to draft a training programme for the personnel that needs to be familiar with, and know how to apply, the modified concepts, especially air traffic controllers and ARO/AIS operators, for the implementation of Amendment 1 to the PANS-ATM, and send it to the ICAO SAM Regional Office no later than 31 October 2011.															

Instrucciones para el llenado del formulario - Instructions to fill in the form

- Cumplida: colocar **Sí** en el casillero correspondiente. / Accomplished: place **YES** in the corresponding box
- En ejecución: colocar **OG** (on going) e indicar en “observaciones” la fecha prevista de término./ In execution: place **OG** (on going) and indicate under “remarks” the estimated deadline
- No cumplida: colocar **NO** en el casillero correspondiente y, de ser el caso, hacer comentarios en columna de observaciones/ Not complied: place **NO** in the corresponding box and if such were the case, make comments in the remarks column