INTERNATIONAL CIVIL AVIATION ORGANIZATION

CAR/SAM PLANNING AND IMPLEMENTATION REGIONAL GROUP (GREPECAS)

SECOND MEETING OF THE PROGRAMMES AND PROJECTS REVIEW COMMITTEE (PPRC/2)

FINAL REPORT

Lima, Peru
16 – 18 July 2013

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HISTORY OF THE MEETING

ii.1 Place and Duration of the Meeting

The Second Meeting of the Programmes and Projects Review Committee (PPRC/2) was held at the ICAO South American Regional Office in Lima, Peru, from 16 to 18 July 2013.

ii.2 Opening Ceremony and Other Matters

Mr. Franklin Hoyer, Regional Director of the ICAO South American (SAM) Regional Office and Secretary of GREPECAS, welcomed the participants, emphasizing the need to implement the new GREPECAS work methodology. Mrs. Loretta Martin, Regional Director of the ICAO North American, Central American and Caribbean (NACC) Regional Office, participated in the opening and provided opening remarks regarding the importance of working in a coordinated manner. Mr. Normando Araújo de Medeiros (Brazil), Chairman of GREPECAS, highlighted the work being developed by the PPRC.

ii.3 Organization, Officers and Secretariat

Mr. Normando Araújo de Medeiros (Brazil), Chairman of GREPECAS, presided over the meeting. Mr. Franklin Hoyer, Regional Director, ICAO South American Regional Office, acted as Secretary of the meeting and was assisted by the following officers from the ICAO NACC and SAM Regional Offices and Headquarters:

Loretta Martin	Regional Director, ICAO NACC Regional Office
Oscar Quesada	Deputy Regional Director, ICAO SAM Regional Office
Jorge Fernández	Deputy Regional Director, ICAO NACC Regional Office
Michiel Vreedenburgh	Chief, Implementation Support and Development – Safety Section (ISD-SAF) Safety Management and Monitoring, ICAO Headquarters
Onofrio Smarrelli	Air Navigation Bureau
Victor Hernández	Regional Officer, Communications, Navigation and Surveillance, ICAO SAM Regional Office
Jaime Calderón	Regional Officer, Air Traffic Management/Search and Rescue, ICAO NACC Regional Office
Julio Siu	Regional Officer, Aerodromes and Ground Aids, ICAO NACC Regional Office
Lia Ricalde	Regional Officer, Communications, Navigation and Surveillance, ICAO NACC Regional Office
Roberto Arca	Regional Officer, Aerodromes and Ground Aids, ICAO SAM Regional Office
	Regional Officer, Air Traffic Management/Search and Rescue and Aeronautical Information Management, ICAO SAM Regional Office

ii.4 Working Languages

The working languages of the meeting and its documentation were English and Spanish.

ii.5 **Agenda**

The agenda was adopted as follows:

Agenda Item 1: Follow-up on status of GREPECAS and PPRC Conclusions and Decisions in force and air navigation deficiencies in the CAR/SAM Regions with "U" priority

1.1 Review of the implementation status of PPRC/1 conclusions and decisions in force
1.2 Review of the implementation status of GREPECAS conclusions and decisions in force
1.3 Status of "U" priority air navigation deficiencies in the CAR/SAM Regions

Agenda Item 2 Air navigation activities at the global and inter-regional level

2.1 Results of the PIRG AND RASG Global Coordination Meeting
2.2 Results of the Twelfth Air Navigation Conference
2.3 RASG coordination matters

Agenda Item 3: Review of GREPECAS Programmes and Projects

3.1 Projects under the PBN Programme
3.2 Projects under the ATFM Programme
3.3 Projects under the Automation and ATM Situational Awareness Programme
3.4 Projects under the Ground-ground and Air-ground Telecommunications Infrastructure Programme
3.5 Projects under the Aerodromes Programme
3.6 Projects under the AIM Programme
3.7 Projects under the Aeronautical Meteorology Programme

Agenda Item 4: **Items related with the organization of GREPECAS**

4.1 Review of GREPECAS Programmes and Projects Review Committee terms of reference and work programmes
4.2 GREPECAS annual report

Agenda Item 5: Other business

ii.6 **Attendance**

The PPRC/2 Meeting was attended by 26 participants from 5 NAM/CAR States and 7 SAM PPRC member States of GREPECAS, 1 SAM State (Observer), and 1 international organization as Observer. A list of participants is shown on page iii-1.

ii.7 **Draft Conclusions, Draft Decisions and Decisions**

PPRC records its actions in the form of Draft Conclusions, Draft Decisions, and Decisions as follows:

Draft Conclusions: Conclusions that require approval by GREPECAS prior to implementation.

Draft Decisions: Decisions that require approval by GREPECAS prior to implementation.

Decision: Decisions that deal with matters of concern to the PRCC.

ii.8 **List of Draft Conclusions**

i.9 **List of Draft Decisions**

LIST OF PARTICIPANTS

ARGENTINA

Gabriela Logatto
Rafael Alberto Molina
Ignacio Oliva Whiteley
Esteban Gorlero Pizarro

BOLIVIA

César Augusto Varela C.
Aníbal Castro Cárdenas

BRAZIL / BRASIL

Normando Araujo de Medeiros (GREPECAS Chairman)
José Alves Candez Neto

CHILE

Juan Luis Rodríguez

COLOMBIA

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CUBA

Mirta Crespo Frasquieri
Juan Ayón Alfonso

DOMINICAN REPUBLIC / REPÚBLICA DOMINICANA

Bolívar León
Johann Estrada

HAITI / HAITÍ

Jacques Boursiquot (GREPECAS Vice Charirnan)

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iv List of Documentation

All meeting documentation is available at the following web link:

http://www.lima.icao.int, Meetings, GREPECAS, 2013

WORKING PAPERS

Number	Agenda Item	Title	Prepared and Presented by
WP/01	--	Tentative Agenda, Schedule and Proposed Working Methods	Secretariat
WP/02	1.1	Review of the status of implementation of PPRC/1 conclusions and decisions in force	Secretariat
WP/03	1.2	Review of the status of implementation of the GREPECAS conclusions and decisions in force - Revised	Secretariat
WP/04	1.3	Status of air navigation deficiencies in the CAR/SAM Regions with "U" priority	Secretariat
WP/05	2.1	Results of the PIRG and RASG Global Coordination Meeting - Revised	Secretariat
WP/06	2.2	Follow-up to recommendations of the Twelfth Air Navigation Conference (AN-Conf/12)	Secretariat
WP/07	2.3	Update of RASG-PA Projects	Secretariat
WP/08	3.1	Follow-up on the activities of project A1 (PBN implementation) and project A2 (Air navigation system in support of PBN)	Secretariat
WP/09	3.2	Follow-up on the activities of project B1 (Improve the Balance Between Demand and Capacity) and project B2 (Flexible Use of the Airspace)	Secretariat
WP/10	3.3	Follow-up of activities of the automation and situational awareness projects	Secretariat
WP/11	3.4	Description and follow-up to the implementation of project activities under the Ground-ground and Ground-air Communication Infrastructure Programme for the CAR and SAM Regions	Secretariat
WP/12	3.5	Description and follow-up of aerodrome project activities	Secretariat
WP/13	3.6	Projects G1 "Developments for the supply of electronic terrain and obstacle data (e-TOD) in CAR and SAM States", G2 "Aeronautical Information / Data Management", and G3 "Development of the quality specifications applicable to the AIM digital environment" of the CAR and SAM Regions	Secretariat
WP/14	3.7	Projects under the MET Programme - Revised	Secretariat
WP/15	4.1	Review of GREPECAS Programmes and Projects Review Committee terms of reference and work programmes	Secretariat
WP/16	4.2	GREPECAS Annual Report – Revised	Secretariat
WP/17	2.1	Regional and global air navigation reporting	Secretariat
WP/18	2.2	Funding of aviation infrastructure, oversight functions and aviation systems	Secretariat
WP/19	2.1	Regional priorities and targets for air navigation	Secretariat
WP/20	2.2	Support for the Global Air Navigation Plan, Aviation System Block Upgrades and regional implementation	United States
WP/21	3.7	WIFS Accounts	United States
WP/22	2.3 3.1	Airbus safety support to the ICAO PBN regional roadmap deployment	AIRBUS

INFORMATION PAPERS

Number	Agenda Item	Title	Prepared and Presented by
IP/01	--	General Information	Secretariat
IP/02	--	List of Working and Information Papers	Secretariat
IP/03	2	The evolution of electronic tools and data: A strategic plan for the creation of a community-driven decision-support digital environment for the global aviation community	Secretariat
IP/04	2.2	The mini-global demonstration ***(English only)***	United States
IP/05	3.6	Global information space for seamless delivery of Air Traffic Management (ATM) information ***(English only)***	United States
IP/06	3.7	Support by United States to GREPECAS for meteorological information ***(English only)***	United States
IP/07	3.2	Air Traffic Flow Management (ATFM) Programme Project Summary ***(English Only)***	United States
IP/08	2.2	A Comprehensive strategy for Air Navigation: Revised Global Air Navigation Plan	Secretariat

Agenda Item 1: Follow-up on the status of GREPECAS and PPRC Conclusions and Decisions in force and air navigation deficiencies in the CAR/SAM Regions with "U" priority

Under this agenda item, the following working papers were presented:

- WP/02 - *Review of the status of implementation of PPRC/1 conclusions and decisions in force* (Secretariat)
- WP/03 - *Review of the status of implementation of the GREPECAS conclusions and decisions in force (*Secretariat)
- WP/04 - *Status of air navigation deficiencies in the CAR/SAM Regions with "U" priority* (Secretariat)

1.1 Review of the implementation status of PPRC/1 Conclusions and Decisions in force

1.1.1 The Meeting, upon analyzing Conclusion 1/1 - *Actions to improve processing of air navigation deficiencies*, Decisions 1/2 - *GREPECAS Procedural handbook* and 1/3 - *Programmes and Projects Review Committee (PPRC) terms of reference and work programme*, considered that these had been completed and with regard to Decision 1/4 - *GREPECAS annual report content*, considered that it was no longer valid and was superseded by draft Decision 2/8 – *GREPECAS Annual Report*.

1.2 Review of the implementation status of GREPECAS Conclusions and Decisions in force

1.2.1 The Meeting analyzed GREPECAS conclusions and decisions considered valid during the PPRC/1 Meeting, as well as the actions taken to date by the CAR/SAM States/Territories/international organizations and/or ICAO Secretariat for implementation, and in this respect, considered that all conclusions and decisions had been completed. Refer to **Appendix A** to this agenda item.

1.3 Status of air navigation deficiencies in the CAR/SAM Regions with "U" priority

1.3.1 The Meeting noted the actions carried out by ICAO to improve processing of air navigation deficiencies (Conclusion PPRC 1/1) and confirmed that the GREPECAS Air Navigation Deficiencies Database (GANDD) continues to be the official application for management of deficiencies, noting that the Air Navigation Deficiencies (ANDEF) application of the Integrated Safety Trend Analysis and Reporting System (iSTARS) scheduled for launch in December 2012 had been postponed until further notice.

1.3.2 The Meeting noted that since the PPRC/1 Meeting, the number of priority "U" deficiencies in the CAR Region had dropped by 40% while in the SAM Region the situation remained practically the same. **Appendices B and C** to this agenda item show a comparison between the current status of deficiencies with that of the PPRC/1 Meeting.

1.3.3 The Meeting took note of a number of improvements recommended for the revised methodology for processing priority "U" deficiencies involving the application of the Hazard Identification and Risk Assessment (HIRA) and the management of the GANDD resulting from the Workshop on the Management of Air Navigation Deficiencies conducted by ICAO in May 2013, including the following:

HIRA:

a) Update the description of the HIRA process, revising the title and the description of fields, such as field 8 on *Potential consequences of the deficiency*
b) Review the revised methodology based on the safety requirements contained in Annex 19
c) The need was identified for an ICAO workshop on SSP and SMS implementation in line with the new *Safety Management Manual* (Doc 9859) and Annex 19 for the application of the HIRA process
d) There is a need to train States on the practical use of HIRA methodology
e) International organizations, like IATA, IFALPA, etc., should be encouraged to provide regional safety information for ICAO to address this issue
f) Consideration should be given to the importance of data analysis for establishing an appropriate risk assessment criterion in order to reduce subjectivity in the analysis

GANDD:

a) Include a function to add evidence (files) to justify the resolution of the deficiency
b) Include a data export function in the GANDD
c) States should make more use of the GANDD to update information on air navigation deficiencies

1.3.4 In addition, the Secretariat recalled that in accordance with the methodology approved by GREPECAS for the management of deficiencies, the lack of response from a State to conduct the HIRA process on a deficiency could be considered as possible evidence for lack of compliance by a service provider in the implementation of a SMS. The Meeting adopted the following draft conclusion:

Draft
Conclusion 2/1 Improvements to the Revised Air Navigation Deficiencies Methodology and the GREPECAS Air Navigation Deficiencies Database (GANDD)

That ICAO:

a) review and make the necessary modifications to improve the air navigation deficiencies methodology and GANDD based on the recommendations formulated under Agenda Item 1, paragraph 1.3.3; and
b) submit the improvements at the GREPECAS/17 Meeting.

APPENDIX A

STATUS AND FOLLOW-UP OF OUTSTANDING GREPECAS CONCLUSIONS AND DECISIONS – ACTION PLAN

Conc/Dec No. --- Strategic Objective[1]	Title of Conclusion/ Decision	Text of Conclusion/Decision	Follow-up and Remarks	Responsibility	Deliverable	Action by ANC	Status and Reporting/ Completion Date
C 12/67	**QUALITY ASSURANCE SYSTEMS FOR METEOROLOGICAL SERVICES IN THE CAR/SAM REGIONS**	That CAR/SAM States/Territories/ International Organizations make utmost efforts to establish quality assurance systems for meteorological services provided in support of international air navigation in the CAR/SAM Regions.	In the SAM Region all the States implemented the QMS/MET system and 5 of these States certified the QMS/MET system and the remaining ones are in the certification process. In the CAR Region, 5 States and 1 Territory have implemented the QMS/MET system, and 11 States are well advanced in the implementation of QMS/MET. Since practically all States have started establishing quality assurance systems for meteorological services, this conclusion has been completed.	States and Territories	Implementation of MET QMS	N/A	**Completed**

[1] The Council agreed to three Strategic Objectives for the triennium 2011- 2013 as follows (C-DEC 188/13 refers):
Strategic Objective A: ***Safety*** **-** *Enhance global civil aviation safety*
Strategic Objective B: ***Security*** **-** *Enhance global civil aviation security*
Strategic Objective C: ***Environmental Protection and Sustainable Development of Air Transport –*** *Foster harmonized and economically viable development of international civil aviation that does not unduly harm the environment*

Conc/Dec No. --- Strategic Objective[1]	Title of Conclusion/ Decision	Text of Conclusion/Decision	Follow-up and Remarks	Responsibility	Deliverable	Action by ANC	Status and Reporting/ Completion Date
C 13/23	**DEVELOPMENT OF A GUIDE FOR THE DRAFTING OF EMERGENCY PLANS FOR AERODROMES THAT MIGHT BE AFFECTED BY VOLCANIC ASH IN THE CAR/SAM REGIONS**	That the AERMET Subgroup, in coordination with the Secretariat, develops a guide for the drafting of emergency plans for aerodromes that might be affected by volcanic ash in the CAR/SAM Regions.	The guide was drafted, which is available in Spanish and English. Pending is its review by States.	ICAO	Guide for the drafting of emergency plans for aerodromes that might be affected by volcanic ash in the CAR/SAM Regions.	N/A	**Completed**
C 13/41	**NEED TO FURTHER AIS/MAP AUTOMATED SYSTEMS**	That, considering the need for CAR/SAM States/Territories/ International Organizations to develop automated systems for exchange of information/data and the resulting application of the aeronautical information management concept, GREPECAS consider: a) that automation of AIS services in the CAR/SAM Regions as an urgent matter necessary to make progress in line with developments related to the CNS/ATM elements that are already being implemented in these Regions; and b) urging ICAO to define the global data model for the exchange of aeronautical information as soon as possible.	Regarding item b), it is expected that ICAO define the exchange model. ICAO Headquarters has not yet provided a specific date. States and international organizations have made significant progress with the implementation of automated systems in the production and distribution of the IAIP. Costa Rica, Dominican Republic, Trinidad & Tobago (for States under the Piarco FIR), Cuba, Mexico and Nicaragua, as well as COCESNA (for Central America) are in the forefront in technologies related with global AIM. ICAO has taken note of the SARPs required for the exchange of aeronautical information, expected to be delivered by 2014, therefore, the conclusion has been completed.	ICAO	Guidelines and/or SARPs for the exchange model.	N/A	**Completed**

Conc/Dec No. --- Strategic Objective[1]	Title of Conclusion/ Decision	Text of Conclusion/Decision	Follow-up and Remarks	Responsibility	Deliverable	Action by ANC	Status and Reporting/ Completion Date
C 15/4	**D-VOLMET AERONAUTICAL DATA LINK REQUIREMENTS IN THE CAR/SAM REGIONS**	That the ICAO NACC and SAM Offices, in coordination with the ICAO SAM Office, amend Part VII Vol. I – ATS of the ANP to reflect the requirement for D-VOLMET aeronautical data link services in the CAR/SAM Regions.	The AERMET/SG, upon analyzing D-VOLMET implementation in the CAR/SAM Regions, proposes an amendment in ANP Volume I Basic, Part VII ATS. The amendment will be included in the new ANP publication. The amendment process to the ANP, Volume I, is in progress. Its completion is expected for the first quarter of 2014, therefore, the conclusion has been completed.	ICAO	Amendment to ANP Vol I – Basic, Part VII-ATS	N/A	**Completed**
C 15/35	**IMPLEMENTATION OF THE NEW ICAO FLIGHT PLAN MODEL**	Considering that States should take measures to implement the new ICAO flight plan model pursuant to Amendment No. 1 to the 15th Edition of the PANS-ATM (Doc 4444), and in order to establish a regional strategy to facilitate global implementation of this amendment that: a) based on the guidance material to be prepared by ICAO, CAR/SAM States/Territories and International Organizations take the necessary measures to prepare for the transition to the new flight plan model; and b) the Subgroup establish a contributory body to develop a regional strategy for the transition to the new flight plan model in the CAR/SAM Regions and the provisions associated with ATS messages.	CAR/SAM States and Territories successfully implemented Amendment1 to PANS/ATM (Doc 4444), 15th Edition. The transition to the new ICAO flight plan model was successfully conducted on 15 November 2012.	a) States/ Territories and International Organizations b) CNS/ATM/SG	Regional strategy for the implementation of a new ICAO flight plan model	Recognizing that many of the regions are progressing at a different pace for migration to new ICAO flight plan, the Commission reiterated the need for global coordination by ICAO HQ so as to ensure smooth transition at regional and national levels.	**Completed** Nov 2012

Conc/Dec No. --- Strategic Objective[1]	Title of Conclusion/ Decision	Text of Conclusion/Decision	Follow-up and Remarks	Responsibility	Deliverable	Action by ANC	Status and Reporting/ Completion Date
C 16/10 **C**	**MONITORING OF SIGMET RECEIVED IN BRASILIA INTERNATIONAL OPMET DATABANK**	That in the controls of OPMET information carried out by the Brasilia International Databank: a) priority is given to the analysis of most common errors in the headings of SIGMET; b) the results be sent to the ICAO SAM Office; and c) ICAO Lima and Mexico Offices submit the monitoring results to the corresponding States for them to take the pertinent actions to correct the deficiencies detected.	Ongoing activity taking into account items a), b) and c). The respective project coordination has carried out this activity on 4-7 June 2013. The results were very positive, given States response in providing on time information to the Brasilia and Washington data banks. Continuous activity carried out by the Brasilia OPMET data bank. The Regional Offices monitor the conduct of the activity and submit results to States, therefore, the conclusion has been completed.	Brasilia OPMET international data bank	SIGMET monitoring	Not analyzed by the Commission	**Completed**
C 16/13 **C**	**SIGMET WV TESTS**	That in order to keep a constant feedback and efficiency in the issuance of volcanic ash SIGMET starting 2010, the States, in coordination with the corresponding VAACs, carry out the SIGMET WV test during the month of September. The test should have a duration of 48 hours.	Included in MET Programme IAVW Project. States have taken note of the conduct of annual SIGMET WV tests every September, therefore, the conclusion has been completed.	CAR/SAM States/territories/ international organizations	SIGMET WV trials	Not analyzed by the Commission	**Completed**

Conc/Dec No. --- Strategic Objective[1]	Title of Conclusion/ Decision	Text of Conclusion/Decision	Follow-up and Remarks	Responsibility	Deliverable	Action by ANC	Status and Reporting/ Completion Date
C 16/16 **C**	**INSTALLATION OF AMHS USER TERMINALS IN METEOROLOGICAL UNITS WITH INTERNATIONAL OPMET REQUIREMENT**	That the corresponding States, when implementing the new AMHS system in substitution of the current AFTN system, take into consideration the installation of AMHS user terminals in the MET units of the States that have international OPMET requirements, in order to increase the availability of OPMET information and to comply with GREPECAS Conclusion 6/33.	States, upon implementing the new AMHS, are considering the installation of AMHS terminals at meteorological units with international OPMET requirement. In the CAR Region, many States are in the process of implementing this new AMHS. States have noted the need of installing AMHS terminals at MET stations with international requirements and many have done so, therefore, the conclusion has been completed.	CAR/SAM States/ territories/ international organizations	Installation of AMHS terminals at meteorological units with international OPMET requirement	Not analyzed by the Commission	**Completed**
C 16/17 **C**	**AMENDMENT TO CAR/SAM ANP BASIC AND FASID, PART VI - MET**	That: a) Part VI – MET of CAR/SAM ANP Basic and FASID Tables MET 1A and MET 2A are amended as shown in Appendix D to WP/08 of this meeting; and b) Table MET 2B of the CAR/SAM Facilities and Services Implementation Document (FASID): i. be eliminated from CAR/SAM FASID; and ii. be included as an Appendix to the CAR/SAM Guide for OPMET exchange.	Amendment to ANP Basic submitted on 6 March 2012. Amendment to ANP Basic – NACC information pending	ICAO NACC and SAM Offices Secretariat	Amendment to CAR/SAM Basic ANP, Part VI-MET	Not analyzed by the Commission	**Completed** Jun 2012

Conc/Dec No. --- Strategic Objective[1]	Title of Conclusion/ Decision	Text of Conclusion/Decision	Follow-up and Remarks	Responsibility	Deliverable	Action by ANC	Status and Reporting/ Completion Date
C 16/19 **C**	**ATM/MET SEMINAR/ WORKSHOP**	That in order to develop a list of possible MET requirements in support of ATM for the CAR/SAM Regions, ICAO, in coordination with WMO, conduct a seminar/workshop for the CAR/SAM Regions.	To be held at NACC RO on 29-31 October 2012	ICAO Regional Offices Lima and Mexico	ICAO/WMO seminar/workshop	Noted and invited the Secretary General to request support for the organization of the seminar/ workshop from WMO.	**Completed** Oct 2012
C 16/24 **A**	**HARMONIZATION OF TAXIWAY DESIGNATION**	That ICAO consider the development and provision of guidelines on the harmonization of taxiway designation in order to reduce operator confusion and to minimize runway incursions.	AGA section developed guidelines on the harmonization of taxiway designation and is currently under review The ICAO Aerodromes Panel has included this task in its work programme, expecting to finalize it in 2014, therefore, the conclusion has been completed.	ICAO HQ	Guidelines on the harmonization of taxiway designation	Supported the development and scope of ICAO guidelines and requested the Secretariat to include this matter in the work programme of the Aerodromes Panel.	**Completed**

Conc/Dec No. --- Strategic Objective[1]	Title of Conclusion/ Decision	Text of Conclusion/Decision	Follow-up and Remarks	Responsibility	Deliverable	Action by ANC	Status and Reporting/ Completion Date
C 16/31 **C**	**AVAILABILITY OF DOCUMENTATION IN SPANISH**	That the need to give priority, to the extent possible, to translating into Spanish the texts that are available only in English and that are of crucial importance for complying with ICAO SARPs, be proposed to ICAO with a view to achieving the AIS-AIM transition.	Quality Manual, Training Manual, Charting Manual, Guidelines in the Use of the Public Internet for Aeronautical Applications and eTOD Manual to be translated. ICAO HQ is drafting Doc 9839 – AIM/QMS and is preparing the AIM TRAIN manual, as well as the PANS/AIM and documentation indicated in this conclusion, for their translation into Spanish. Since HQ is translating the documentation, scheduled to be finalized in 2014, the conclusion has been completed.	ICAO HQ IIM/AIM	Text in Spanish of guidance material for AIS-AIM transition	Noted.	**Completed**
C 16/32 **C**	**GENERAL GUIDANCE FOR THE IMPLEMENTATION OF A GIS SYSTEM IN AIM**	GREPECAS approves as vital importance to support ICAO SARPs, the application of the General Guidance for the Implementation of a GIS System in AIM, towards achieving the transition from AIS to AIM in the States, Territories and International organizations of the CAR/SAM Regions.	CAR States are in the process of implementing the guides, which have been adopted by SAM States. In the SAM Region, all Sates have implemented a GIS system	CAR/SAM States/ territories/ international organizations	Apply general guidance for implementation of a GIS system in AIM	Noted.	**Completed**

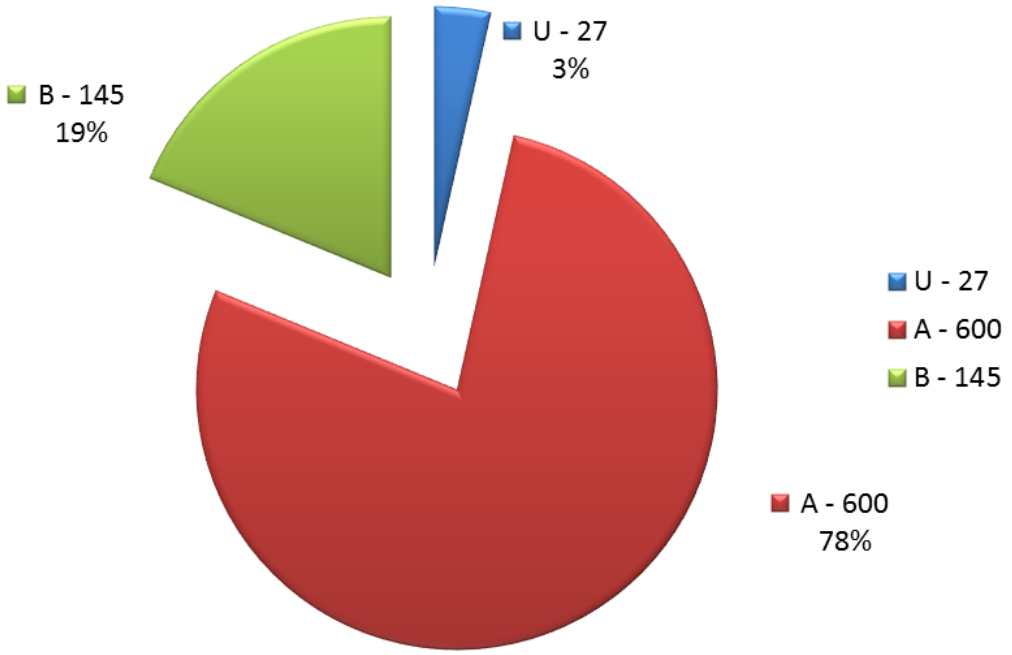
Conc/Dec No. --- Strategic Objective[1]	Title of Conclusion/ Decision	Text of Conclusion/Decision	Follow-up and Remarks	Responsibility	Deliverable	Action by ANC	Status and Reporting/ Completion Date
C 16/36 **C**	**COLLECTION OF INFORMATION ON EXISTING AND FUTURE AVIONICS IN THE CAR/SAM REGIONS**	Taking into account the importance of having information on avionics already installed and to be installed on user aircraft, for purposes of planning and cost/benefit analyses, it is urged that: a) States/Territories and International Organisations are urged to collect information on avionics already installed and to be installed in non-IATA domestic fleets and other general aviation users, suggesting the adoption of a format similar to that of the IATA survey form (Appendix D to this part of the Report), the results to be sent to the respective ICAO Regional Office by December 2010; b) IATA include the aforementioned information in the IATA database, informing the ICAO CAR/SAM Regional Offices about the response to this request; and c) The information collected to date in the SAM and CAR Regions be included in the mentioned data base, as well as any information that can be provided by the avionics manufacturers.	Difficulties in collecting the information from CAR/SAM States continue. This conclusion should be examined together with ICAO, to confirm/update the agreement for the collection of this information. The collection of information using the IATA is no longer being used. The collection of avionics information is being carried out in each Region as part of the activities being considered within the implementation of PBN, data links and nuew surveillance systems, therefore, the conclusion is no longer valid and has been completed.	CAR/SAM States/ territories/ international organizations	Collection of information on existing and future avionics Inclusion of avionics information in IATA survey form	Not analyzed by the Commission	**Completed**

Conc/Dec No. --- Strategic Objective[1]	Title of Conclusion/ Decision	Text of Conclusion/Decision	Follow-up and Remarks	Responsibility	Deliverable	Action by ANC	Status and Reporting/ Completion Date
C 16/38 **C**	**IMPROVEMENTS TO THE ACTIVITIES REFERRED IN ADS-B TRIALS**	That States/territories/ international organizations who are carrying out ADS-B trials are urged to: a) continue with the data collection and analysis, in accordance with GREPECAS guidelines (GREPECAS/15 Report, Appendix Q); b) search for the exchange of data between States, particularly with regard to coverage superposition and analysis criteria; c) solve, with the respective airspace users, the duplicate or illegal 24-bit Address cases identified, and inform in this respect to the ICAO Regional Offices; d) inform airspace users on any anomaly in the received ADS-B messages, in preparation of future ADS-B implementation; and e) duly inform the ICAO Regional Offices on the trial results, for their publication.	Valid: These improvements and considerations are being considered at the ADS-B trials by the NAM/CAR Ad-hoc Group and the SAM/IG. Ongoing activity prior to the installation of an ADS-B station. a) Many States are analysing ADS-B data b) ADS-B data sharing will be carried out as part of the analysis c) 24-bit address duplication is part of the data analysis d) Continuous activity prior to the installation of an ADS-B station. The ad-hoc groups will inform ICAO on their activities. States have taken note of the actions required when conducting ADS B trials, therefore, the conclusion has been completed.	CAR/SAM States/ territories/ international organizations	Improvement in activities related to ADS-B trials	Noted.	**Completed**
C 16/40 + associated C 16/41 C	**TRAINING FOR AERONAUTICAL PROFESSIONAL COMPETENCE**	That CAR/SAM States/ territories and international organizations, take into consideration the list of short and mid-term and training requirements shown in Appendix D to the report of the CNS/ATM/SG/1 Meeting, so that CATCs, in coordination with civil that CAR/SAM States/territories and international organizations, aviation authorities, prepare aeronautical training programmes which contemplate regional air navigation and safety requirements.	To guide States on competence training, CATC/121 meeting (Lima, Peru, 3-5 Dec 2012) considered that the Mexico and Peru training centres draft an agenda for a seminar/workshop based on competence, to be conducted in the second semester of 2013	CAR/SAM States/ territories/ international organizations	Aeronautical training programmes taking into consideration regional requirements.	Noted.	**Completed**

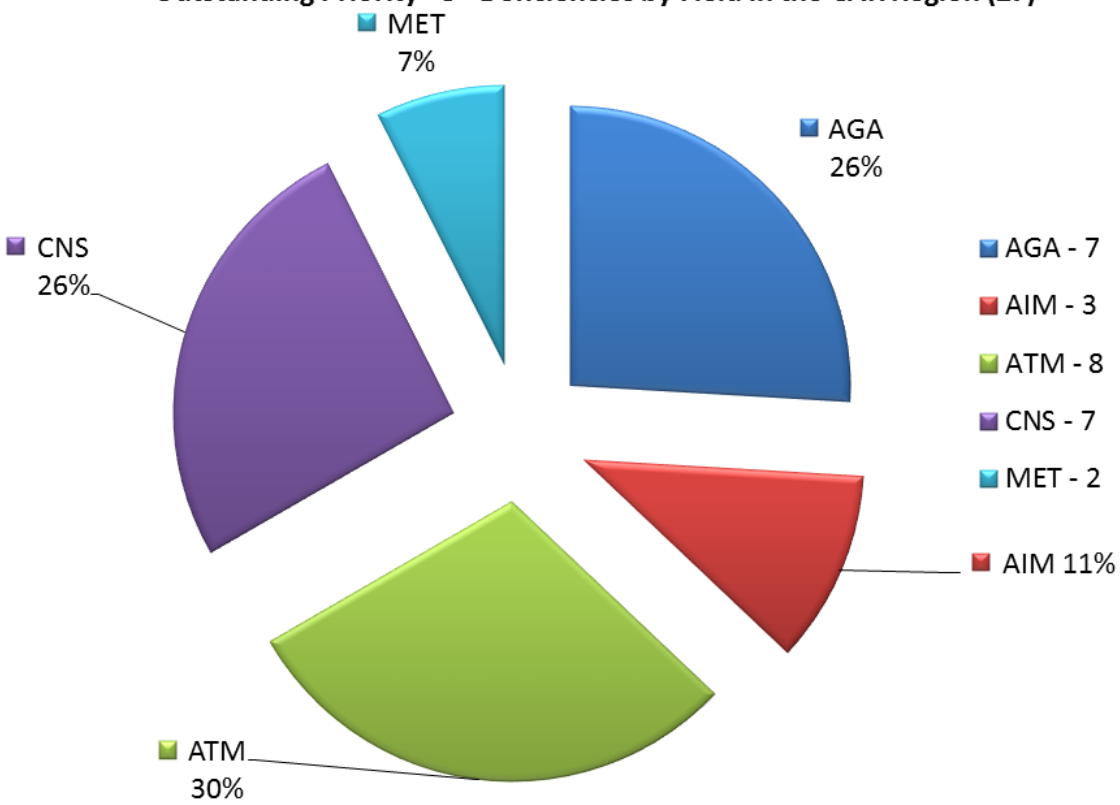
Conc/Dec No. --- Strategic Objective[1]	Title of Conclusion/ Decision	Text of Conclusion/Decision	Follow-up and Remarks	Responsibility	Deliverable	Action by ANC	Status and Reporting/ Completion Date
C 16/43 A	**REVISED METHODOLOGY FOR THE IDENTIFICATION, ASSESSMENT AND REPORTING OF AIR NAVIGATION DEFICIENCIES**	That: a) ICAO consider the proposed revised methodology for the identification, assessment and reporting of air navigation deficiencies presented in Appendix A to this part of the report; and b) in the interim, GREPECAS adopt the revised methodology as a test-bed and notify the ANC of the results.	a) ICAO noted the revised methodology for the identification, assessment and reporting of deficiencies and is awaiting for the results from the tests b) The methodology continues as a test bed. ICAO has taken note of the revised methodology, found in a trial platform before its final adoption, therefore, the conclusion has been completed.	ICAO HQ GREPECAS Secretary	Proposed revised methodology for identification, assessment and reporting of air navigation deficiencies	Commended the work by GREPECAS proposing a revised methodology for identification, assessment and reporting of air navigation deficiencies. Any decision in this matter should wait for the results of the trials. The Secretariat is called upon to ensure that any revised methodology to identify, assess and report of air navigation deficiencies should be applied uniformly by all PIRGs and regions and to verify other proposals presented by other PIRGs.	**Completed**

APPENDIX B

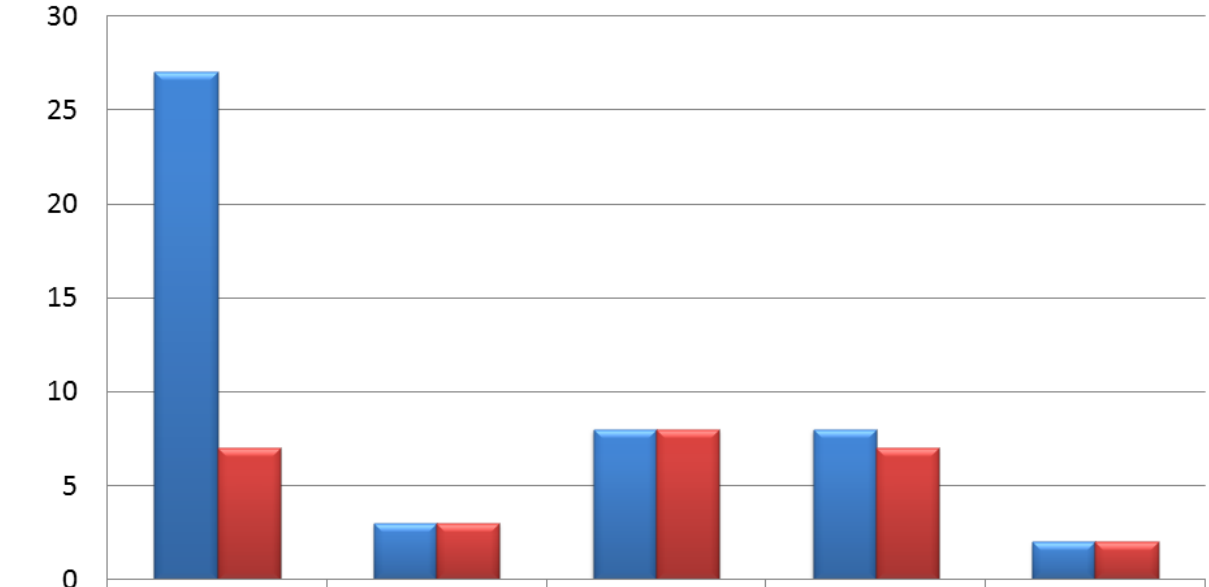
Outstanding Air Navigation Deficiencies by Priority "U", "A" and "B" in the CAR Region (772)



Outstanding Priority "U" Deficiencies by Field in the CAR Region (27)



"U" Deficiencies Status and Changes Between the PPRC/1 and PPRC/2 Meetings - CAR Region



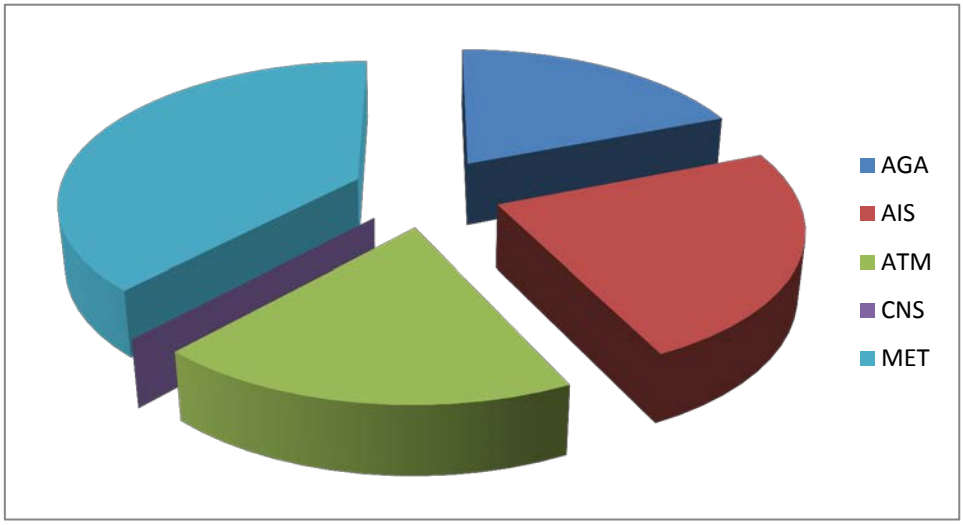
	AGA	AIM	ATM	CNS	MET
2012	27	3	8	8	2
2013	7	3	8	7	2

APPENDIX C

TYPE "U" DEFICIENCIES IN THE SAM REGION BETWEEN APRIL 2012 AND JUNE 2013

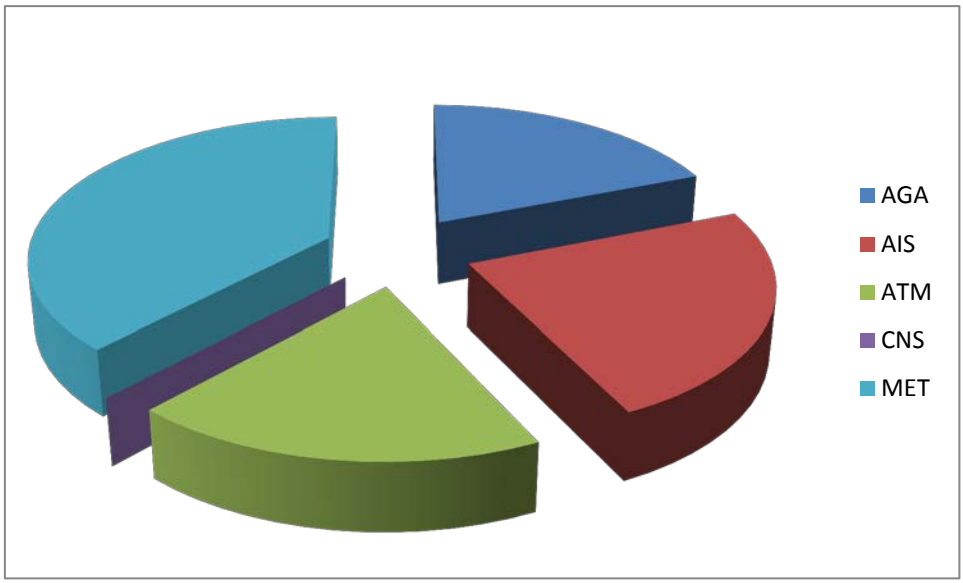
Status of type "U" deficiencies as of April 2012 - SAM Region

AGA	4
AIS	5
ATM	4
CNS	0
MET	8
TOTAL	**21**



Status of type "U" deficiencies as of June 2012 - SAM Region

AGA	4
AIS	4
ATM	4
CNS	0
MET	8
TOTAL	**20**



Agenda Item 2 : Air navigation activities at global and inter-regional level

Under this agenda item, the following papers were presented:

- Working papers on Agenda Item 2.1:
  WP/05 - *Results of the PIRG and RASG Global Coordination Meeting (*Secretariat); WP/17 - *Regional and global air navigation reporting* (Secretariat); WP/19 - *Regional priorities and targets for air navigation* (Secretariat)
- Working and information papers on Agenda Item 2.2:
  WP/06 - *Follow-up to recommendations of the Twelfth Air Navigation Conference (AN-Conf/12)* (Secretariat); WP/18 - *Funding of aviation infrastructure, oversight functions and aviation systems* (Secretariat); WP/20 - *Support for the Global Air Navigation Plan, Aviation System Block Upgrades and regional implementation* (United States); IP/03 - *The evolution of electronic tools and data: a strategic plan for the creation of a community-driven decision-support digital environment for the global aviation community* (Secretariat); IP/04 - *The mini-global demonstration* (United States); IP/08 - *A comprehensive strategy for air navigation: revised global Air Navigation Plan* (Secretariat)
- Working papers on Agenda Item 2.3:
  WP/07 - *Update of RASG-PA Projects* (Secretariat)

2.1 Result of the PIRG and RASG Global Coordination Meeting

2.1.1 The Meeting was informed on the results from the PIRG and RASG Global Coordination Meeting held in Montreal, Canada, on 19 March 2013, and considered the need to establish regional air navigation priorities and targets consistent with the new version of the *Global Air Navigation Plan (GANP)* and the *Aviation System Block Upgrade (ASBU)* framework in conformity with the results of the Twelfth Air Navigation Conference (AN-Conf/12) Recommendations 6/1 and 6/12. In addition, the Meeting deemed that, in order to ensure coherent actions and avoid duplication, regional air navigation priorities and targets should be coordinated with RASG-PA. In this respect, the Meeting formulated the following draft decision:

Draft
Decision 2/2 Regional Priorities and Targets for Air Navigation

That GREPECAS:

a) establish, as per Recommendations 6/1 and 6/12 of the Twelfth Air Navigation Conference (AN-Conf/12), regional priorities and targets for air navigation, consistent with the Global Air Navigation Plan (GANP) and Aviation System Block Upgrades (ASBUs), by March 2014, if possible, and by May 2014 at the latest; and
b) as per GREPECAS Decision 16/3, the regional priorities and targets for air navigation will be coordinated with RASG-PA to ensure consistency of action and avoid overlap.

2.1.2 The Meeting noted that as part of the actions to align the regional performance-based plans, the SAM Region had aligned the A*ir Navigation System Performance-based Implementation Plan for SAM Region (SAM PBIP)* with the ASBU framework, establishing the modules and the respective implementation priorities in accordance with regional operational requirements. The SAM PBIP will be presented for approval at the Thirteenth Meeting of Civil Aviation Authorities of the SAM Region (RAAC/13) in Bogota, Colombia, from 4 to 6 December 2013.

2.1.3 Similarly, the NAM/CAR Regional Performance Based Air Navigation Implementation Plan (RPBANIP) will be revised by September 2013 and presented to the CAR Region Directors of Civil Aviation for approval by December 2013. Both regional plans will then be submitted to GREPECAS for final approval in 2014. The Meeting was informed that GREPECAS/17 is planned for the second semester of 2014. One State expressed concern that the meeting timeframe would be too late to discuss regional priorities, metrics, targets, content for the regional performance dashboards and global air navigation report. The Secretariat clarified that approvals would be sought from the respective directors of civil aviation during the planned meetings and by correspondence using the fast track mechanism.

2.1.4 In addition, the Meeting was informed of ICAO plans to count with a regional performance dashboard on the ICAO websites of the NACC and SAM Regional Offices. The dashboard would initially contain a dataset on the progress made with implementation of key global air navigation priorities such as Performance Based Navigation (PBN), Continuous Descent Operations (CDO), Continuous Climb Operations (CCO), Aeronautical Information Management (AIM), Air Traffic Flow Management (ATFM) and estimated fuel savings and CO2 emissions reduction benefits accrued from operational improvements from associated performance indicators and metrics. The regional performance dashboard is scheduled for implementation in March 2014.

2.1.5 The Meeting took note of the Global Air Navigation Report, of which the first edition is planned for publication in April 2014. The objective of the annual Global Air Navigation Report is to assist PIRGs and States with understanding which areas require special attention to effectively improve air navigation performance worldwide as well as to publicize information on implementation success stories.

2.1.6 In this regard, the Meeting considered that the PPRC will be responsible for the collecting, monitoring and reporting implementation progress of operational improvements in the CAR/SAM Regions through information provided by projects and States and will present an annual report in contribution to the Global Air Navigation Report. The Meeting therefore formulated the following draft conclusion:

Draft
Conclusion 2/3 Regional and Global Air Navigation Reporting

That States:

a) support the plan to produce an online Regional Performance Dashboard in March 2014 and annual Global Air Navigation Report in April 2014;
b) provide requisite information to the ICAO Regional Offices to demonstrate operational improvements by February 2014, and periodically thereafter; and
c) establish, if not yet done so, a performance measurement strategy that comprises data compilation, processing, storage and reporting for the identified regional performance metrics for air navigation systems.

2.2 Results of the Twelfth Air Navigation Conference (AN-Conf/12)

2.2.1 The Meeting agreed with the proposal for States and international organizations to follow-up on AN-Conf/12 recommendations as applicable.

2.2.2 In addition, the Meeting agreed that the AN-Conf/12 recommendations be analysed for impact on GREPECAS programmes and projects, and that the Programme Coordinators should follow-up on, review and revise the projects accordingly and present the results to the GREPECAS/17 Meeting.

2.2.3 In this respect, the Meeting adopted the following draft conclusions:

Draft
Conclusion 2/4 Follow-up on AN-Conf/12 Recommendations by States and International Organizations

That States and international organizations, on the basis of analysis to **Appendix A** hereto, take follow-up action as appropriate on the applicable recommendations of AN-Conf/12.

Draft
Conclusion 2/5 Follow-up to AN-Conf/12 Recommendations by GREPECAS

That in order to follow-up on AN-Conf/12 recommendations and report to the GREPECAS/17 Meeting, the ICAO Regional Offices:

a) inform on the activities and actions to the recommendations as assigned to ICAO; and
b) study the recommendations of the AN-Conf/12, initiate appropriate follow-up actions and submit a report on the outcomes of these actions in accordance with the distribution presented in **Appendix B**.

2.2.4 The Meeting took note of the new edition of the *Global Air Navigation Plan (GANP)* and the *Aviation System Block Upgrade (ASBU)* concept, to be presented at the Thirty-eighth Session of the ICAO Assembly, to be held in Montreal, Canada, from 24 September to 4 October 2013, and invited State support. In this respect, the Meeting formulated the following draft conclusion:

Draft
Conclusion 2/6 Support to GANP and ASBU Concept at the Thirty-eighth Session of the ICAO Assembly

That CAR/SAM States support the new edition of the Global Air Navigation Plan (GANP) and the Aviation System Block Upgrade (ASBU) concept during the Thirty-eighth Session of the ICAO Assembly.

2.2.5 The Meeting was informed on the results of the AN-Conf/12 and Sixth Worldwide Air Transport Conference (ATConf/6) with regard to funding and financing issues, including the implementation of a new generation of air navigation systems, the financing of safety surveillance functions, aviation security and economic aspects, and support for the corresponding 2014 - 2016 (see PPRC/2-WP/17, section 4).

2.2.6 The Meeting also took note of a cost-benefit analysis summary for implementation of the United States Next Generation Air Transportation System (NextGen) with the aim that interested States consider it as an example when conducting a cost-benefit analysis.

2.2.7 The Meeting was informed on the activities carried out by ICAO in the collection, processing and distribution of data to the aeronautical community, as well as the evolution of forecasts in this regard, with the aim that the aviation community count on effective electronic tools and centralized data bases designed to support GANP and GASP implementation.

2.2.8 The Meeting took note of the United States (FAA) "*Mini Global Demonstrations"* initiative planned for 2014, which simulates seamless transfer of data between air navigation service providers (ANSPs) to ultimately promote more efficient operations across Flight Information Regions. United States invited ANSPs in the CAR and SAM Regions to observe or participate in the initiative.

2.3 **RASG PA Coordination Matters**

2.3.1 The Meeting analyzed the status of RASG-PA projects: *Consistent use of standard Spanish and English phraseology* in accordance with the ICAO PANS-ATM – *Air Traffic Management* (Doc 4444) and the Bird Strike Reduction Programme (WIN-CAP), and deemed it convenient that the ICAO AGA and ATM Programme Coordinators follow-up on the activities of these projects with the RASG-PA Champions to avoid duplication of resources and achieve regional efficiency. It was also recommended that CARSAMPAF representatives attend RASG-PA meetings and WIN-CAP representatives attend CARSAMPAF conferences.

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
Recommendation 1/1 – The draft Fourth Edition of the Global Air Navigation Plan (Doc 9750, GANP)			
That States:			
a) agree in-principle, with the replacement of the introduction by the high level policy principles as shown in the appendix and inclusion of other proposed improvements made at this Conference, into the updated draft Fourth Edition of the GANP;	a): Noted.	a) and c): Develop and review the new draft version of the GANP taking into account AN-Conf/12 recommendations.	a) Note
b) should have the opportunity to provide any final comments on the updated draft GANP to ICAO before it is considered by the ICAO Assembly in 2013;	b): Approved validation process of the new draft version of the GANP as proposed by the ANC.	b): Noted.	b) Note
That ICAO:			
c) include the key air navigation policy principles presented in the appendix under "Global Air Navigation Plan" into the Fourth Edition of the *Global Air Navigation Plan* (Doc 9750, GANP);	c): Approved as part of the GANP approval.	-	c) to g): Note
d) develop financial policies which support efficient acquisition and implementation of global air navigation services infrastructure and aircraft equipage;	d): Requested Secretary General to take appropriate action.	d): Contribute to the definition of financial policies.	

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
e) taking a total systems and performance-based approach, create a Standards and Recommended Practices development plan for the aviation system block upgrades including the establishment of agreed global priorities between the different blocks and modules; f) define a stable and efficient process for endorsement by the 38th Session of the ICAO Assembly, for updating the GANP that ensures stability in module timelines for any future updates; and g) ensure that the nature and status of the planning information in the various documents pertaining to the GANP are consistent and complete and allow due account to be taken of the inputs from ATM research, development and deployment programmes.	e) to g): Noted.	e) to g): Approved and include in the Air Navigation work programme.	
Recommendation 1/2 – Implementation That ICAO: a) through its regional offices, provide guidance and practical assistance to States and regions and subregions when they decide to implement individual blocks or modules of the aviation system block upgrades; b) establish a group and improved mechanism for interregional cooperation to ensure harmonization of air traffic management; and c) assist States and regions in training and capacity-building towards implementation of the relevant modules of the aviation system block upgrades.	a) to c): Noted.	a) to c): Consider including into the Air Navigation work programme and requested the Secretary General to take appropriate action.	a) to c): Note.

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
Recommendation 1/3 – Guidance on business cases That ICAO complete the development of guidance material on business case analysis, adopting such appropriate guidance material that may be already available or under development.	Approved and requested the Secretary General to take appropriate action.	Contribute to the definition of business cases and related guidance.	Note
Recommendation 1/4 – Architecture That ICAO: a) develop, for inclusion in the first update of the GANP after the 38th Session of the ICAO Assembly, a global ATM logical architecture representation in support of the GANP and planning work by States and regions; and b) develop a breakdown of the logical architecture of the ground system to the level needed to best address the global interoperability issues.	a) and b): Noted.	a) and b): Approved and include in the Air Navigation work programme.	a) and b): Note.
Recommendation 1/5 – Time reference accuracy That ICAO define the accuracy requirements for the future use of a time reference and to prepare the necessary amendments to Standards and Recommended Practices.	Noted.	Approved and include in the Air Navigation work programme	Note

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
Recommendation 1/6 – Data communications issues That ICAO: a) organize a multidisciplinary review of air traffic control communication requirements and issues; and b) review the operation, management and modernization of a regional digital network technical cooperation project and other similar regional experiences with the aim that this efficient practice can be adapted for use in other ICAO regions; That States: c) explore multi-modal solutions when appropriate to overcome transition issues; and d) anticipate and accelerate the migration of air traffic management communication systems towards more efficient technologies to timely service the aviation system block upgrade modules.	a) and b): Noted. c) and d): Noted.	a) and b): Approved and include in the Air Navigation work programme. c) and d): Approved and requested the Secretary General to bring to the attention of States.	a) and b): Note c) and d): States to take appropriate action
Recommendation 1/7 – Automatic dependent surveillance — broadcast That States: a) recognize the effective use of automatic dependent surveillance — broadcast (ADS-B) and associated communication technologies in bridging surveillance gaps and its role in supporting future trajectory-based air traffic management operating concepts, noting that the full potential of ADS-B has yet to be fully realized; and	a) to c): Noted.	a) to c): Noted and requested the Secretary General to bring to the attention of States.	a) to b): Note.

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
b) recognize that cooperation between States is key towards improving flight efficiency and enhancing safety involving the use of automatic dependent surveillance — broadcast technology; That ICAO: c) urge States to share automatic dependent surveillance — broadcast (ADS-B) data to enhance safety, increase efficiency and achieve seamless surveillance and to work closely together to harmonize their ADS-B plans to optimize benefits.			c) States to share ADS-B data to enhance safety, increase efficiency and achieve seamless surveillance and to work closely together
Recommendation 1/8 – Rationalization of radio systems That ICAO and other stakeholders to explore strategies for the decommissioning of some navigation aids and ground stations, and the rationalization of the on-board communications, navigation and surveillance systems while maintaining safety and coordinating the need for sufficient system redundancy.	Noted.	Approved and include in the Air Navigation work programme.	States and IOs explore strategies for the decommissioning of some navigation aids and ground stations, and the rationalization of the on-board CNS systems, while maintaining safety.
Recommendation 1/9 – Space-based automatic dependent surveillance — broadcast That ICAO: a) support the inclusion in the Global Air Navigation Plan, development and adoption of space-based automatic dependent surveillance — broadcast surveillance as a surveillance enabler; b) develop Standards and Recommended Practices and guidance material to support space-based automatic dependent surveillance — broadcast as appropriate; and c) facilitate needed interactions among stakeholders, if necessary, to support this technology.	a) to c): Noted.	a) to c): Approved and include in the Air Navigation work programme.	a) to c): Note.

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
Recommendation 1/10 – Automatic dependent surveillance — self-organizing wireless data networks That ICAO consider the use of self-organizing wireless data networks based on VDL Mode-4 technology taking into account: a) possible technical advantages; b) whether it satisfies any unmet operational need; and c) its impact of forward and retro-fit on the global air transport fleet.	a) to c): Noted.	a) to c): Approved and include in the Air Navigation work programme.	a) to c): Note.
Recommendation 1/11 – Automation roadmap That ICAO: a) develop a global roadmap for the evolution of ground air traffic management automation systems in line with aviation system block upgrade implementation; and b) develop performance-based system requirements for air traffic management automation systems so that: 1) where necessary these systems are interoperable across States and regions; and 2) the function and operation of these systems will result in consistent and predictable air traffic management system performance across States and regions.	a) and b): Noted.	a) and b): Approved and include in the Air Navigation work programme.	a) to b): Note.

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
Recommendation 1/12 – Development of the aeronautical frequency spectrum resource That States and stakeholders: a) recognize that a prerequisite for the deployment of systems and technologies is the availability of adequate and appropriate radio spectrum to support aeronautical safety services; b) work together to deliver efficient aeronautical frequency management and "best practices" to demonstrate the effectiveness and relevance of the industry in spectrum management; c) support ICAO activities relating to the aviation spectrum strategy and policy through relevant expert group meetings and regional planning groups; and d) support Assembly Resolution A36-25 and the requirement for sufficient State representation of aviation interests at World Radiocommunication Conferences (WRCs) and relevant International Telecommunication Union WRC preparatory meetings;	a) to d): Noted.	a) to d): Noted and requested the Secretary General to bring to the attention of States and Stakeholders.	a) to d): PIRGs, States and IO to take appropriate action

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
That ICAO: e) develop and implement a comprehensive aviation frequency spectrum strategy to be referenced to the Global Air Navigation Plan (GANP), which includes the following objectives: 1) timely availability and appropriate protection of adequate spectrum to create a sustainable environment for growth and technology development to support safety and operational effectiveness for current and future operational systems and allow for the transition between present and next generation technologies; 2) demonstrate efficient use of the spectrum allocated through efficient frequency management and use of best practises; and 3) clearly state in the strategy the need for aeronautical systems to operate in spectrum allocated to an appropriate aeronautical safety service; f) establish timelines and methodologies to complement the GANP planning objectives with a frequency spectrum strategy; g) continue to allocate adequate resources with a far-sighted approach to its work programmes regarding aviation spectrum challenges; h) consider a methodology to enable ATM stakeholders to effectively share ICAO material on aviation frequency spectrum as a common guidance for securing the aviation position at World Radiocommunication Conferences; and	e) to i): Noted.	e) to i): Approve and include in the Air Navigation work programme.	e) to i): Note.

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
i) consider structuring the *Handbook on Radio Frequency Spectrum Requirements for Civil Aviation including Statement of Approved ICAO Policies* (Doc 9718) by using a web-based platform as appropriate, to further support States in their implementation of the spectrum strategy.			
Recommendation 1/13 – Potential use of fixed satellite service spectrum allocations to support the safe operation of remotely piloted aircraft systems That ICAO support studies in the International Telecommunication Union Radio Communication Sector (ITU-R) to determine what ITU regulatory actions are required to enable use of frequency bands allocated to the fixed satellite service for remotely piloted aircraft system command and control (C2) links to ensure consistency with ICAO technical and regulatory requirements for a safety service.	Noted.	Approved and include in the Air Navigation work programme.	Note

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
Recommendation 1/14 – Long-term very small aperture terminal spectrum availability and protection That: a) ICAO and Member States not support additional international mobile telecommunications spectrum allocations in the fixed satellite service C-band spectrum at the expense of the current or future aeronautical very small aperture terminal networks; and b) ICAO and Member States pursue this matter in the International Telecommunication Union Radio Communication Sector (ITU-R) and during the World Radiocommunication Conference (WRC-15), with a coordinated proposal to promote a solution where the international mobile telecommunications spectrum allocation does not compromise the availability of the aeronautical very small aperture terminal networks.	a) and b): Noted.	a) and b): Approved and include in the Air Navigation work programme and request the Secretary General to take appropriate action.	a) and b): States to take appropriate action for a long-term VSAT spectrum availability and protection.
Recommendation 1/15 – Performance monitoring and measurement of air navigation systems That ICAO: a) establish a set of common air navigation service performance metrics supported by guidance material, building on existing ICAO documentation (e.g. Manual on Global Performance of the Air Navigation System (Doc 9883) and the Manual on Air Navigation Services Economics (Doc 9161)); b) promote the development and use of "leading safety indicators" to complement existing "lagging safety indicators" as an integral and key component to drive improvement in performance and in the achieved management of risk; and	a) to c): Noted.	a) to c): Approved and include in the Air Navigation work programme.	a) and c): Note.

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
c) encourage the early and close involvement of the regulator and oversight bodies in the development, proving of concepts and implementation of the aviation system block upgrades and regional programmes.			
Recommendation 1/16 – Access and equity considerations That States: a) ensure, as part of the aviation system block upgrade implementation, the principles of access and equity are included in all airspace modernization and redesign efforts; and b) detail how they will monitor the service providers to ensure that they are providing fair, equitable, and efficient access to all aviation services including general aviation.	a) and b): Noted.	a) and b): Noted and requested the Secretary General to take appropriate action and bring to the attention of States and Stakeholders.	a) and b): States to ensure the principles of access and equity are included in all airspace modernization and redesign efforts and detail how they will monitor the service providers to ensure that they are providing fair, equitable, and efficient access to all aviation services including general aviation.
Recommendation 2/1 – ICAO aviation system block upgrades relating to airport capacity That the Conference: a) endorse the aviation system block upgrade modules relating to airport capacity included in Block 1 and recommend that ICAO use them as the basis of its standards work programme on the subject; b) agree in principle to the aviation system block upgrade modules relating to airport capacity included in Blocks 2 and 3 as the strategic direction for this subject; c) recommend that the ICAO Council supports the implementation of the APEX in Safety Programme and asks the Secretary General to continue ICAO participation in safety reviews and sharing of relevant safety information, as provided for in the Memorandum of Cooperation between ACI and ICAO;	c): Noted	c): Noted.	c) Note

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
That ICAO: d) include, following further development and editorial review, the aviation system block upgrade modules relating to airport capacity in the draft Fourth Edition of the *Global Air Navigation Plan* (Doc 9750, GANP);	d): Noted.	d): Approved and include in the Air Navigation work programme.	d) Note
e) States and service providers ensure that airport capacity, including relevant airport planning and operational issues, are addressed and accounted for when planning for air traffic management capacity and system performance;	e): Noted.	e): Approved and include in the Air Navigation work programme, and requested the Secretary General to take appropriate action.	e) States and service providers ensure that airport capacity issues are addressed and accounted for when planning for air traffic management capacity and system performance;
f) work with the Airports Council International (ACI) and other interested parties on guidance material to promote the globally-harmonized implementation of airport collaborative decision-making, including best practices and global technical standards; and	f): Noted.	f): Approved and include in the Air Navigation work programme.	f) Note
That States: g) according to their operational needs, implement the aviation system block upgrade modules relating to airport capacity included in Block 0.	g): Noted.	g): Approved and requested the Secretary General to bring to the attention of States and Stakeholders.	g) Note
Recommendation 2/2 – Development of ICAO provisions for remotely operated air traffic services That ICAO provide: a) updates on additional guidelines for surveillance and air and ground communications systems;	a) to c): Noted.	a) to c): Approved and include in the Air Navigation work programme.	a) to c): Note
b) requirements for the use of sensors and display technologies to replace visual observation to air traffic in the provision of air traffic services; and			
c) requirements for air traffic services (ATS) personnel and flight crew training, ATS personnel licensing and related procedures for remotely operated air traffic services.			

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
Recommendation 2/3 – Security of air navigation systems That ICAO: a) seek the support of States and stakeholders to complete its work in developing a robust, secure aeronautical telecommunication network; and b) establish, as a matter of urgency, an appropriate mechanism including States and industry to evaluate the extent of the cyber security issues and develop a global air traffic management architecture taking care of cyber security issues.	a) and b): Approved and include in the Security work programme.	a) and b): Approved and include in the Air Navigation work programme.	a) to b): Note
Recommendation 2/4 – Optimized management of wake turbulence That ICAO: a) accelerate the implementation of new ICAO wake turbulence categorization systems and to pursue development of dynamic wake turbulence separation provisions with supporting implementation guidance; b) support the continuation of the cooperative work on-going addressing the static pair wise separation, with a view to having revised global provisions in place in advance of Block 1 timescales; and c) develop the wake vortex flight safety system (WVSS) concept description along with a proposed system architecture with the possibility for WVSS to be included in the aviation system block upgrade Modules B1-70, B2-70, B1-85 and B2-85.	a) to c): Noted	a) to c): Approved and include in the Air Navigation work programme.	a) to c): Note

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	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
Recommendation 2/5 – Performance-based navigation for terminal and approach operations implementation That States and stakeholders: a) urgently implement, where appropriate, performance-based navigation for terminal and approach operations in accordance with Assembly Resolution A37-11; b) urgently adopt efficient operations approval procedures and support the mutual recognition of other States' operational approvals; c) share their best practices including required navigation performance authorization required implementation initiatives as well as relevant flight operational safety assessment documentation with other States; d) determine operational requirements in support of their airspace concept in accordance with the processes described in the *Performance-based Navigation (PBN) Manual* in order to select the appropriate PBN specification; e) including regulators, airport authorities, air navigation service providers, commercial operators, General Aviation and the military, work together at all levels and in close coordination to ensure successful performance-based navigation implementation;	a) to g): Noted.	a) to g): Noted and requested the Secretary General to bring to the attention of States and Stakeholders.	a) States and IOs urgently implement, where appropriate, PBN for terminal and approach operations in accordance with Assembly Resolution A37-11; b) States and IOs urgently adopt efficient operations approval procedures and support the mutual recognition of other States' operational approvals; c) States and IOs share their best practices d) States and IOs determine operational requirements in support of their airspace concept in accordance with the processes described in the *PBN Manual* e) States and IOs work together at all levels and in close coordination to ensure successful PBN implementation;

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f) international organizations and industry continue to provide resources to support ICAO with the development of provisions, guidance and training material in support of performance-based navigation implementation; and g) States, when considering performance-based navigation routes arriving at and departing from airports, should ensure that air navigation service providers and aircraft operators involve airport operators from the outset so that they may consult fully with local communities in order to avoid adverse noise impact on those communities.			f) IOs provide resources to support ICAO with the development of provisions, guidance and training material in support of PBN implementation g) States, when considering PBN routes arriving at and departing from airports, should ensure that air navigation service providers and aircraft operators involve airport operators from the outset so that they may consult fully with local communities in order to avoid adverse noise impact on those communities
Recommendation 2/6 – Development of ICAO provisions for performance-based navigation for en route terminal and approach operations That ICAO study and make appropriate additions where required to the ICAO provisions, including: a) required navigation performance authorization-required departure navigation specification; b) the application of performance-based navigation standard terminal arrival routes for en route independent simultaneous approaches; c) assessment of the need for ICAO provisions on the use of ground-based augmentation system to append standard instrument arrival and standard instrument departure procedures to approach and landing trajectory; d) development of separation minima to support all performance-based navigation specifications and which will also allow for operations where mixed performance requirements are in effect;	a) to g): Noted.	a) to g): Approved and include in the Air Navigation work programme.	a) to g): Note.

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e) advanced use of performance-based navigation to support aviation system block upgrade modules; f) continued development of provisions, guidance and training material in support of performance-based navigation implementation; and g) develop and make available the minimum qualification requirements for personnel to attend performance-based navigation procedure design training.			
Recommendation 3/1 – ICAO aviation system block upgrades relating to performance improvement through the application of system-wide information management That the Conference: a) endorse the aviation system block upgrade module relating to performance improvement through the application of system-wide information management included in Block 1, and recommend that ICAO use it as the basis of its work programme on the subject; b) agree in principle with the aviation system block upgrade module relating to performance improvement through the application of system-wide information management included in Block 2, as the strategic direction for this subject; That ICAO: c) include, following further development and editorial review, the aviation system block upgrade modules relating to performance improvement through the application of system-wide information management for inclusion in the draft Fourth Edition of the *Global Air Navigation Plan* (Doc 9750, GANP).	c) Noted.	c) Approved and include in the Air Navigation work programme.	c) Note

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	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
Recommendation 3/2 – Development of a global system-wide information management concept That ICAO: a) undertake further work to develop a global system-wide information management concept for air traffic management operations and related ICAO provisions that may be necessary; b) at the appropriate time coordinate information management principles and performance-based information management; c) perform additional work on the global implementation of those principles and framework for all air traffic management information through the development of appropriate information management/system-wide information management concepts to be ready in 2014 for subsequent system development work in Block 1 and to include in its work programme, specific activities tailored at coordinating system-wide information management deployment at a local, regional and global level; d) update the information management/system-wide information management (IM/SWIM) working arrangements; That States and stakeholders: e) work together to demonstrate how system-wide information management capabilities and functions will meet the needs of the future air traffic management system.	a) to d): Noted. e): Noted.	a) to d): Approved and include in the Air Navigation work programme. e) Noted and requested the Secretary General to bring to the attention of States.	a) to d): Note. e) States and IOs work together to demonstrate how SWIM capabilities and functions will meet the needs of the future ATM

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	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
Recommendation 3/3 – Development of ICAO provisions relating to system-wide information management That: a) under the leadership of ICAO, develop detailed technical specifications for system-wide information management in close collaboration with the aviation community; b) detailed technical specifications for system-wide information management should be open and rely on generic international standards to the extent possible; and c) ICAO undertake work to identify the security standards and bandwidth requirements for system-wide information management.	a) to c): Noted.	a) to c): Approved and include in the Air Navigation work programme.	a) to c): Note.
Recommendation 3/4 – State and industry and industry support of system-wide information management a) industry support the transition towards system-wide information management by providing appropriate systems supporting automation and the exchange of all relevant air traffic management data in a globally standardized manner; and b) States and all relevant stakeholders contribute to further development and harmonization of performance-based information management.	a) and b): Note.	a) and b): Noted and requested the Secretary General to bring to the attention of States.	a) States and IOs support the transition towards SWIM b) States and IOs contribute to further development and harmonization of performance-based information management
Recommendation 3/5 – Operational performance through flight and flow – information for a collaborative environment That the Conference: a) endorse the aviation system block upgrade module relating to flight and flow – information for a collaborative environment included in Block 1, and recommend that ICAO use it as the basis of its work programme on the subject;			

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b) agree in principle with the aviation system block upgrade module relating to flight and flow – information for a collaborative environment included in Blocks 2 and 3, as the strategic direction for this subject;			
That ICAO:			
c) include, following further development and editorial review, the aviation system block upgrade modules relating to flight and flow – information for a collaborative environment for inclusion in the draft Fourth Edition of the *Global Air Navigation Plan* (Doc 9750, GANP);	c) and d): Noted.	c) and d): Approved and include in the Air Navigation work programme.	c) and d): Note
d) investigate, as part of the post-implementation review of the FPL2012, proposals for the implementation of all performance-based navigation codes and other capabilities into the flight plan, having regard to an impact assessment including cost benefit analysis and other factors;			
e) convene a symposium, as soon as possible, where interested partners would develop an end-to-end advanced system demonstrations of new air traffic management concepts to support a common understanding of concepts such as SWIM, FF-ICE trajectory-based operations and collaborative decision-making;	e): To Review.	e): Noted.	e) : Noted.
That States:			
f) and industry work through ICAO to mature the flight and flow – information for a collaborative environment concept;	f) to h): Noted.	f) to h): Noted and requested the Secretary General to bring to the attention of States and Stakeholders.	f) States and IOs work through ICAO to mature the FF-ICE for a collaborative environment concept;
g) support the development of a flight information exchange model;			g) States and IOs support the development of a flight information exchange model;
h) according to their operational needs, implement the aviation system block upgrade modules relating to improved operational performance through flight and flow – information for a collaborative environment included in Block 0.			h) States according to their operational needs, implement the ASBU modules relating to improved operational performance through FF-ICE

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Recommendation 3/6 – ICAO aviation system block upgrades relating to service improvement through aeronautical information management as well as digital air traffic management information That the Conference: a) endorse the aviation system block upgrade module relating to service improvement through the integration of digital air traffic management information included in Block 1 and recommend that ICAO use it as the basis of its work programme on the subject; That ICAO: b) include, following further development and editorial review, the aviation system block upgrade modules relating to service improvement through digital aeronautical information management as well as integration of digital air traffic management information in the draft in the draft Fourth Edition of the *Global Air Navigation Plan* (Doc 9750, GANP); That States: c) according to their operational needs, implement the aviation system block upgrade module relating to service improvement through digital aeronautical information management included in Block 0.	b): Noted. c): Note.	b): Approved and include in the Air Navigation work programme. c): Noted and requested the Secretary General to bring to the attention of States.	b) Note c) States, according to their operational needs, implement the ASBU module relating to service improvement through digital AIM

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Recommendation 3/7 – ICAO provisions relating to service improvement through aeronautical information management as well as digital air traffic management information That ICAO: a) expedite the development of relevant Standards facilitating the transition of aeronautical information service to aeronautical information management and the implementation of system-wide information management taking into account the work accomplished in State programmes; and b) as a matter of urgency, to translate and make available the necessary Standards and guidance material to facilitate the global transition from aeronautical information service to aeronautical information management.	a) and b): Noted.	a) and b): Approved and include in the Air Navigation work programme.	a)and b) :Note

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	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
Recommendation 3/8 – State actions relating to service improvement through aeronautical information management as well as digital air traffic management information That States: a) accelerate transition from aeronautical information service to aeronautical information management by implementing a fully automated digital aeronautical data chain; b) implement necessary processes to ensure the quality of aeronautical data and information from the origin to the end users; c) engage in intraregional and interregional cooperation for an expeditious transition from aeronautical information service (AIS) to aeronautical information management (AIM) in a harmonized manner and to using digital data exchange and consider regional or subregional AIS databases as an enabler for the transition from AIS to AIM; and d) review their NOTAM publication procedures, provide appropriate guidance to NOTAM originators and ensure adequate oversight of the NOTAM publication process is conducted.	a) to d): Noted.	a) to d): Noted and requested the Secretary General to bring to the attention of States and Stakeholders.	a) States accelerate transition from AIS to AIM by implementing a fully automated digital aeronautical data chain; b) States implement necessary processes to ensure the quality of aeronautical data and information from the origin to the end users; c) States /PIRGS /Regional implementation groups engage in intraregional and interregional cooperation for an expeditious transition from AIS to aeronautical information management AIM in a harmonized manner and to using digital data exchange and consider regional or subregional AIS databases as an enabler for the transition from AIS to AIM; and d) States review their NOTAM publication procedures, provide appropriate guidance to NOTAM originators and ensure adequate oversight of the NOTAM publication process
Recommendation 3/9 – Review of NOTAM system and development of options for replacement That ICAO initiate a review of the current NOTAM system, building further on the digital NOTAM activities, including the development of options for a replacement system that would enable web-based applications and compliant with the system-wide information management principles that are being developed for the air traffic management system.	Noted.	Approved and include in the Air Navigation work programme.	Note.

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Recommendation 4/1 – Efficient management of airspace and improved flow performance through collaborative decision-making That the Conference: a) endorse the aviation system block upgrade modules relating to network operations included in Block 1 and recommend that ICAO use them as the basis of its work programme on the subject; b) agree in principle with the aviation system block upgrade modules relating to network operations included in Blocks 2 and 3 as the strategic direction for this subject; That ICAO: c) include, following further development and editorial review, the aviation system block upgrade modules relating to network operations in the draft Fourth Edition of the *Global Air Navigation Plan* (Doc 9750, GANP); d) include in its work programme the future standardization of all elements to support the collaborative decision-making process underlying the air traffic control (ATC)-air traffic flow management (ATFM) integration as well as of the technical exchanges between ATFM and ATC; e) develop and incorporate into the ICAO *Manual on Collaborative Air Traffic Flow Management* (Doc 9971) implementation guidance on Airport-CDM and provisions on air traffic flow management data exchange format including trajectory information;	c) to g): Noted.	c) to g): Approved and include in the Air Navigation work programme.	c) to g): Note.

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f) develop and execute global communications, roll-out and training plan for the ICAO *Manual on Collaborative Air Traffic Flow Management* (Doc 9971); and g) develop further provisions and guidance on flexible use of airspace principles for future use and in preparation for future 4D trajectory-based airspace management. That States: h) accelerate the implementation of collaborative decision-making processes in the provision of services at the regional level, being guided by the principles set forth in the *Manual on Collaborative Air Traffic Flow Management* (Doc 9971) and the *Manual on Flight and Flow – Information for a Collaborative Environment* (Doc 9965); i) according to their operational needs, implement the aviation system block upgrade modules relating to network operations included in Block 0.	h) and i): Noted.	h) and i): Noted and requested the Secretary General to bring to the attention of States.	h) States and PIRGs to accelerate the implementation of CDM i) States, according to their operational needs, implement the ASBU modules relating to network operations included in Block 0.
Recommendation 4/2 – ICAO aviation system block upgrades relating to ground surveillance using automatic dependent surveillance – broadcast/multilateration, air traffic situational awareness, interval management and airborne separation. That the Conference: a) endorse the aviation system block upgrade modules relating to interval management included in Block 1 and recommend that ICAO use them as the basis of its work programme on the subject; b) agree in principle to the aviation system block upgrade modules relating to airborne separation included in Block 2 as the strategic direction for this subject;			

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That ICAO: c) include, following further development and editorial review, the aviation system block upgrade modules relating to airborne separation in the Appendices to the draft Fourth Edition of the *Global Air Navigation Plan* (Doc 9750, GANP); d) agree in principle to review the concepts and terminology of the "airborne separation" concepts involving controllers assigning tasks to flight crews, with controllers able to apply different, risk-based separation minima for properly equipped ADS-B IN aircraft; e) in the development of provisions, acknowledge the relationship between airborne separation and airborne collision avoidance system; f) modify aviation system block upgrade (ASBU) Module B2-85 to reflect d) and e), modify ASBU Module B2-101 to reflect f); and g) agree in principle to review the concepts and terminology supporting B2-85 "airborne separation" and amend the module accordingly.	c) to g): Noted.	c) to g): Approved and include in the Air Navigation work programme.	c) to g): Note.
That States: h) according to their operational needs, to implement the aviation system block upgrade modules relating to ground surveillance, improved air traffic situational awareness and improved access to optimum flight levels included in Block 0.	h): Noted	h): Noted and requested the Secretary General to bring to the attention of States.	h): States, according to their operational needs, to implement the ASBU modules relating to ground surveillance, improved ATSA and improved access to optimum flight levels included in Block 0.

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	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
Recommendation 4/3 – ICAO aviation system block upgrades relating to airborne collision avoidance systems and ground-based safety nets That the Conference: a) endorse the aviation system block upgrade module relating to ground-based safety nets included in Block 1 and recommend that ICAO use it as the basis of its work programme on the subject; b) agree in principle to the aviation system block upgrade module relating to airborne collision avoidance systems included in Block 2, as the basis of the strategic direction for this subject; That ICAO: c) include, following further development and editorial review, the aviation system block upgrade modules relating to airborne collision avoidance systems and ground-based safety nets in the Appendices to the draft Fourth Edition of the *Global Air Navigation Plan* (Doc 9750, GANP); d) adopt a coordinated approach towards reviewing and developing as necessary Standards and Recommended Practices, Procedures for Air Navigation Services and guidance material for ground-based and airborne safety nets, taking into account careful evaluation and validations of the effects on safety and performance of downlinking airborne collision avoidance system (ACAS) Resolution Advisories (RAs) to controllers; e) when considering Standards and Recommended Practices for airborne collision avoidance system (ACAS) downlink, to emphasize the significant amount of training material already existing and the importance of increased pilot and air	c) to h): Noted.	c) to h): Approved and include in the Air Navigation work programme.	c) to h): Note.

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traffic controller training on the responsibilities and requirements to reacting correctly to ACAS RA events and then communicating; f) develop an ICAO Manual for Ground-based Safety Nets, which includes provision for tools for validation and certification of these; g) incorporate the new generation of airborne collision avoidance system (ACAS X) into its work programme; h) encourage the Federal Aviation Administration to work with other States with the capacity and capability to do so, in the development of new generation of airborne collision avoidance system (ACAS X); That States: i) according to their operational needs, to implement the aviation system block upgrade modules relating to airborne collision avoidance systems and ground based safety nets included in Block 0.	i): Noted.	i): Noted and requested the Secretary General to bring to the attention of States.	i): States to implement the ASBU modules relating to ACAS and ground based safety nets included in Block 0.
Recommendation 4/4 – Positioning and tracking over oceanic and remote areas, and flight data triggered transmission That ICAO: a) continue the evaluation of the necessary changes in the field of transmission of flight data, bearing in mind the cost associated with any of these changes as well as the need to improve search and rescue operations; and b) develop suitable proposals for the amendment of ICAO documents, as necessary.	a) and b): Noted.	a) and b): Approved and include in the Air Navigation work programme.	a) and b): Note.

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Recommendation 4/5 – Civil/military coordination/cooperation and sharing of airspace That States: a) planning and implementation regional groups, and ICAO to analyse the benefits that could be achieved through improved civil/military cooperation and sharing of the airspace serving international traffic flows and express the results of this analysis in terms of: 1) capacity increases and reduction in routine delays as measured by traffic volumes on major traffic flows; 2) document fuel savings and emission reductions through the use of the fuel savings estimation tools; and 3) other additional benefits; b) based on the analysis made by States, planning and implementation regional groups, and ICAO, urge States to develop plans to implement improvements for the cooperative use of airspace related to the top areas of opportunity and establish concrete targets using tools already available for this purpose; c) in relation to international traffic flows, for each ICAO region urge the planning and implementation regional groups and their associated States to identify the top areas of opportunity that could benefit the most from improvements in civil/military cooperation and sharing of the airspace and develop concrete targets for improvement;	a) to c): Noted.	a) to c): Noted and request the Secretary General to bring to the attention of States.	a): PIRGs to analyse the benefits that could be achieved through improved civil/military cooperation and sharing of the airspace serving international traffic flows and express the results of this analysis in terms of capacity increase, fuel savings and emissions reductions and other additional benefits. b): States to develop plans to implement improvements for the cooperative use of airspace on the basis of analysis made by States /PIRGs and ICAO. c): PIRGs and States to identify the top areas of opportunity that could benefit the most from improvements in civil/military cooperation and sharing of the airspace and develop concrete targets for improvement

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That ICAO: d) develop a set of criteria or metrics to enable objective measurement of progress in civil/military cooperation; and e) continue to develop guidance material for States on the flexible use of their airspace, airspace design, interoperability and integration of humanitarian assistance flights in crisis response scenarios in their airspaces to facilitate integrated use of the airspace.	d) and e): Noted.	d) and e): Approved and include in the Air Navigation work programme.	d) and e): Note.
Recommendation 4/6 – ICAO aviation system block upgrades relating to integration of remotely piloted aircraft into non-segregated airspace That the Conference: a) endorse the aviation system block upgrade module relating to remotely piloted aircraft included in Block 1 and recommend that ICAO use it as the basis of its work programme on the subject; b) agree in principle to the aviation system block upgrade modules relating to remotely piloted aircraft included in Blocks 2 and 3 as the strategic direction for this subject;.			

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That ICAO: c) as a matter of urgency, develop the necessary regulatory framework in its entirety to support the integration of remotely piloted aircraft into non-segregated airspace and at aerodromes including and clearly showing the scope of such regulation; d) investigate the need for and scope of oversight of data links related to command, control and air traffic control communications for remotely piloted aircraft systems; e) include, following further development and editorial review, the aviation system block upgrade modules relating to the integration of remotely piloted aircraft into non segregated airspace in the Appendices to the draft Fourth Edition of the *Global Air Navigation Plan* (Doc 9750, GANP);	c) to e): Noted.	c) to e): Approved and include in the Air Navigation work programme.	c) to e): Note.
That States: f) be cognizant of the recent amendments to Annexes 2 — *Rules of the Air* and 7 — *Aircraft Nationality and Registration Marks* related to remotely piloted aircraft systems and to support the continuation of this work at ICAO; g) work closely with ICAO and each other to ensure harmonization of provisions if they have an urgent need to accommodate remotely piloted aircraft system operations	f) and g): Noted.	f) and g): Noted and requested the Secretary General to bring to the attention of States.	f) Note g) States to work closely with ICAO and each other to ensure harmonization of provisions if they have an urgent need to accommodate RPAS operations.
Recommendation 4/7 – ICAO aviation system block upgrades relating to meteorological information That the Conference: a) endorse the aviation system block upgrade module relating to meteorological information included in Block 1, including the addition of the provision of information on space weather, and recommend that			

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ICAO uses it as the basis of its work programme on the subject; b) agree in principle the aviation system block upgrade module relating to meteorological information included in Block 3 as the strategic direction for this subject; That ICAO: c) include, following further development and editorial review, the aviation system block upgrade modules relating to meteorological information in the draft Fourth edition of the *Global Air Navigation Plan* (Doc 9750, GANP); d) undertake the development of the air traffic management meteorological information integration plan and an associated roadmap by a cross-disciplinary group of experts; e) work on defining the meteorological information exchange model as an enabler for system-wide information management; f) invite the next Meteorology Divisional Meeting, held in coordination with the World Meteorological Organization, to develop initial provisions in Annex 3 — *Meteorological Service for International Air Navigation* relating to the aviation system block upgrade modules concerning meteorological information and f) above, and to develop a long-term strategy to support their further development and full implementation;	c) to f): Noted.	c) to f): Approved and include in the Air Navigation work programme.	c) to f): Note.

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That States: g) according to their operational needs, to implement the aviation system block upgrade module relating to meteorological information included in Block 0, including the addition of the provision of OPMET information; h) work together in the implementation of the aviation system block upgrades relating to meteorological information and to increase investment in education and training.	g) and h): Noted.	g) and h): Noted and requested the Secretary General to bring to the attention of States.	g): States , according to their operational needs, to implement the ASBU module relating to meteorological information included in Block 0, including the addition of the provision of OPMET information; h) work together in the implementation of the ASBU relating to meteorological l information and to increase investment in education and training.
Recommendation 4/8 – Crisis coordination arrangements and contingency plans That ICAO: a) consider how crisis coordination arrangements for potentially disruptive events, similar to that used for volcanic eruptions, could be established on a regional basis; and b) and regional offices continue to support the development, promulgation, maintenance of contingency plans, including the holding of practical exercises, in preparedness for potentially disruptive events, including those events that may adversely impact aviation safety.	a) and b): Noted.	a) and b): Approved and include in the Air Navigation work programme.	a) and b): Note.

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Recommendation 5/1 – Improved operations through enhanced airspace organization and routing Considering that performance-based navigation (PBN) is one of ICAO's highest air navigation priorities and the potential benefits achievable through creation of additional capacity with PBN: That States: a) implement performance-based navigation in the en-route environment; b) fully assess the operational, safety, performance and cost implications of a harmonization of transition altitude and, if the benefits are proven to be appropriate, undertake further action on a national and (sub) regional basis a first step towards a globally harmonized transition altitude; c) take advantage of improved models for inter-regional coordination and collaboration to achieve seamless air traffic management and more optimum routes through the airspace; d) through the planning and implementation regional groups improve their methods of coordination to increase implementation of en-route performance-based navigation in order to achieve more optimum routes through the airspace;	a) to d): Noted.	a) to d): Approved and include in the Air Navigation work programme.	a): States implement PBN in the enroute environment b) : States fully assess the operational, safety, performance and cost implications of a harmonization of transition altitude and, if the benefits are proven to be appropriate, undertake further action on a national and (sub) regional basis a first step towards a globally harmonized transition altitude; c): States and PIRGs take advantage of improved models for inter-regional coordination and collaboration to achieve seamless air traffic management and more optimum routes through the airspace; d): States and PIRGs improve their methods of coordination to increase implementation of en-route performance-based navigation in order to achieve more optimum routes through the airspace;

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
That ICAO: e) encourage the planning and implementation regional groups to support the early deployment of performance-based navigation in accordance with Assembly Resolution 37-11; f) support, through development of a framework that capitalizes, builds on, and promotes demonstration activities which confirm the benefits of performance-based navigation as an enabler of more efficient operations in the en-route phase of flight; and g) that avionics incorporate fixed radius transition functionality to support closer spacing of performance-based navigation routes and improve airspace capacity.	e) and f): Noted. g): Noted.	e) and f): Noted and request the Secretary General to bring to the attention of States. g): Noted and request the Secretary General to bring to the attention of relevant Industry Stakeholders.	e) and f): Note. g): Note
Recommendation 5/2 – ICAO aviation system block upgrades relating to trajectory based operations That the Conference: a) endorse the aviation system block upgrade module relating to trajectory-based operations included in Block 1 and ICAO use it as the basis of its work programme on the subject; b) agree in principle with the aviation system block upgrade module relating to 4D trajectory-based operations included in Block 3 as the strategic direction for this subject;			

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
That ICAO: c) include, following further development and editorial review, the aviation system block upgrade module relating to 4D trajectory-based operations in the draft Fourth Edition of the *Global Air Navigation Plan* (Doc 9750, GANP);	c): Noted.	c): Approved and include in the Air Navigation work programme.	c): Note.
That States: d) support development by ICAO of Standards and Recommended Practices and guidance material related to trajectory-based operations; and	d) and e): Note.	d) and e): Note and request the Secretary General to bring to the attention of States.	d): support development by ICAO of SARPs and guidance material related to TBO
e) implement, according to their operational needs, the aviation system block upgrade module relating to trajectory-based operations included in Block 0.			e): States implement, according to their operational needs, the ASBU module relating to TBO included in Block 0.

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
Recommendation 5/3 – Increased flexibility and efficiency in descent and departure profiles That the Conference: a) endorse the aviation system block upgrade module relating to continuous descent operations included in Block 1; b) agree in principle to the aviation system block upgrade module relating to continuous descent operations included in Block 2; That ICAO: c) include, following further development and editorial review, the aviation system block upgrade modules relating to continuous climb operations and continuous descent operations in the draft Fourth Edition of the *Global Air Navigation Plan* (Doc 9750, GANP); d) incorporate the point merge technique as an interim continuous descent operations measure in Block B0-05; That States: e) as supported by their operational requirements and a positive business case, implement according to their operational needs as a matter of urgency, the aviation system block upgrade modules relating to continuous climb operations and continuous descent operations included in Blocks 0 and 1; and f) as supported by their operational requirements and a positive business case, use point merge technique as an application towards achieving full continuous descent operations, when developing performance-based navigation standard instrument arrivals (STARs).	c) and d): Noted. e) and f): Noted.	c) and d): Approved and include in the Air Navigation work programme. e) and f): Noted and requested the Secretary General to bring to the attention of States	c) and d): Note e):States, as supported by their operational requirements and a positive business case, implement according to their operational needs as a matter of urgency, the ASBU modules relating to CCO and CDO included in Blocks 0 and 1. f) States, as supported by their operational requirements and a positive business case, use point merge technique as an application towards achieving full continuous descent operations, when developing PBN STARs,

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
Recommendation 6/1 – Regional performance framework – planning methodologies and tools That States and PIRGs: a) finalize the alignment of regional air navigation plans with the Fourth Edition of the *Global Air Navigation Plan* (Doc 9750, GANP) by May 2014; b) focus on implementing aviation system block upgrade Block 0 Modules according to their operational needs, recognizing that these modules are ready for deployment; c) use the electronic regional air navigation plans as the primary tool to assist in the implementation of the agreed regional planning framework for air navigation services and facilities; d) involve regulatory and industry personnel during all stages of planning and implementation of aviation system block upgrade modules; e) develop action plans to address the identified impediments to air traffic management modernization as part of aviation system block upgrade planning and implementation activities;	a) to e): Approved.	a) to e): Noted and requested the Secretary General to bring to the attention of States and Stakeholders.	a): States and PIRGs finalize the alignment of regional air navigation plans with the Fourth Edition of the *Global Air Navigation Plan* (Doc 9750, GANP) by May 2014; b):States and PIRGs focus on implementing ASBU Block 0 Modules according to their operational needs. c): States, PIRGs, IOs, use the electronic regional air navigation plans as the primary tool to assist in the implementation of the agreed regional planning framework for air navigation services and facilities; d) States and PIRGs involve regulatory and industry personnel during all stages of planning and implementation of ASBU modules; e) States and PIRGs develop action plans to address the identified impediments to air traffic management modernization as part of aviation system block upgrade planning and implementation activities;

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
That ICAO: f) considers how the continuous monitoring approach to safety oversight maps to the evaluation of Member States' safety oversight capabilities concerning aviation system block upgrades g) review the current amendment process to the Regional Air Navigation Plans (ANPs) and recommend improvements to increase efficiencies related to the approval and maintenance of the data in the regional ANPs; h) develop guidance material, on the basis of best practices employed worldwide, for the regional/local deployment of new ATM technologies, required procedures, operational approvals and continue to support States in the implementation of the aviation system block upgrades; i) identify the issues, funding, training and resource requirements necessary to support a safety framework that would lay the foundation for successful implementation the aviation system block upgrades;	f) to l): Noted.	f) to l): Approved with the exception of j), include in the Air Navigation work programme and request the Secretary General take appropriate action.	f) to l): Note
j) develop, together with industry and stakeholders, an engagement strategy to address the economic and institutional impediments to implementation of the aviation system block upgrades; k) develop a mechanism for sharing of best practices for the aviation system block upgrade implementation; and l) define a methodology to ensure interregional and global harmonization of air navigation services through ANRF reporting in an effective and timely manner, and consider the employment of interregional and multi-regional fora.	j): Approved and requested the Secretary General to address the economic and institutional impediments to GANP implementation.	j): Noted and consider contribution to be included in the Air Navigation work programme.	j): Note

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
Recommendation 6/2 – Guidelines on service priority That: a) ICAO develop an appropriate set of operational and economic incentive principles to allow early benefits of new technologies and procedures, as described in the aviation system block upgrade modules, to support operational improvements, while maximizing safety, capacity and overall system efficiency; and b) States and international organizations contribute to this work.	a) and b): Noted.	a) and b): Approved, consider contribution to be included in the Air Navigation work programme and request the Secretary General to take appropriate action.	a) and b): Note
Recommendation 6/3 – Assessment of economic, financial and social implications of air traffic management modernization and aviation system block upgrades deployment That ICAO: a) undertake work toward developing a network-wide operational improvement level assessment for global use, which should include the development of standard values and processes for economic evaluations; b) take the relevant conclusions from the AN-Conf/12, regarding economic, financial and social aspects of the aviation system block upgrades, to the Sixth Air Transport Conference with the aim of developing solutions which would support a safe and sustainable air navigation system; That States: c) conduct their economic, financial and social analyses in a closely coordinated manner with relevant ATM stakeholders in view of their diverse position of involvement in the implementation of aeronautical systems.	a) and b): Noted. c): Note and request the Secretary General to bring to the attention of States.	a) and b): Approved, consider contribution to be included in the Air Navigation work programme and request the Secretary General to take appropriate action. c): Noted and the Secretary General to bring to the attention of States.	a) and b): Note c): States conduct their economic, financial and social analyses in a closely coordinated manner with relevant ATM stakeholders in view of their diverse position of involvement in the implementation of aeronautical systems

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
Recommendation 6/4 – Human performance That ICAO: a) integrate human performance as an essential element for the implementation of ASBU modules for considerations in the planning and design phase of new systems and technologies, as well as at the implementation phase, as part of a safety management approach. This includes a strategy for change management and the clarification of the roles, responsibilities and accountabilities of the aviation professionals involved; b) develop guidance principles, guidance material and provisions, including SARPs as necessary, on ATM personnel training and licensing including instructors and assessors, and on the use of synthetic training devices, with a view to promoting harmonization, and consider leading this effort with the support of States and industry; c) develop guidance material on using field experience and scientific knowledge in human performance approaches through the identification of human-centred operational and regulatory processes to address both current safety priorities and the challenges of future systems and technologies; d) assess the impact of new technologies on competencies of existing aviation personnel, and prioritize and develop competency-based provisions for training and licensing to attain global harmonization; e) establish provisions for fatigue risk management for safety within air traffic services operations; f) develop guidance material on different categories of synthetic training devices and their respective usage;	a) to f): Noted.	a) to f): Approved and include in the Air Navigation work programme.	a) to f): Note.

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
That States: g) provide human performance data, information and examples of operational and regulatory developments to ICAO for the benefit of the global aviation community; h) support all ICAO activities in the human performance field through the contribution of human performance expertise and resources; i) adopt airspace procedures, aircraft systems, and space-based/ground-based systems that take into account human capabilities and limitations and that identify when human intervention is required to maintain optimum safety and efficiency; and j) investigate methods to encourage adequate numbers of high quality aviation professionals of the future and ensure training programmes are in line with the skills and knowledge necessary to undertake their roles within a changing industry.	g) to j): Note.	g) to j): Note and request the Secretary General to bring to the attention of States.	g): States provide human performance data, information and examples of operational and regulatory developments to ICAO. h) States support all ICAO activities in the human performance field through the contribution of human performance expertise and resources. i) States adopt airspace procedures, aircraft systems, and space-based/ground-based systems that take into account human capabilities and limitations and that identify when human intervention is required j) States investigate methods to encourage adequate numbers of high quality aviation professionals of the future and ensure training programmes are in line with the skills and knowledge necessary.

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
Recommendation 6/5 – ICAO work programme to support global navigation satellite system evolution That ICAO undertake a work programme to address: a) interoperability of existing and future global navigation satellite system constellations and augmentation systems, with particular regard to the technical and operational issues associated with the use of multiple constellations; b) identification of operational benefits to enable air navigation service providers and aircraft operators to quantify these benefits for their specific operational environment; and c) continued development of Standards and Recommended Practices and guidance material for existing and future global navigation satellite system elements and encouraging the development of industry standards for avionics.	a) to c): Noted.	a) to c): Approved and include in the Air Navigation work programme.	a) to c): Note
Recommendation 6/6 – Use of multiple constellations That States, when defining their air navigation strategic plans and introducing new operations: a) take advantage of the improved robustness and availability made possible by the existence of multiple global navigation satellite system constellations and associated augmentation systems; b) publish information specifying the global navigation satellite system elements that are approved for use in their airspace; c) adopt a performance-based approach with regard to the use of global navigation satellite system (GNSS), and avoid prohibiting the use of GNSS elements that are compliant with applicable ICAO Standards and Recommended Practices;	a) to e): Noted.	a) to e): Noted and requested the Secretary General to bring to the attention of States and Stakeholders.	a): States take advantage of the improved robustness and availability made possible by the existence of multiple GNSS constellations and associated augmentation systems; b) States publish information specifying the GNSS elements that are approved for use in their airspace; c) States adopt a performance-based approach with regard to the use of GNSS, and avoid prohibiting the use of GNSS elements that are compliant with applicable ICAO SARPs

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
d) carefully consider and assess if mandates for equipage or use of any particular global navigation satellite system core constellation or augmentation system are necessary or appropriate; That aircraft operators: e) consider equipage with GNSS receivers able to process more than one constellation in order to gain the benefits associated with the support of more demanding operations.			d) States carefully consider and assess if mandates for equipage or use of any particular global navigation satellite system core constellation or augmentation system are necessary or appropriate; e) IOs consider equipage with GNSS receivers able to process more than one constellation in order to gain the benefits associated with the support of more demanding operations
Recommendation 6/7 – Assistance to States in mitigating global navigation satellite system vulnerabilities That ICAO: a) continue technical evaluation of known threats to the global navigation satellite system, including space weather issues, and make the information available to States; b) compile and publish more detailed guidance for States to use in the assessment of global navigation satellite system vulnerabilities; c) develop a formal mechanism with the International Telecommunication Union and other appropriate UN bodies to address specific cases of harmful interference to the global navigation satellite system reported by States to ICAO; and d) assess the need for, and feasibility of, an alternative position, navigation and timing system.	a) to d): Noted.	a) to d): Approved and include in the Air Navigation work programme.	a) to d): Note.

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
Recommendation 6/8 – Planning for mitigation of global navigation satellite system vulnerabilities That States: a) assess the likelihood and effects of global navigation satellite system vulnerabilities in their airspace and apply, as necessary, recognized and available mitigation methods; b) provide effective spectrum management and protection of global navigation satellite system (GNSS) frequencies to reduce the likelihood of unintentional interference or degradation of GNSS performance; c) report to ICAO cases of harmful interference to global navigation satellite system that may have an impact on international civil aviation operations; d) develop and enforce a strong regulatory framework governing the use of global navigation satellite system repeaters, pseudolites, spoofers and jammers; e) allow for realization of the full advantages of on-board mitigation techniques, particularly inertial navigation systems; and f) where it is determined that terrestrial aids are needed as part of a mitigation strategy, give priority to retention of distance measuring equipment (DME) in support of inertial navigation system (INS)/DME or DME/DME area navigation, and of instrument landing system at selected runways.	a) to f): Noted.	a) to f): Approved and requested the Secretary General to bring to the attention of States and Stakeholders.	a) States assess the likelihood and effects of GNSS vulnerabilities in their airspace and apply, as necessary, recognized and available mitigation methods. b) States provide effective spectrum management and protection of GNSS frequencies to reduce the likelihood of unintentional interference or degradation of GNSS performance. c) States report to ICAO cases of harmful interference to global navigation satellite system that may have an impact on international civil aviation operations. d) States develop and enforce a strong regulatory framework governing the use of global navigation satellite system repeaters, pseudolites, spoofers and jammers. e) States allow for realization of the full advantages of on-board mitigation techniques, particularly inertial navigation systems. f) States where it is determined that terrestrial aids are needed as part of a mitigation strategy, give priority to retention of DME in support of inertial navigation system (INS)/DME or DME/DME area navigation, and of instrument landing system at selected runways

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
Recommendation 6/9 – Ionosphere and space weather information for future global navigation satellite system implementation That ICAO: a) coordinate regional and global activities on ionosphere characterization for global navigation satellite system implementation; b) continue its effort to address the global navigation satellite system (GNSS) vulnerability to space weather to assist States in GNSS implementation taking into account of long-term GNSS evolution as well as projected space weather phenomena; c) study the optimum use of space weather information that is globally applicable from low to high magnetic latitude regions for enhanced global navigation satellite system performance at a global context; That States: d) consider a collaborative approach to resolve ionospheric issues including ionospheric characterization for cost-effective, harmonized and regionally suitable global navigation satellite system implementation.	a) to c): Noted. d): Noted.	a) to c): Approved and include in the Air Navigation work programme. d): Noted and requested the Secretary General to bring to the attention of States.	a) to c): Note. d): States consider a collaborative approach to resolve ionospheric issues including ionospheric characterization for cost-effective, harmonized and regionally suitable global navigation satellite system implementation

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
Recommendation 6/10 – Rationalization of terrestrial navigation aids That, in planning for the implementation of performance-based navigation, States should: a) assess the opportunity for realizing economic benefits by reducing the number of navigation aids through the implementation of performance-based navigation; b) ensure that an adequate terrestrial navigation and air traffic management infrastructure remains available to mitigate the potential loss of global navigation satellite system service in their airspace; and c) align performance-based navigation implementation plans with navigation aid replacement cycles, where feasible, to maximize cost savings by avoiding unnecessary infrastructure investment.	a) to c): Noted.	a) to c): Approved and requesedt the Secretary General to bring to the attention of States and Stakeholders.	a): States assess the opportunity for realizing economic benefits by reducing the number of navigation aids through the implementation of PBN; b) States ensure that an adequate terrestrial navigation and air traffic management infrastructure remains available to mitigate the potential loss of global navigation satellite system service in their airspace; and c) States align performance-based navigation implementation plans with navigation aid replacement cycles, where feasible, to maximize cost savings by avoiding unnecessary infrastructure investment.
Recommendation 6/11 – Regional performance framework – alignment of air navigation plans and regional supplementary procedures That ICAO initiate a formal amendment process in accordance with normal procedures to align the areas of applicability of the air navigation plans and the regional supplementary procedures, observing the following principles: 1) there will be no change to the current accreditation of the ICAO regional offices to Contracting States; 2) there will be no change to the obligation of individual States to provide services in accordance with ICAO Annex 11 — *Air Traffic Services*, 2.1; 3) there will be no change to the governance responsibilities of the ICAO Council, including approval of amendments to air	Approved and requested the Secretary General to bring to the attention of States and Stakeholders.	Noted.	Note

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
navigation plans and regional supplementary procedures; 4) there will be no change to the current requirements for services and facilities and or to the current supplementary procedures for a given airspace as listed in current air navigation plans and regional supplementary procedures; 5) there will be no change to the principle that a planning and implementation regional group is composed of the Contracting States providing air navigation service in the air navigation region and that other Contracting States can participate in the activities with observer status; 6) there will be no change to ICAO's assistance to planning and implementation regional groups from the regional offices; 7) the responsibilities of the performance framework management for an air navigation region will now be integrated and will rest with the planning and implementation regional group established for the region; and 8) to the extent possible, the main traffic flows will be accommodated within homogeneous airspaces in order to minimize changes between different air navigation systems and different operational procedures during flight.			

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
Recommendation 6/12 – Prioritization and categorization of block upgrade modules That States and PIRGs: a) continue to take a coordinated approach among air traffic management stakeholders to encourage effective investment into airborne equipment and ground facilities; b) take a considerate approach when mandating avionics equipage in its own jurisdiction of air navigation service provision, taking into account of burdens on operators including foreign registry and the need for consequential regional/global harmonization; That ICAO: c) continue to work on guidance material for the categorization of block upgrade modules for implementation priority and provide guidance as necessary to planning and implementation regional groups and States; d) modify the block upgrade module naming and numbering system using, as a basis, the intuitive samples agreed by the Conference; and e) identify modules in Block 1 considered to be essential for implementation at a global level in terms of the minimum path to global interoperability and safety with due regard to regional diversity for further consideration by States.	a) and b): Noted. c): Noted. d):Noted. e):Noted.	a) and b): Noted. c): Approved and include in the Air Navigation work programme. d): Approved and requested the Secretary General to take appropriate action. e): Approved and include in the Air Navigation work programme.	a): States, PIRGS and IOs continue to take a coordinated approach among air traffic management stakeholders to encourage effective investment into airborne equipment and ground facilities b) States , PIRGs and IOs, take a considerate approach when mandating avionics equipage in its own jurisdiction of air navigation service provision, taking into account of burdens on operators including foreign registry and the need for consequential regional/global harmonization c): Note d): Note e): Note

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
Recommendation 6/13 – Development of Standards and Recommended Practices, procedures and guidance material That ICAO: a) improve its project management and coordination of contributing ICAO panels, study groups and other expert groups, including task forces and other specialized teams tasked with the development of ICAO provisions and related work, through: 1) consistent application of the *Directives for Panels of the Air Navigation Commission* (Doc 7984); 2) receiving regular reports from the expert groups against agreed terms of reference and work programmes; 3) mandating strong coordination between all expert groups developing ICAO provisions to ensure efficient management of issues and avoidance of duplication; 4) application of the principles of accountability, geographical representation, focus, efficiency, consistency, transparency and integrated planning to the operation of all the expert groups; 5) developing documented procedures for other expert groups, including task forces and other specialized teams as well; and 6) better use of today's communication media and internet to facilitate virtual meetings, thereby increasing participation and reducing costs to States and ICAO;	a) to d): Noted.	a) to d): Approved and include in the Air Navigation work programme. d), 1): review and update the *Directives for Panels of the Air Navigation Commission* (Doc 7984) along principles stated by the Conference.	a) to d): Note

RECOMMENDATIONS ADOPTED BY AN-CONF/12	FOLLOW-UP ACTION TAKEN		FOLLOW-UP ACTION TO BE INITIATED
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)	PIRGs/States/International Organizations (IO)
b) continue to coordinate with the other recognized standards-making organizations (Assembly Resolution A37-15 refers) in order to make the best use of the capabilities of these other recognized standards-making organizations and to make reference to their material, where appropriate; c) initiate studies to improve the verification and validation process required within ICAO before material developed by recognized standards-making organizations can be referenced in ICAO documentation; and d) consider a methodology by which ICAO can capture the regional implementation and challenges, and to reflect them in a standardized process to effectively support the aviation system block upgrade deployment.			
Recommendation 6/14 – Guidelines for conducting aeronautical studies to assess permissible penetration of obstacle limitation surfaces That ICAO develop comprehensive guidelines for States in the uniform application in conducting aeronautical studies to assess the permissible penetration of obstacle limitation surfaces (OLS).	Noted.	Approved and include in the Air Navigation work programme.	Note

APPENDIX B / APENDICE B

FOLLOW-UP OF AN-CONF/12 RECOMMENDATIONS BY GREPECAS COORDINATORS
ASIGNACION PARA EL SEGUIMIENTO DE LAS RECOMENDACIONES DE LA AN-CONF/12 A LOS COORDINADORES DEL GREPECAS

AN-CONF/12 REC	GREPECAS PROGRAMMES TO FOLLOW UP AN-CONF/12 RECOMMENDATIONS AND PRESENT RESULTS TO GREPECAS/17 PROGRAMAS DEL GREPECAS A EFECTUAR SEGUIMIENTO RECOMENDACIONES AN-CONF//12 Y PRESENTAR RESULTADOS AL GREPECAS/17										ACTION SUGGESTED / ACCION SUGERIDA
	A	B	C	D	E	F	G	H	ATM	CNS	
1/1	√	√	√	√	√	√	√	√			
1/2	√	√	√	√	√	√	√	√			
1/3	√	√	√	√	√	√	√	√			
1/4	√	√	√	√	√	√	√	√			
1/5			√	√			√	√			
1/6				√							
1/7			√								
1/8	√		√	√							In the CAR/SAM Regions, the only system considered decommissioning has been the NDB. It would be convenient that an activity be added to the PBN GREPECAS Program En las Regiones CAR/SAM el único sistema en el que se ha considerado el retiro ha sido el NDB. Sería conveniente la adición de una actividad en el Programa PBN,
1/9			√								

A - Performance based navigation (PBN)
Navegación basada en la performance (PBN)
B - Air traffic flow management (ATFM)
Gestión de afluencia del tránsito aéreo (ATFM)
C - ATM automation and situational awareness
Automatización y comprensión situacional ATM
D - Ground-ground and air-ground telecommunications infrastructure
Infraestructura de comunicaciones tierra-tierra y tierra-aire
E - Search and rescue (SAR)
Búsqueda y salvamento (SAR)
F – Aerodromes
Aeródromos
G – Aeronautical information management (AIM)
Gestión de información aeronáutica (AIM)
H – Aeronautical meteorology (MET)
Meteorología aeronáutica (MET)
ATM – Activity not taken under consideration within the existing Programmes/
Actividad no contemplada dentro de los Programas existentes
CNS – Activity not taken under consideration within the existing Programmes/
Actividad no contemplada dentro de los Programas existentes

AN-CONF/12 REC	GREPECAS PROGRAMMES TO FOLLOW UP AN-CONF/12 RECOMMENDATIONS AND PRESENT RESULTS TO GREPECAS/17 PROGRAMAS DEL GREPECAS A EFECTUAR SEGUIMIENTO RECOMENDACIONES AN-CONF//12 Y PRESENTAR RESULTADOS AL GREPECAS/17										ACTION SUGGESTED / ACCION SUGERIDA
	A	B	C	D	E	F	G	H	ATM	CNS	
1/10			√								
1/11			√								
1/12	√		√	√							
1/13				√							
1/14				√							In view of the extensive regional use of very small aperture terminal (VSAT) communications networks, such as MEVA and REDDIG, as well as the numerous VSAT based national networks, Programme D should establish a strategy to guide States in the long term spectrum availability protection for these systems / En vista del amplio uso de redes de comunicaciones terminales de apertura muy pequeña (VSAT) tanto a nivel regional, como la red MEVA y REDDIG, así como las numerosas redes nacionales basadas en VSAT, el Programa D debería establecer una estrategia para orientar a los Estados en la protección a largo plazo en la disponibilidad del espectro para estos sistemas
1/15	√	√	√	√	√	√	√	√			
1/16	√	√	√	√	√	√	√	√			
2/1						√					
2/2			√	√					√		There is no Programme dealing with this topic / No hay Programa que trate este tema

A - Performance based navigation (PBN)
Navegación basada en la performance (PBN)
B - Air traffic flow management (ATFM)
Gestión de afluencia del tránsito aéreo (ATFM)
C - ATM automation and situational awareness
Automatización y comprensión situacional ATM
D - Ground-ground and air-ground telecommunications infrastructure
Infraestructura de comunicaciones tierra-tierra y tierra-aire
E - Search and rescue (SAR)
Búsqueda y salvamento (SAR)
F – Aerodromes
Aeródromos
G – Aeronautical information management (AIM)
Gestión de información aeronáutica (AIM)
H – Aeronautical meteorology (MET)
Meteorología aeronáutica (MET)
ATM – Activity not taken under consideration within the existing Programmes/
Actividad no contemplada dentro de los Programas existentes
CNS – Activity not taken under consideration within the existing Programmes/
Actividad no contemplada dentro de los Programas existentes

AN-CONF/12 REC	GREPECAS PROGRAMMES TO FOLLOW UP AN-CONF/12 RECOMMENDATIONS AND PRESENT RESULTS TO GREPECAS/17 PROGRAMAS DEL GREPECAS A EFECTUAR SEGUIMIENTO RECOMENDACIONES AN-CONF//12 Y PRESENTAR RESULTADOS AL GREPECAS/17										ACTION SUGGESTED / ACCION SUGERIDA
	A	B	C	D	E	F	G	H	ATM	CNS	
2/3				√							
2/4									√		There is no Programme dealing with this topic / No hay Programa que trate este tema
2/5	√										
2/6	√										
3/1							√				
3/2							√				
3/3							√				
3/4							√				
3/5			√								New flight plan format post-implementation activity / Actividad post implantación del nuevo formato de plan de vuelo
3/6							√				
3/7							√				
3/8							√				
3/9							√				
4/1		√									
4/2			√								
4/3			√								
4/4			√	√							

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AN-CONF/12 REC	GREPECAS PROGRAMMES TO FOLLOW UP AN-CONF/12 RECOMMENDATIONS AND PRESENT RESULTS TO GREPECAS/17 PROGRAMAS DEL GREPECAS A EFECTUAR SEGUIMIENTO RECOMENDACIONES AN-CONF//12 Y PRESENTAR RESULTADOS AL GREPECAS/17										ACTION SUGGESTED / ACCION SUGERIDA
	A	B	C	D	E	F	G	H	ATM	CNS	
4/5		√									
4/6									√		There is no Programme dealing with this topic / No hay Programa que trate este tema
4/7								√			
4/8	√	√	√	√	√	√	√	√			
5/1	√										
5/2	√										
5/3	√										
6/1	√	√	√	√	√	√	√	√			
6/2	√	√	√	√	√	√	√	√			
6/3	√	√	√	√	√	√	√	√			
6/4	√	√	√	√	√	√	√	√			
6/5	√									√	There is no Programme dealing with this topic / No hay Programa que trate este tema
6/6	√									√	There is no Programme dealing with this topic / No hay Programa que trate este tema
6/7	√									√	There is no Programme dealing with this topic / No hay Programa que trate este tema
6/8	√									√	There is no Programme dealing with this topic / No hay Programa que trate este tema

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AN-CONF/12 REC	GREPECAS PROGRAMMES TO FOLLOW UP AN-CONF/12 RECOMMENDATIONS AND PRESENT RESULTS TO GREPECAS/17 PROGRAMAS DEL GREPECAS A EFECTUAR SEGUIMIENTO RECOMENDACIONES AN-CONF//12 Y PRESENTAR RESULTADOS AL GREPECAS/17										ACTION SUGGESTED / ACCION SUGERIDA
	A	B	C	D	E	F	G	H	ATM	CNS	
6/9	√									√	There is no Programme dealing with this topic / No hay Programa que trate este tema
6/10	√									√	There is no Programme dealing with this topic / No hay Programa que trate este tema
6/11	√	√	√	√	√	√	√	√			
6/12	√	√	√	√	√	√	√	√			
6/13	√	√	√	√	√	√	√	√			
6/14						√					

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Agenda Item 3: Review of the GREPECAS Programmes and Projects

Under this agenda item, the following papers were presented:

- Working paper on Agenda Item 3.1:
  WP/08 – Follow-up on the activities of project A1 (PBN implementation) and project A2 (air navigation system in support of PBN)(Secretariat); WP/22 - *Airbus safety support to the ICAO PBN regional roadmap deployment* (Airbus)
- Working and information papers on Agenda Item 3.2:
  WP/09 – *Follow-up on the activities of Project B1 (Improve the balance between demand and capacity) and Project B2 (Flexible use of airspace)* (Secretariat); IP/07 - *Air Traffic Flow Management (ATFM) Programme Project Summary* (United States)
- Working paper on Agenda Item 3.3:
  WP/10 – *Follow-up of activities of the Automation and Situational Awareness projects* (Secretariat)
- Working paper on Agenda Item 3.4:
  WP/11 – Description and follow-up to the implementation of project activities under the ground-ground and ground-air communication infrastructure programme for the CAR and SAM regions (Secretariat)
- Working paper on Agenda Item 3.5:
  WP/12 – *Description and follow-up of Aerodrome Project activities* (Secretariat)
- Working and information papers on Agenda Item 3.6:
  WP/13 - *Projects G1 "Implementation of the provision of electronic ground and obstacle data (e-TOD)"; G2 "Implementation of aeronautical information exchange systems (AIXM)"; and G3 "Implementation of the quality management system at AIM units" of the CAR and SAM Regions (Secretariat)*
  IP/05 - *Global information space for seamless delivery of Air Traffic Management (ATM) information* (United States)
- Working and information papers on Agenda Item 3.7:
  WP/14 – *Projects under the MET Programme* (Secretariat)
  WP 21 – *WIFS accounts* (United States);IP/06 Support by United States to GREPECAS for meteorological information (United States)

3.1 **Projects under the PBN Programme**

3.1.1 The Meeting took note of the progress made in the execution of project activities under Programme *A: Performance Based Navigation (PBN)* since the PPRC/1 Meeting, as detailed in the Appendices to PPRC/2-WP/08:

Project A1 "PBN Implementation" CAR Region

3.1.2 The Meeting took note that PBN implementation in the CAR Region is being carried out in accordance with ICAO Assembly Resolution A37-11 and AN-Conf/12 recommendations, revealing that 100% of CAR States and Territories have presented their action plans and significant improvements with implementation of RNAV routes have been achieved. Specific implementation achievements are the following:

a) States have gradually implemented a PBN airspace concept with clear metrics and implementation dates

b) RNP 10 and random RNAV routes have been implemented in WATRS oceanic airspace, the Gulf of Mexico, and the Houston and Miami Oceanic FIR
c) Random RNAV routes have been implemented in the Piarco FIR
d) RNAV 5 routes in the upper continental airspace
e) 60% of aerodromes have instrument approach procedures with vertical guidance (APV), (BARO-VNAV and/or GNSS augmentation) either as primary approach or support to precision approaches
f) 60% of international airports have implemented SIDs/STARs with PBN navigation specifications and continuous descent and climb (CDO/CCO) criteria
g) March 2013 analysis of RNP 10 and 11 new RNAV routes implemented in the Gulf of Mexico (GoMEX Project) indicates total fuel savings of 712,066 kg, resulting in cost savings of US$1.5 million per month
h) As per Resolution A37-19, all States should use the IFSET electronic tool to present estimated fuel savings resulting from operational improvements

Project A1 "PBN Implementation" SAM Region

3.1.3 The Meeting took note that the optimization routes plan, Version 01 (March 2011) implemented 15 new RNAV routes, realigned 19 routes and eliminated 18 conventional and RNAV routes being unused with a CO2 savings of 22,600,000 kg per year.

3.1.4 Version 02 of the optimization routes plan foresees a fuel cost savings of US$2,713,902 per month for 2013 and 2014 (at US$1.57 per liter), equivalent to reducing approximately 54,572 tons of CO2 from the atmosphere in one year.

3.1.5 In 2012, only two States of the Region replied to the survey on implementation of instrument procedures and PBN SIDs/STARs; in 2013, five States provided the information. The progress made with implementation is detailed in the Table in PPRC/2-WP/08.

3.1.6 The Meeting noted that the SAM PBN implementation project has three clearly distinct areas of application: ATS routes (basically in the upper airspace), terminal areas, and the design of RNAV/RNP procedures.

Project A2 "Air Navigation Systems in Support of PBN" CAR Region

3.1.7 The SACCSA Project has informed that the feasibility of regional application, technical aspects and operational benefits of SBAS are favourable. With respect to WAAS analysis, Mexico is testing five stations for use in the airspace under its jurisdiction. The extension of WAAS requirements to the CAR Region will be analyzed in the medium term.

Project A2 "Air Navigation Systems in Support of PBN" SAM Region

3.1.8 In the SAM Region, the DME/DME coverage study was completed, as well as the practical guide for implementation of GBAS systems. Regarding RAIM availability, the corresponding technical specifications are ready and it is expected that the bidding process will start in early July 2013 in order to have the application implemented by February 2014. The RAIM prediction service, once implemented (February 2014), will initially benefit 11 SAM States. It is expected that by the end of 2014, all States and Territories will have this service.

Conclusions of the Meeting

3.1.9 The Meeting approved the proposal of the Secretariat to merge Projects A1 and A2 of the CAR Region, as well as the reformulation proposed for Projects A1 and A2 of the SAM Region.

Other PBN issues

3.1.10 In addition, the Meeting took note that approximately 90% of the aircraft fleet operating in the CAR/SAM Regions has various RNAV/RNP capabilities. Nevertheless, only approximately 30% of the air operators use PBN routes and procedures, primarily due to lack of PBN training programmes. The implementation activities with major priority in the short place are:

a) States should develop training programmes for all relevant staff (Civil Aviation Authorities (CAAs), ATS, airlines, etc.)
b) States should implement PBN operational approval processes in accordance with ICAO Doc 9613, *Performance Based Navigation (PBN) Manual*
c) States should verify the quality of aeronautical information and data associated with the publication of PBN aeronautical charts
d) States should examine their restricted areas on the basis of flexible use airspace (FUA) in order to improve airspace safety, efficiency and capacity for aircraft operations in accordance with civil and military user needs

3.1.11 AIRBUS ProSky presented PPRC/2-WP/22 containing information on its PBN Tutoring Programme, which aims to support the regulatory baseline and pertinent regulatory information among CAAs. The activities of the programme include:

a) RNP approach procedure design course
b) PBN operational approval course for flight inspectors
c) PBN training for pilots and air traffic controllers (ATCO)
d) PBN workshops and follow up visits in support to the definition of regulations
e) Training and tutoring on Electronic Terrain and Obstacle Data (eTOD)
f) On site data survey on obstacles at the airport(s) related with the project, and Digital Elevation Model (DEM) for the airport(s), where necessary

3.1.12 The Meeting thanked the offer made by AIRBUS and deemed convenient that in order to avoid duplication of activities, CANSO, IATA and AIRBUS ProSky should coordinate their collaboration with the ICAO NACC and SAM Regional Offices in regard to the PBN implementation Project.

3.2 **Projects under the ATFM Programme**

3.2.1 The Meeting took note of the progress made with the execution of project activities under Programme *B: Air Traffic Flow Management (ATFM)* since the PPRC/1 Meeting, as detailed in the Appendices to PPRC/2-WP/09.

CAR B1 Project "Improve the balance between demand and capacity**"**

3.2.2 The Meeting took note that several States in the CAR Region (2.2) had recognized that it was not necessary to establish specific ATFM units in all FIRs. However, ATFM coordination was done through the Area Control Centres (ACCs) of each FIR through teleconferences, applying a methodology agreed upon by all the representatives of the CAR FIRs. This methodology permits continuous analysis of ATS capacity and airport acceptance rates (AARs). An analysis of additional resources will be conducted in the short term to improve ATM situational awareness.

3.2.3 The regional catalogue containing all CAR ATS contingency plans, including hurricane and volcanic ash coordination procedures, has been completed, allowing for the establishment of better coordination procedures in case of natural disasters.

SAM B1 Project "Improve the balance between demand and capacity"

3.2.4 In 2012, only 21% of SAM States had done capacity calculations. In 2013, 57% of the States had done the corresponding capacity calculations, representing a 36% improvement. Regarding the implementation of flow management units or positions, only 14% of States had reached that goal in 2012. In 2013, 35% of the States had met this goal. The Meeting took note of the training provided to date to SAM experts as described in WP/09.

3.2.5 The Meeting recognized that in view of global events that will take place in 2014 and 2016, there was a need to establish at least one ATFM position at the main control centres.

CAR B2 Project "Flexible use of airspace"

3.2.6 The Meeting noted that out of the 19 CAR States, 17 had established civil/military coordination bodies between ATS civil aviation units and the corresponding air defence units. In the short term (2014), a regional review of special use airspace will be carried out to identify improvements to air traffic service management.

SAM B2 Project "Flexible use of airspace"

3.2.7 In the SAM Region, this project has produced all the material required for effective implementation of flexible use of airspace. The percentage of SAM States that had implemented civil/military coordination committees or bodies in 2012 was 21% and 28% in 2013. According to available information, the percentage of States that had made their special use areas more flexible for route implementation purposes was 28% in 2012 and 35% in 2013.

3.2.8 Furthermore, the Meeting agreed to finalize Project B2 on flexible use airspace in the SAM Region, and agreed to transfer the task on "*Regional strategy and work programme for the implementation of the flexible use of airspace based on a phased approach, starting with a more dynamic sharing of reserved airspace"* to Project A1 "PBN Implementation" of the SAM Region, since it considered that it fell under the broader airspace optimization concept.

3.3 **Projects under the Automation and ATM Situational Awareness Programme**

3.3.1 The Meeting took note of the progress made with the execution of project activities under Programme C *"Automation and ATM situational awareness"* since the PPRC/1 Meeting as detailed in the Appendices to PPRC/2-WP/10:

a) *Project C CAR Region:*

- Examples of MoUs for interconnection between States
- Three agreements signed for AIDC implementation
- Analysis of the GREPECAS and NAM/CAR ICDs
- Initial assessment of the status of implementation of alarms and automated systems for the improvement proposal
- Regional plan for the implementation of AIDC with CPL-LAM messages
- Progress with the graphical use of the SIGMET tool for assessment by NAM/CAR States.

b) *Project C2 SAM Region – Improve ATM situational awareness in the SAM Region:*

- Assessment of surveillance system coverage in the SAM Region and the *Guide on technical/operational aspects for the implementation of ADS-B* were completed in October and June 2012, respectively, thus completing 100% of the activities foreseen for 2012
- An initial *Guide for the production of graphic SIGMETs* has been developed and will be reviewed by the MET Secretariat

c) The Meeting took note of the completion of Project C3 in both the CAR and SAM Regions, which consisted of the successful implementation of the new ICAO model flight plan format. In this regard, the Meeting commended the work done by Project C3 for the CAR and SAM Regions.

3.3.2 The Meeting approved the following changes to Programme C:

a) In order to facilitate and optimize the participation of State experts in the projects under Programme C, it was agreed in the CAR Region to merge the tasks and deliverables of Projects C1 – *Interoperability of automated systems in the CAR Region* and C2 – *Improve ATM situational awareness* into a single project entitled Project C – *Automation and improve ATM situational awareness*
b) A field has been added to the project description document to define project goals.

3.3.3 Likewise, the following delays were reported in Projects of Programme C:

a) The merging of Projects C1 and C2 of the CAR Region has delayed several scheduled activities, thus requiring a reassignment of tasks
b) *Project C1 SAM – Automation:* The drafting of Memoranda of Understanding (MoUs) between some States is still pending, as well as the interconnection of automated systems in States that have already signed the respective MoU. Based on the responses to the questionnaire circulated by the Project, the visit by two automation experts to those States that have signed a MoU is scheduled for August 2013.

Conclusions of the Meeting

3.3.4 The Meeting approved the completion of Project C3 in both regions and the proposal of the Secretariat to merge Projects C1 and C2 of the CAR Region.

3.4 Projects under the ground-ground/air-ground communication infrastructure Programme

3.4.1 The Meeting was informed of progress made with activities of Projects *ATN Architecture* (D1) and *ATN ground-ground and air-ground applications* (D2) of the Programme *Ground-ground/air-ground communication infrastructure* for the SAM Region and Project *ATN infrastructure in the CAR Region and its ground-ground and ground-air applications (D)* since the PPRC/1 Meeting as detailed in the Appendices to PPRC/2-WP/11:

a) *Project* D - *ATN infrastructure in the CAR Region and its ground-ground and ground-air applications (D) for the CAR Region:*

- The technical study of CAR networks for ATN implementation was completed as reflected in the MEVA II tender document, which includes the requirements for the interconnection of the MEVA Network with the REDDIG and the Eastern Caribbean Networks
- The first AMHS interconnections are being tested in accordance with the CAR regional implementation plan
- The AMHS implementation process has started in Mexico
- Two Phase-1 AIDC services have been implemented through CPL-LAM messages
- Most of the activities contemplated in this project have been performed as scheduled; however, several deliverables have been rescheduled due to delays in the definition of operational requirements

b) *Project D1 - SAM ATN Architecture*

- The activities contemplated in Project D1 have been performed almost entirely; only the monitoring of REDDIG II implementation, foreseen for the third quarter of 2014, is still pending
- The IP network implementation safety guides and policies for the SAM Region have been developed

c) *Project D2 – SAM ATN ground-ground and air-ground applications*

- A new AMHS interconnection was implemented between the Quito TMA, in Ecuador, and the Lima TMA, in Peru;
- The need to implement the TP0 protocol for the interconnection of some AMHS systems was identified; and
- A *Guide for the implementation of AID in the SAM Region* was developed.

3.4.2 The Meeting approved the addition of a new field in the project description document to define project goals.

3.4.3 The Meeting took note of the following delays in D Projects:

a) Project D CAR: reduced number of experts for generating deliverables and withdrawal of the IATA representative
b) Project D1 SAM: the Coordinator of Project D1, Mr. Athayde Frauche, held that position until the end of June 2013 and needed to designate a new project coordinator
c) Project D2 SAM: no progress has been made with implementation of AIDC integration between adjacent ACCs. The Coordinator of Project D2, Mr. Omar Gouarnalusse, informed that he would not be able to continue in that position, and Mr. Gustavo Chiri of Argentina was designated to replace him.

3.5 **Projects under the Aerodromes Programme**

3.5.1 The Meeting took note of the progress made in the execution of project activities under Programme *F*: *Aerodromes* since the PPRC/1 Meeting as detailed in the Appendices to PPRC/2-WP/12:

a) *Project F1– Improvements to aerodrome certification in the CAR Region:*

- Two workshops were conducted for aerodrome inspectors, and a survey was sent to States/Territories to analyse the project status and plan future activities.
- Project F2 was merged with Project F1 due to shared common activities and tasks

b) *Project F3 – Improvements to runway safety in the CAR Region:*

- Survey sent to States/Territories regarding compliance with the provisions of Annex 14, Vol. 1, related to visual aids and safety areas in order to analyse the current situation

c) *Project AGA F for the SAM Region:*

- Development and approval of the AGA LARs under the umbrella of the SRVSOP
- Training of aerodrome inspectors in the AGA LARs and Aerodrome Inspector Manual
- Aeronautical studies, workshops on safety assessment offered to the States
- Workshop on visual aids to reduce runway incursions
- Regional survey on the quality and availability of aeronautical data and development of an implementation strategy

Conclusions of the Meeting

3.5.2 The Meeting approved the following changes to Programme F:

a) In order to optimize the participation of State experts in the projects under Programme F, the CAR Region decided to merge Project F2 – *Safety assessment for non-compliant aerodromes* with Project F1 – *Improvements to aerodrome certification.*

b) Taking into account the progress made in the projects under Programme F in the SAM Region, human resource requirements and the implementation of the ASBU methodology, it was agreed that Projects F1 – *Aerodrome certification*, F2 – *Safety assessment for non-compliant aerodromes*, F4 – *Quality and availability of aeronautical data* and F5 – *Improvement of aerodrome physical and operational characteristics* would be merged into a single Project F1 – *Aerodrome certification*.

3.5.3 The Meeting took note of the following delays in Projects of Programme F:

a) CAR Project F3 has a coordinator but does not have support from any State experts, causing a delay in the activities scheduled for the first phase of the project.
b) Taking into account the merging of projects and the new work methodologies, it is advisable to designate new coordinators for the SAM AGA projects, acknowledging the successful work done by the outgoing project coordinators.

3.5.4 The Meeting discussed the scarce participation of States in the approval of new ICAO Standards and Recommended Practices (SARPs) that affect the aerodromes area. As a result, approved SARPs can be difficult to implement at certain aerodromes and some States have significant non-compliance with the standards. The Meeting also recognized the importance of responding to ICAO when a proposal for amendment to SARPs is circulated to the States in order to avoid future compliance issues with SARPs.

3.6 **Projects under the AIM Programme**

3.6.1 The Meeting took note of the progress made in the execution of project activities under Programme *G: AIM* since the PPRC/1 Meeting as detailed in the Appendices to PPRC/2-WP/13:

Project G1 – *"Developments for the supply of electronic terrain and obstacle data (e-TOD) in the States"* - CAR Region

3.6.2 The Meeting took note that the CAR Region had developed a Guidance Document, in Spanish and English, to assist States with implementation. All States had approved the e-TOD Document.

3.6.3 Regarding automated systems in the CAR Region, 18 out of 19 States had an automated AIM management system, either their own or under official agreement with COCESNA, CEPA or PIARCO. The percentage of implementation was 85.7%. Regarding service level agreements (SLAs), 90.5 % had been implemented.

3.6.4 The Meeting took note of the offer made by AIRBUS ProSky to support implementation of e-TOD in the CAR/SAM Regions, which was considered beneficial for the project. The Regional Offices will coordinate with Airbus to secure this support.

Project G1 – *"Developments for the supply of electronic terrain and obstacle data (e-TOD) in the States"* - SAM Region

3.6.5 The products developed within the framework of GREPECAS Project G1 to assist SAM States with implementation of the provision of electronic terrain and obstacle data (e-TOD) were analysed and approved by the Meeting and are as follows:

a) Guidance Document on the objectives of the e-TOD project
b) e-TOD technical and project specifications
c) Model Service Level Agreement (SLA)
d) Model list of data for SLAs

3.6.6 The Secretariat reported that by 2012 only two States had an automated AIM management system, and in 2013, four States had implemented this system. In 2012, no State had an approved e-TOD Guidance Document, and in 2013, all States have had their documentation approved by SAM/AIM/4. Only 2 States have implemented SLAs.

Project G2 - *"Implementation of Aeronautical Information Exchange Systems (AIXM)" - CAR Region"*

3.6.7 The Meeting took note of the recommendation to cancel this Project, taking into account that the SARPs on exchange models and XML formats are not yet available, and the timeframe for the implementation of the ASBU module had been extended. The Project had no coordinator or experts available to address these issues.

Project G2 - *"Implementation of Aeronautical Information Exchange Systems (AIXM)"* - SAM Region

3.6.8 In the SAM Region, the Programme Coordinator informed that the tasks performed to date had been performed by the Secretariat, but this Project required the corresponding SARPs and training. He felt the need to maintain the Project and to use this period of time to conduct seminars and training on this topic in the SAM Region.

Project G3 – *"Development of quality specifications applicable to the digital AIM environment"* CAR Region

3.6.9 The Secretariat informed the Meeting of the progress made with development of ICAO documentation for publication of Doc 9839, *AIM/QMS Manual*. It also reported on the problems regarding availability of human resources to perform project activities. Cuba offered to coordinate with the NACC Regional Office on conducting the activities required to continue with Project G3 in the CAR Region. Four States had certified their AIM/QMS, and significant progress had been made with implementation of the quality system in the States of the PIARCO FIR.

Project G3 – *"Development of quality specifications applicable to the digital AIM environment"* SAM Region

3.6.10 In the SAM Region, a Plan for the Implementation of the Quality Management System for Aeronautical Information Services had been developed for the States in connection with each Article of ISO Standard 9001:2008, the contents of each component, the framework for QMS implementation, the responsibilities of the various areas, and the action to be taken for its implementation.

3.6.11 The following QMS products were developed and approved at the regional level:

a) QMS implementation plan
b) Procedures for QMS corrective and preventive actions
c) Procedure for QMS internal audits
d) Procedure for the control of AIS management system records
e) Procedure for drafting QMS documents
f) Procedure for the control of non-conforming QMS services/products
g) Procedures for the control of AIS management system documents

3.6.12 At present, five States have QMS certification in the SAM Region: Brazil, Chile, Ecuador, French Guiana, and Paraguay. In early 2012, four States were certified. Chile was re-certified with the new QMS standard, and Brazil had completed the certification process.

Conclusions of the Meeting

3.6.13 The Meeting approved the cancellation of Project *G2 "Implementation of Aeronautical Information Exchange Systems (AIXM)"* in the CAR Region and urged States to support the activities of other projects by providing coordinators and experts, taking into account that most of the activities involved working from the place of origin of the expert and did not entail travel expenses.

3.7 **Projects under the Aeronautical Meteorology Programme**

3.7.1 The Meeting took note of the progress made in projects *Implementation of the WAFS (CAR/SAM) (H1)**;** Implementation of the IAVW (H2); Implementation of the MET/QMS (H3)*; and *Optimization of OPMET exchange, including SIGMETs (WS, WV, and WC) (H4)*, since the PPRC/1 Meeting as detailed in the Appendices to PPRC/2-WP/14.

WAFS Implementation Project (CAR/SAM) (H1)

3.7.2 The Meeting took note that all the CAR and SAM States had successfully completed the transition from the International Satellite Communications System (ISCS) to the WAFS Internet Files Service (WIFS). Thus, the Meeting considered that the activities of the CAR/SAM Project had been completed.

3.7.3 The Meeting was informed by United States of the WAFS Internet File Service (WIFS) and the request to examine and complete the CAR/SAM WIFS list (PPRC/2-WP/21, Appendix A) regarding the name of the person authorizing WIFS operations. The Meeting requested the NACC and SAM Regional Offices to send a letter to States requesting that the information be provided no later than 31 August 2013.

IAVW Implementation Project (H2) (CAR)

3.7.4 The Meeting was informed about the difficulties encountered with the designation of a project coordinator, which had hindered achievement of results. In this regard, the Meeting considered that the project should be cancelled until the required experts were obtained and urged CAR States to support the project with experts to perform such activities.

IAVW Implementation Project (H2) (SAM)

3.7.5 The Meeting took note of the drafting of a Protocol for the volcanic ash SIGMET exercise conducted in December 2012 and SIGMET Guide update. The Meeting noted that the following tasks would no longer be part of the project: *Regional contingency plan for cases of volcanic activity* and *Regional contingency plan for cases of accidental release of radioactive material,* which would now be under the responsibility of the ATM area.

MET/QMS Implementation Project (H3) (CAR)

3.7.6 The Meeting took note that most CAR States had implemented MET/QMS; therefore, the Meeting agreed that the project had been completed.

MET/QMS Implementation Project (H3) (SAM)

3.7.7 The Meeting took note that, by the end of 2012, 100% of SAM States had established a MET/QMS. It also took note that to date, out of all the States that had established a MET/QMS, five States had had their MET/QMS certified by an organization approved pursuant to ISO Standard 9001:2008, and nine States had a documentary scheme in place and were in the process of certification.

Project for the Optimization of OPMET Exchange, including SIGMETs (WS, WV, and WC) H4 (CAR)

3.7.8 The Meeting took note that more than 90% of the major aerodromes in the CAR Region had METAR/SPECI and TAF reports available. It also noted that all Meteorological Watch Offices (MWOs) in the CAR Region were preparing and disseminating SIGMET messages. Nevertheless, when some volcanic eruptions had occurred at night (January 2013), SIGMETs could not be issued due to some volcano observatories not operating 24 hours a day.

Project for the Optimization of OPMET Exchange, including SIGMETs (WS, WV, and WC) H4 (SAM)

3.7.9 The Meeting took note that SAM States were not having operational problems due to lack of OPMET data and that, when so required, they used the International OPMET data bank of Brasilia. Accordingly, it was agreed that starting in 2014 it would not be necessary to continue with the coordinated control of OPMET exchange in the SAM Region.

3.7.10 The Meeting was informed that to date, 85% of OPMET data was received at the Brasilia international data bank and in each of the States.

Conclusions of the Meeting

3.7.11 The Meeting approved the completion of Projects H1 and H3 and the cancellation of Project H2 of the CAR Region.

General comments

3.8 The Meeting took note that practically all projects had included their targets in the project descriptions as requested by the PPRC/1 Meeting. In addition, some of the projects had aligned their activities with ASBU Block 0 Modules, which is necessary for the remainder of projects.

3.9 The Secretariat, supported by States, reiterated the commitment assumed by the civil aviation authorities to support the projects of the GREPECAS Programmes with the human resources necessary for the timely development of the activities as per the project schedules.

3.10 The Meeting also emphasized that States who had nominated project coordinators and experts needed to facilitate the involvement of those individuals to carry out the activities assigned in accordance with GREPECAS Conclusion 16/49.

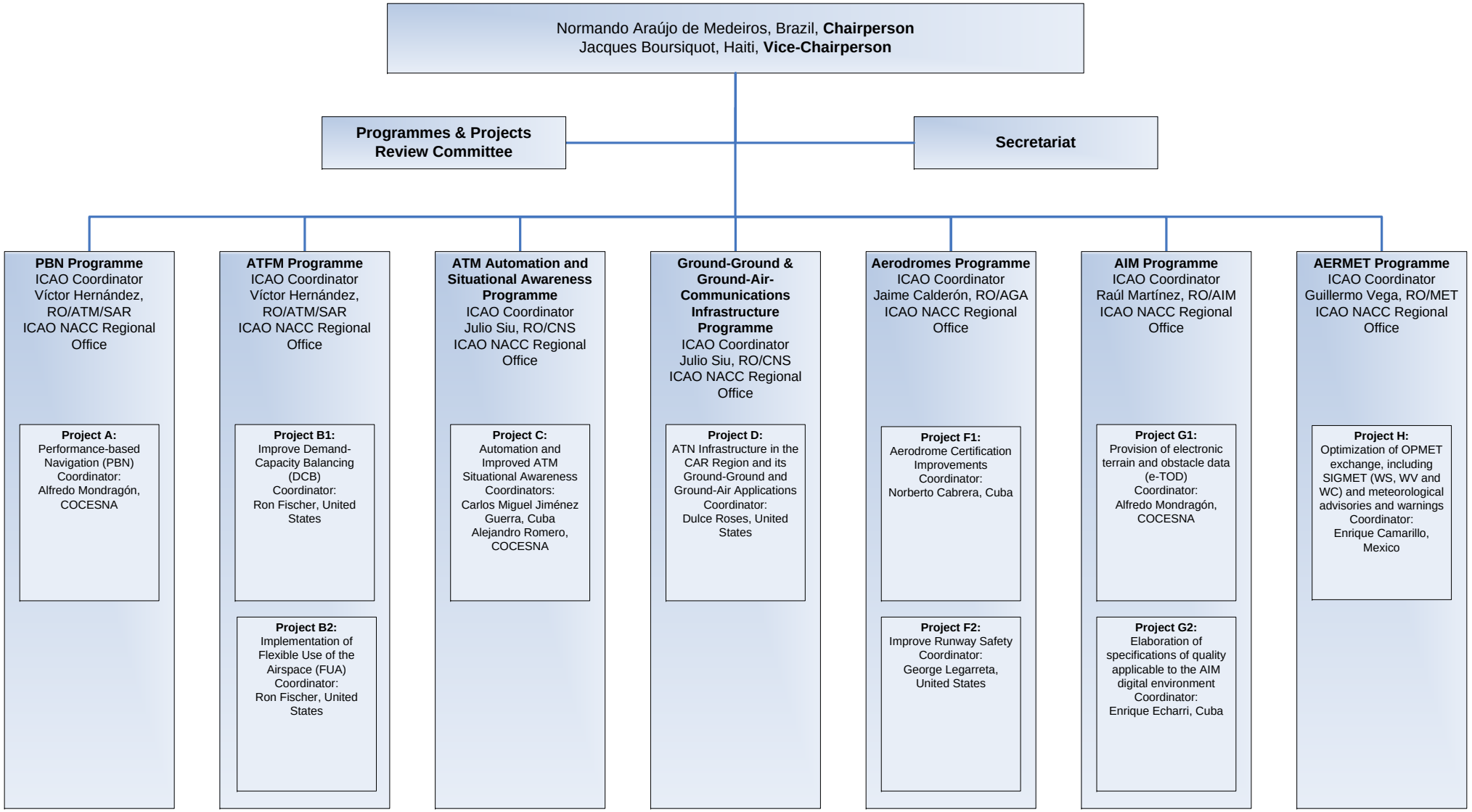
3.11 Finally, the Meeting congratulated the project coordinators and experts on the tasks completed, which have contributed towards the results achieved and activities carried out to date.

Organization of the GREPECAS Programmes and Projects

3.12 The **Appendix** to this part of the Report presents the GREPECAS organization scheme with updated information on the CAR and SAM Programmes and Projects.

APPENDIX

GREPECAS Organization and CAR Region Projects



GREPECAS Organization and SAM Region Projects

Normando Araújo de Medeiros, Brasil, Chairperson
Jacques Boursiquot, Haiti, Vice-Chairperson

Programmes & Projects Review Committee

Secretariat

PBN Programme

ICAO Coordinator Roberto Arca
RO/AIM/SAR
SAM Regional Office

Project A:

PBN Implementation

Coordinator: Alexandre Luiz Dutra Bastos, Brazil

ATFM Programme

ICAO Coordinator Roberto Arca
RO/AIM/SAR
SAM Regional Office

Project B:

Improve the balance between demand and capacity

Coordinator: No Coordinator

ATM Automation and Situational Awareness Programme

ICAO Coordinator Onofrio Smarrelli, RO/CNS
SAM Regional Office

Project C1:

Automation

Coordinator: Alessander Santoro, Brazil

Project C2:

Improve ATM situational awareness in the SAM Region

Coordinator: Paulo Vila, Perú

Ground-Ground & Air-Ground Communications Infrastructure Programme

ICAO Coordinator Onofrio Smarrelli, RO/CNS
SAM Regional Office

Project D1:

ATN Architecture

Coordinator: No Coordinator

Project D2:

ATN ground-ground and air-ground applications

Coordinator: Gustavo Chiri, Argentina

Aerodromes Programme

ICAO Coordinator Lia Ricalde, RO/AGA
SAM Regional Office

Project F1:

Aerodrome certification

Coordinator: Vicente Uribe, Colombia

Project F2:

Improve Runway Safety

Coordinator: Augusto Diaz Albuja, Ecuador

AIM Programme

ICAO Coordinator Roberto Arca, RO/AIM/SAR
SAM Regional Office

Project G1:
Developments for the supply of electronic terrain and obstacle data (e-TOD) in the States

Coordinator: Juan González, Uruguay

Project G2:

Implementation of Aeronautical Information Exchange Systems (AIXM)

Coordinator: No coordinator

Project G3:

Development of quality specifications applicable to the digital AIM environment

Coordinator: Oscar Dioses, Peru

AERMET Programme

ICAO Coordinator Nohora Arias, RO/MET SAM Regional Office

Project H1:

Implementation of the IAVW

Coordinator: Jorge Oscar Leguizamón, Argentina

Project H2:

Optimization of OPMET exchange, including SIGMETs (WS, WV, and WC)

Coordinator: Cleber Souza Correa, Brasil

Agenda Item 4: Items related with the organization of GREPECAS

Under this agenda item, the following working papers were discussed:

- WP/15 *Review of GREPECAS Terms of Reference and Work Programme* (Secretariat)
- WP/16 - *GREPECAS Annual Report* (Secretariat)

4.1 Review of GREPECAS Programmes and Projects Review Committee Terms of Reference and Work Programme

4.1.1 The Meeting examined the terms of reference and work programme of the PPRC and included two additional tasks in the work programme. The first task corresponds to the collection, monitoring and reporting of implementation performance measurements on the ICAO website regional performance dashboard. The second task is to ensure that the programmes and projects are aligned with the ASBU modules. **Appendix A** to this agenda item presents the updated terms of reference and work programme of the GREPECAS PPRC. In this regard, the Meeting formulated the following draft decision:

Draft
Decision 2/7 Revised Terms of Reference and Work Programme of the Programmes and Projects Review Committee (PPRC)

That the proposed revised terms of reference and work programme of the PPRC shown in **Appendix A** to this part of the report is approved.

4.2 GREPECAS Annual Report

4.2.1 The Meeting was informed that the ICAO Air Navigation Bureau (ANB) and Air Navigation Commission (ANC) were trying to simplify and standardize the format of the PIRG Reports and consolidate the annual review of all PIRG reports. Therefore, the Meeting approved the proposal to re-examine PPRC Decision 1/4 regarding the contents of the GREPECAS Annual Report.

4.2.2 Furthermore, the Meeting noted that planned future regional and global reporting will have a cyclic linkage between the revised Global Plans, new Regional Performance Dashboards (to be available on the ICAO web site and updated periodically by the Regional Offices) and Global Annual Reports for both safety and air navigation. Consequent to this new reporting structure, to be implemented in 2014, the ANC and ICAO Council will no longer review individual PIRG and RASG reports unless a specific action is called for. In this respect, the following draft decision was adopted:

Draft
Decision 2/8 GREPECAS Annual Report

That GREPECAS submit an annual report to the ICAO Air Navigation Bureau (ANB) consisting of the GREPECAS meeting report in years when a GREPECAS meeting is held and a PPRC meeting report in other years, which includes a Table of Conclusions and Decisions in the format presented in **Appendix B**.

APPENDIX A

PROPOSED REVISED GREPECAS PROGRAMMES AND PROJECTS REVIEW COMMITTEE TERMS OF REFERENCE AND WORK PROGRAMME

1. **Introduction**

PPRC activities are performed by high-level member State representatives on behalf of all GREPECAS member States. The representatives selected to the PPRC shall focus their activities on the review of GREPECAS programmes and projects with regard to objectives, implementation progress, challenges encountered results achieved and not duplicate the work performed by the technical experts. The PPRC will make recommendations for approval by GREPECAS on programme and project results, as well as the establishment, modification and termination of programmes and projects.

2. **Membership**

The PPRC comprises the GREPECAS Chairperson, Vice-Chairperson, Secretary and Co-Secretary, eight States of the CAR Region and eight States of the SAM Region identified by the Directors of Civil Aviation of the States[1]. Other GREPECAS member States may participate in meetings if the agenda includes a topic of interest. The international organizations listed in the GREPECAS Procedural Handbook and affected States of other Regions may participate in meetings as Observers when relevant to the agenda.

3. **The Terms of Reference of the Committee are:**

a) coordinate and harmonize GREPECAS administrative matters and participate in its internal management and scheduling of events;

b) review and approve the planning, progress and execution of programmes and projects to ensure their alignment with the GREPECAS terms of reference, ICAO strategic objectives, business plan and global air navigation plan; and

c) follow-up on high-risk safety deficiencies and take action to promote their resolution.

4. **In order to comply with its Terms of Reference the Committee shall:**

a) review and propose amendments to the GREPECAS Procedural Handbook;

b) review the GREPECAS work methodology and propose specific actions to improve its performance;

[1] The PPRC Member States for the CAR Region are, Cuba, Dominican Republic, Haiti, Honduras (in representation of Central America in the rotation scheme and as selected by the COCESNA Executive Committee), Jamaica, Mexico, Trinidad and Tobago and United States selected by Conclusion 4/1 of the Fourth Meeting of Directors of Civil Aviation of North America, Central America and the Caribbean (NACC/DCA/4) held in San Pedro Sula, Honduras, from 20 to 24 June 2011. The PPRC Member States of the SAM Region are Argentina, Bolivia, Brazil, Chile, Colombia, Panama, Paraguay and Venezuela as ratified at the Twelfth Meeting of Civil Aviation Authorities of the SAM Region (RAAC/12), held in Lima, Peru, from 3 to 6 October 2011 (ref. paragraph 2.3.5 of the Final Report).

c) follow-up on the programmes and projects on a continuous basis and, if necessary, intervene in project development to ensure that results are achieved according to approved timeframes;

d) ensure that the programmes and projects are aligned with the Global Air Navigation Plan (GANP) Aviation System Block Upgrade (ASBU) modules;

e) prepare reports on PPRC activities, progress and results of programmes and projects for each GREPECAS meeting and annual GREPECAS reports in between GREPECAS meetings;

f) measure the progress of implementation targets for air navigation improvements adopted by GREPECAS;

g) prepare the draft agenda for GREPECAS meetings; and

h) in cases of high-risk safety deficiencies, request the respective ICAO Regional Office to request the Air Navigation Bureau to inform the Air Navigation Commission.

APPENDIX B / APENDICE B

CONCLUSIONS/DECISIONS OF GREPECAS/XX
CONCLUSIONES/DECISIONES DE GREPECAS/XX

Conclusion/ Decision No./ Conclusión/ Decisión No.	Title of Conclusion/Decision Título de Conclusión/Decición	Text of Conclusion/Decision Texto de Conclusión/Decisión	Responsibility/ Responsabilidad	Deliverable/ Entregable	Reporting/ Completion date / Fecha de notificación/ finalización	Action Recommended to the ANC/ Acción Recomendada al ANC

Agenda Item 5: Other business

5.1 No working or information papers were presented under this agenda item; nevertheless, note was taken on the tentative agenda for the GREPECAS/17 Meeting and submission of papers to the 38th Session of the ICAO Assembly.

Tentative agenda for the GREPECAS/17 Meeting

5.2 The Meeting was informed that the tentative agenda for the GREPECAS/17 Meeting would be presented following the results of the 38th Session of the ICAO Assembly to be held in Montreal, Canada, from 24 September to 4 October 2013. In this regard, the Meeting noted that the Secretariat would be sending a letter including the GREPECAS/17 tentative agenda to all CAR/SAM States at the beginning of the first quarter of 2014.

Submission of working papers to the 38th Session of the ICAO Assembly

5.3 The Meeting was informed that working papers, with the support of all States of the SAM Region, had been presented at the AN-Conf/12. In this respect, the Meeting deemed convenient to present joint papers to the 38th Session of the ICAO Assembly in a similar manner. With the aim of coordinating the preparation of these papers, web teleconferences, coordinated through the respective ICAO Regional Offices, will be conducted if proposals are received from States.