



Agenda Item 1: Follow-up to conclusions and decisions adopted by SAM/IG meetings and results on the Twelfth Air Navigation Conference (ANC/12)

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 workshops/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 updated 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, 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.

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							
1-3	UM 662 Guayaquil – Madrid	<ul style="list-style-type: none"> • Coordinate the implementation. • Issue AIC. • Train personnel. • Amend CAR/SAM ANP 	Route implemented	Agreement with FAV Venezuela is pending SAM/ATSRO/4	States Secretariat	RO/ATM RO/AIM	VALID (see SAM/IG/5, Agenda Item 2) The enquiry was reiterated to Venezuela who proposed an alternative and Ecuador is pending a reply on agreement with the rest of the States.
2. Optimisation of ATS routes in the SAM Region							
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.	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • 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
2-19	<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
2-20	<p>Conclusion SAM/IG/10-1 Safety Plan for the implementation of routes Phase 3, Version 02</p> <p>That SAM Region States determine the viability of the SAM ATS Route Network optimization (ATSRO) Programme, based on a risk assessment, in order to ensure safety within their FIRs.</p>	Determine viability of ATSRO Programme.	Result of risk assessment within considered FIR	ATS/RO/5	SAM States		

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
2-21	Conclusion SAM/IG/10-2 Implementation of the new concept on flexible use of the airspace in the ICAO South American Region That States in the SAM Region use, if deemed appropriate, the Guidelines for the implementation of the Flexible Use of Airspace Concept in the ICAO South American Region for the design and airspace management of the flight information region under their jurisdiction.	Operational improvements related to the optimization of airspace.	Airspace optimization plan with the utilization of FUA	ATS/RO/5	SAM States		
3. Implementation of Performance Based Navigation (PBN) in the SAM Region							
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 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.	Prepare national PBN plans	All SAM States will have a PBN implementation plan aligned with the regional PBN plan	SAM/IG/9	States	RO/ATM	VALID 11 States in the SAM Region presented their national PBN plan for its harmonization. States that have updated their plans will send them for the Regional Office. It is expected that the 3 remaining States (Ecuador, French Guiana, and Suriname) send their national plans as soon as possible. The Secretariat must encourage their submission

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/10	States	RO/ATM	VALID Some States introduced CDO in their national plans.
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	October 2011	States	RO/ATM	VALID
3-21	Approval of aircraft and operators	Realize the approvals	Safe RNAV5 implementation	Permanent	States	RO/ATM	VALID It is considered a permanent task.

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.	<ul style="list-style-type: none"> • Use Forms CMA F5 and CMA F6. • Taking into consideration that some listings contain all data foreseen in such form, and in such cases, the meeting concluded that the submission of the corresponding F5 forms is not necessary. In cases in which the lists do not contain information foreseen in Form F5, States should send them to CARSAMMA. 	Safe RNAV5 implementation	First Phase October 2011	States	RO/ATM	VALID States should implement procedures to keep data base updated.
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	SAM/IG/10	States	RO/ATM/	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							
4-11	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 through satellite-based PBN instruments	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
5-5	Conclusion SAM/IG/3-5 Runway capacity of an international airport and ATC associated sector 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: 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/8	States	RO/ATM	VALID 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. When the workshop held at the SAM Office was completed, it was agreed to carry out additional e-distance training for students to become instructors. Such training is currently being carried out
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/8	States	RO/ATM	VALID States maintain web conferences due to communication problems in TELCONs held. The use of SKYPE and go-to-meeting is planned. REDDIG II includes a speech communications sub-network to support this application.

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
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
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/10	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/10	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							
6-3	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 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.	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 During SAM/IG/8 meeting, updated information was received from Brazil and Guyana on CNS improvement plans. Any change made by States to the Guide should be notified to the ICAO SAM Regional Office

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 2013	SAM States	SAM States AMHS providers RO/CNS	<p>VALID</p> <ul style="list-style-type: none"> a) Completed. Coordination has been carried out with providers to complete the interconnection. b) In July 2012 an AMHS course was carried out by EUROCO NTROL's INSTILU X center; from 24 to 28 July 2013 a second course will be carried out by the same Institute. c) Coordination has been increased. <p>Pending implementation of new MOUs (Appendix D, Agenda Item 5, SAM/IG/10)</p>

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. Maintain updated DME DME coverage study to support RNAV5 routes.	Regional DME DME coverage study updated to support RNAV5 routes.	Permanent	States	RO/CNS	VALID

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
6-11	<p>Conclusion SAM/IG/8-3 Implementation of a RAIM/FDE prediction system in the SAM Region</p> <p>That, in order for the FDE SAM Region to have a common service for predicting RAIM and FDE availability to support PBN operation for en-route, non-precision approach, vertical guide approach (APV) and terminal area:</p> <p>a) the Fifth Meeting of the Coordination Committee of Regional Project RLA/06/901 consider the purchase of the RAIM prediction service selected between the proposals presented by DWI and Colombia; and</p> <p>b) ICAO analyse the most convenient way for States that are not members of Regional Project RLA/06/901 to pay the corresponding fee for the RAIM prediction service</p>	<p>a) Approval by RCC/5 of the acquisition of a common RAIM availability prediction service.</p> <p>b) Analysis of the most appropriate manner so that non-member States of RLA/06/901 contribute with the quota for the RAIM availability prediction service.</p>	<p>Acquisition approval of a RAIM availability prediction service in the SAM Region.</p> <p>Procedure for contribution quota for non-member States of RLA/06/901.</p>	<p>a) 12/11</p> <p>b) 10/12</p>	<p>a) Members of RLA/06/901 Project</p> <p>b) Secretariat</p>	<p>Non RLA/06/901 Project member States</p>	<p>COMPLETED</p> <p>a) The Sixth RCC Meeting of RLA/06/901 Project (Lima, Peru, 21 to 23 November 2012) approved the purchase and implementation of the regional RAIM availability prediction service, through Conclusion RCC/6/4.</p> <p>b) Service will initiate with RLA/06/901 Project member States. Project Document was amended with the inclusion of the RAIM availability prediction service. Technical specifications for implementation of RAIM availability prediction service were sent to ICAO technical cooperation to initiate tender process.</p>

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
6-12	SAM/IG/10 Report paragraph 5.1, to complete safety guidelines for the implementation of IP networks and IP router policy.	Complete safety guidelines for the implementation of IP networks and IP router policy	Safety guidelines of IP networks document. IP router policy document.	SAM/IG/11	Project D1	RO/CNS	VALID Guidelines are being presented to SAM/IG/11 meeting for revision. Guidelines have been prepared by experts of Brazil with the support of RLA/06/901 Project
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	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 automation experts	VALID Many States of the Region have issued plans taking into account the guide material prepared by SAM/IG with the support of RLA/06/901 Project. Pending: implementation plans of States which are in process of finalizing with the implementation of automated systems. To date, the following MoUs for the interconnection of automated systems have been drafted and signed: Argentina-Brazil, Argentina-Chile; Argentina-Uruguay;

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to the task	Status of implementation
	<p>ACCs, Interface Control Document (ICD) for data communication between ATS dependencies in Caribbean and South 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>						Brazil-Uruguay; Brazil-Venezuela and Brazil-Peru.
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 o 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	<p>COMPLETED</p> <p>States of the Region have prepared the analysis of safety assessment for the implementation of Amendment 1 to the 15th Edition of PANS ATM (Doc 4444).</p> <p>Amendment implementation has been carried out successfully.</p>

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/9-4 - Active participation in all regional activities for the implementation of Amendment 1 to Doc 4444, 15th Edition</p> <p>That the SAM States, with the aim of complying with the implementation of Amendment 1 to ICAO Doc 4444, 15th Edition:</p> <p>a) Inform of any changes in the list of focal points shown in Appendix B to this Agenda Item;</p> <p>b) Actively participate through their focal points in the web teleconferences scheduled in the following dates: 25 May, 29 June, 31 August, 28 September and d) 31 October 2012; and</p> <p>c) Participate in the scheduling of the regional and inter-regional trials described in Appendix E to this Agenda Item</p>	<p>a) Updating of FPL list;</p> <p>b) Active participation in web teleconferences on the FPL;</p> <p>c) Participation in FPL trials.</p>	<p>Documentation updated</p> <p>Participation in FPL web teleconferences</p> <p>Regional and interregional tests on the NEW FPL</p>	14 Nov 12	SAM States		<p>COMPLETED</p> <p>New FPL was implemented successfully thanks to the work done under the coordination of focal points nominated by States, actively participating in the regional events to follow-up implementation of FPL 2012.</p>

No.	Task to be developed	Specific tasks	Deliverables	Finalization date	Responsible	Supporting members to task	Status of implementation
7-9	Conclusion SAM/IG/10-3 Review of the Guide on technical and operational considerations for the implementation of ADS-B That, in order to review the Guide on technical and operational considerations for the implementation of ADS-B: a) The Secretariat circulate the Guide to SAM States on the last week of October 2012; and b) SAM States send their comments by 31 December 2012	Review of the Guide on technical and operational considerations for the implementation of ADS-B	Guide on technical and operational considerations for the implementation of ADS-B	31 Dic 2012	a) Secretariat b) States	RO/CNS	VALID Guide has been circulated for revision to all States of the Region. Comments were received from Brazil, Chile and Guyana, which were added to the Guide to be reviewed by SAM/IG/11 Meeting
7-10	Conclusion SAM/IG/10-4 Updating of the ICAO FITS website That SAM States that have not done it yet, are urged to inform the ICAO South American Regional Office, by 17 October 2012, the date in which they will start accepting the NEW flight plan format, so that ICAO may update the FITS website http://www2.icao.int/en/FITS/Pages/home.aspx for display to all the global aeronautical community.	Establish start date to start accepting the NEW flight plan format	Establish start date of operations of new flight plan format	17 Oct. 2012	States	RO/CNS RO/AIM	COMPLETED

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	YES	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	YES	YES	YES	OG	--	OG	OG	OG	YES	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	YES	YES	YES	YES	
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	YES	YES	YES	YES	YES	--	--	YES	YES	YES	OG	YES	YES	YES	PER: Nov 2010

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
Appendix B to this part of the Report.															
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) 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.	YES	YES	YES	YES	YES	YES	--	YES	YES	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
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 have less than 5 700 kg. of MTOW – 15 May 2009; c) Other aircraft registered in the Region–15 Aug 2009	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.
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	YES	OG	YES	YES	ECU: Developing PER: Dec 2009, this model is being used SUR: 15 Nov 2009 VEN: 18 Nov 2010

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
3-1 Conclusion SAM/IG/2-5 Advisory Circular CA 91-002 and Job Aid for Aircraft and operators 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.	YES	YES	YES	YES	YES	OG	--	OG	OG	YES	YES	--	YES	YES	COL: Information circular was published and may be seen at the hyperlink: CI 5102-082-002 ECU: Coord. with OPS PER: Dec 2009 BRA and PAN: publication is being harmonized with CA LAR. PAR: signature pending Oct. 2010
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 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	YES	YES	YES	YES	YES					YES	YES		YES	YES	BOL: delivered Dec. 2009 VEN: finalised and delivered.
4-2 Conclusion SAM/IG/2-6 ATFM Roadmap	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
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 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	YES	O/G	--	--	--	-	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 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 b) publish the corresponding national regulations until 5 October	OG	YES	SI	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

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
2009.															APV-BARO/VNAV
3-5 Conclusion SAM/IG/3-5 Runway capacity of an international airport and ATC associated sector 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: 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.	OG	YES	YES	YES	YES	YES	--	--	--	YES	YES	--	NO	YES	ECU: has trained personnel and calculation Quito and Guayaquil airports PAR: has trained personnel and Airport calculation in Asunción airport. VEN: exercise requested was made, personnel from Venezuela has participated in ATFM training workshops BOL: training was provided to personnel in Viru Viru. URU: Continues with personnel problems. Support will be requested to the Regional Office to carry out activities.
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: Gustavo Turcatti Tel.5982 604 0408 Int 5111 blantur@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	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

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
That States of ICAO South American Region, according to the PBN implementation plans: 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	YES	--	--	--	--	--	----	--	--	--	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. 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 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. b) that each State is responsible for providing data and, as time passes, updates or further details on the submitted data should be made; 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	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 process. 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

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
information on its fleet , and thus can perform the update of the data entered, and send it, via e-mail, to the Regional Office.															same.
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/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: PBN training was initiated. VEN: final training phase at the IUAC

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
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 corresponding approval procedures.	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. 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 environmental benefits of Continuous Descent operations, and the need to harmonize these operations in the interest of safety,	OG	OG	OG	YES	O/G	--	--	OG	--	YES	NO	--	NO	NO	URU: will request support of Regional Office to restructure airspace and procedures construction.

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
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/5-7 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.	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	Web REDDIG II includes a speech communications sub-network to meet initial ATFM requirements
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.	NO	O/G	YES	O/G	O/G	--	--	--	--	O/G	NO	--	YES	YES	

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
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.	NO	O/G	YES	O/G	O/G	--	--	--	--	O/G	NO	--	YES	YES	
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	O/G	YES	YES	YES	--	--	--	--	O/G	NO	--	YES	YES	BOL: Approvals completed
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	--	--	--	--	YES	YES	--	YES	YES	CHI: As defined in SAM/IG/7
Conclusion SAM/IG/6-5 Lateral navigation deviation reporting form That SAM States take the	NO	--	YES	YES	YES	--	--	--	--	YES	YES	--	YES	YES	

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Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
a) Require from their AMHS providers the necessary support to successfully end the necessary interconnections;	YES	YES	YES	YES	YES	YES	N/A	YES	NO	YES	YES	YES	N/A	YES	An AMHS course has been coordinated with the Eurocontrol Instilux institute, to support States in AMHS interconnection (Lima, Peru July 2012) and a ground-ground, ground-air data interconnection implementation Workshop/Seminar (Lima, Peru, September 2012). <u>A second COM AMHS course with Eurocontrol Instilux Institute is planned for 24-28 June 2013.</u>
b) Make necessary arrangements to train personnel in the interconnection tasks, with the aim of minimizing the dependency with their providers;	YES	YES	YES	YES	YES	YES	N/A	YES	NO	YES	YES	YES	N/A	YES	
c) Maximize pertinent coordination; and	YES	YES	YES	YES	YES	YES	N/A	YES	YES	YES	YES	YES	N/A	YES	
d) States that have not yet done so, complete the drafting and signature of the MoU.	O/G	N/A	O/G	O/G	O/G	N/A	N/A	O/G	O/G	YES	O/G	O/G	N/A	YES	
Conclusion SAM/IG/6-11 Changes in the AMHS systems and in the FDP for the implementation of 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	YES	YES	O/G	O/G	O/G	YES	O/G	YES	O/G	O/G	YES	YES	YES	O/G	

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
FDP installed at the various ATS units should be effected by the end of March 2012.															
Conclusion SAM/IG/7-1 ATS routes network optimisation programme of the South American Region, Phase 3, Version 02 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.	--	YES	--	YES	O/G	--	--	--	--	O/G	--	--	NO	--	
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.	YES	YES	--	YES	YES	--	--	--	--	YES	--	--	YES	YES	
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.	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
Conclusion SAM/IG/7-4 Publication of the trigger NOTAM 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.	YES	YES	YES	YES	YES	--	--	--	--	YES	YES	NOV/12	YES	YES	
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 RNAV-5.	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	Continuous activity.
Conclusion SAM/IG/7-8 Safety assessment for the implementation of Amendment 1 to 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 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 .	YES	YES	YES	YES	YES	O/G	YES	YES	YES	YES	YES	YES	YES	YES	
Conclusion SAM/IG/8-3 - Implementation of a RAIM/FDE prediction system in the SAM Region That, in order for the FDE SAM	YES	YES	YES	YES	YES	YES	NO	O/G	YES	YES	YES	YES	YES	YES	a) The Sixth RLA/06/901 Project Coordination Meeting (Lima, Peru, 21 to 23

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Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
August, 28 September and 31 October 2012; and c) Participate in the scheduling of the regional and inter-regional trials described in Appendix E to this Agenda Item	YES	YES	YES	YES	YES	YES	NO	NO	YES	YES	YES	YES	YES	YES	
	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES		
Conclusion SAM/IG/10-1 Safety Plan for the implementation of routes Phase 3, Version 02 That SAM Region States determine the viability of the SAM ATS Route Network Optimisation (ATSRO) Programme based on a risk assessment, in order to ensure safety within their FIRs.															
Conclusion SAM/IG/10-2 Implementation of the new concept of flexible use of the airspace in the ICAO South American Region That States in the SAM Region, if deemed appropriate, recommend the definitive approval of the Guidelines for the Implementation of the Flexible Use of Airspace Concept in the ICAO South American Region for the design and airspace management of the flight information region under their jurisdiction.															
Conclusion SAM/IG/10-3 Review of the Guide on technical and operational considerations for the implementation of ADS-B	NO	NO	YES	YES	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	

Conclusión/Tarea Conclusion/Task	ARG	BOL	BRA	CHI	COL	ECU	FGY	GUY	PAN	PAR	PER	SUR	URU	VEN	OBSERVACIONES REMARKS
That, in order to review the Guide on technical and operational considerations for the implementation of ADS-B: a) The Secretariat circulate the Guide to SAM States on the last week of October 2012; and b) SAM States send their comments by 31 December 2012.															
Conclusion SAM/IG/10-4 Updating of the ICAO FITS website That, SAM States that have not done it yet, are urged to inform the ICAO South American Regional Office, by 17 October 2012, the date in which they will start accepting the NEW flight plan format, so that ICAO may update the FITS website (http://www2.icao.int/en/FITS/Pages/home.aspx) for display to all the global aeronautical community.	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	FITS 2012 was implemented successfully on the date foreseen.

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