**INTERNATIONAL CIVIL AVIATION ORGANIZATION**

# REPORT OF THE SIXTEENTH MEETING OF THE CAR/SAM REGIONAL PLANNING AND IMPLEMENTATION GROUP (GREPECAS/16)

(Punta Cana, Dominican Republic, 28 March – 1 April 2011)

## FINAL REPORT

Prepared by the Secretariat

April 2011

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**REPORT ON AGENDA ITEM 6**

# HISTORY OF THE MEETING

## ii.1 Place and Duration of the Meeting

Upon the kind invitation of the Instituto Dominicano de Aviación Civil (IDAC) of the Dominican Republic, the Sixteenth Meeting of the CAR/SAM Regional Planning and Implementation Group (GREPECAS/16) was held in Punta Cana, Dominican Republic, from 28 March to 1 April 2011.

## ii.2 Opening Ceremony and Other Matters

Mrs. Loretta Martin, Regional Director of the ICAO North American, Central American and Caribbean (NACC) Regional Office, expressed her sincere appreciation to the authorities of Dominican Republic for hosting the meeting. Mr. Franklin Hoyer, Regional Director of the ICAO South American (SAM) Regional Office and Secretary of GREPECAS, addressed the participants emphasizing the need to adapt the GREPECAS mechanism according to current efficiency and efficacy requirements. Likewise, Mr. Normando Araújo de Medeiros (Brazil), Chairman of GREPECAS, introduced what was expected to be a milestone meeting for GREPECAS.

Mr. Santiago Rosa Martínez, Deputy Director General of IDAC, in representation of Dr. Alejandro Herrera Rodríguez, Secretary of State and IDAC Director General, welcomed the delegates, wished them success with the meeting objectives, and emphasized the need for close inter-regional coordination aimed at providing a more harmonized air navigation system.

## 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 ICAO Headquarters in Montreal:

| | |
|---|---|
| Loretta Martin | Regional Director, ICAO NACC Regional Office |
| Michiel Vreedenburgh | Deputy Regional Director, ICAO NACC Regional Office |
| Oscar Quesada | Deputy Regional Director, ICAO SAM Regional Office |
| Gustavo De León | Regional Programme Officer, ANB, ICAO Headquarters |
| Nohora Arias | Secretary of the AERMET Subgroup |
| Onofrio Smarrelli | Secretary of the CNS/ATM Subgroup |
| Raúl Martínez | Secretary of the AIM Subgroup |
| Jaime Calderón | Secretary of the AGA/AOP Subgroup |
| Victor Hernández | Regional Officer, Air Traffic Management/Search and Rescue, ICAO NACC Regional Office |
| Julio Siu | Regional Officer, Communications, Navigation and Surveillance, ICAO NACC 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 the results of the GREPECAS/15 meeting**

1.1 Review of the status of implementation of GREPECAS/15 Conclusions that were considered by the ANC
1.2 Review of the status of implementation of GREPECAS/15 Decisions and Conclusions that were not considered by the ANC
1.3 Review of the status of implementation of GREPECAS outstanding Conclusions

**Agenda Item 2: Flight Safety and RASG-PA activities**

**Agenda Item 3: Performance framework for Regional Air Navigation Planning and Implementation**

3.1 Global, inter-regional and intra-regional activities concerning air navigation systems in the CAR/SAM Regions
3.2 AERMET/SG/10 Meeting report
3.3 AGA/AOP/SG/7 Meeting report
3.4 AIM/SG/12 Meeting report
3.5 CNS/ATM/SG/1 and CNS/ATM/SG/2 Meeting reports

**Agenda Item 4: Air navigation deficiencies in the CAR/SAM Regions**

4.1 Proposal of a new uniform methodology for the identification, assessment and reporting of air navigation deficiencies
4.2 Current status of air navigation deficiencies in the CAR/SAM Regions

**Agenda Item 5: Management of the GREPECAS mechanism**

5.1 ACG/8 Meeting report
5.2 Review of GREPECAS Terms of Reference and Work Programmes
5.3 GREPECAS membership

**Agenda Item 6: Other business**

ii.6 **Attendance**

The GREPECAS/16 Meeting was attended by 82 participants from 22 States/Territories of the CAR/SAM Regions, Observers from 1 State from outside the Regions and 9 International Organizations. A list of participants is shown in page iii-1.

ii.7 **Conclusions and Decisions**

GREPECAS records its action in the form of conclusions and decisions as follows:

**Conclusions** deal with matters, which in accordance with the Group's terms of reference require direct attention of States/Territories and/or International Organizations, or on which further action will be initiated by ICAO in accordance with established procedures.

**Decisions** deal with matters of concern only to the GREPECAS organization.

ii.8 **List of Conclusions**

**ii.9 List of Decisions**

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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, 2011
Username: carsamrpg
Password: ccretkode

### LIST OF 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 the conclusions of GREPECAS/15 considered by the ANC ***(Revised)*** | Secretariat |
| WP/03 | 1.1<br>1.2 | Review of the status of implementation of GREPECAS/15 Conclusions that were considered by the ANC<br>Review of the status of implementation of the decisions of GREPECAS/15 and conclusions not considered by ANC *(Revised)* | Secretariat |
| WP/04 | 1.3 | Review of the status of implementation of GREPECAS outstanding conclusions *(Revised)* | Secretariat |
| WP/05 | 2 | Review of Aviation Safety and RASG-PA Developments for the CAR/SAM Air Navigation System | Secretariat |
| WP/06 | 2 | Status and outlook of the Regional Safety Oversight Cooperation System (SRVSOP) ***(Revised)*** | Secretariat |
| WP/07 | 2 | Global, inter-regional and intra-regional activities concerning air navigation systems in the CAR/SAM Regions ***(Revised)*** | Secretariat |
| WP/08 | 3.2 | Report of the AERMET/SG/10 Meeting ***(Revised)*** | Secretariat |
| WP/09 | 3.3 | Report of the AGA/AOP/SG/07 Meeting | Secretariat |
| WP/10 | 3.4 | Report of the AIM/SG/12 Meeting | Secretariat |
| WP/11 | 3.5 | Report of the CNS/ATM/SG/1 and CNS/ATM/SG/2 Meetings | Secretariat |
| WP/12 | 3 | Report of the Scrutiny Working Group (GTE) | Secretariat |
| WP/13 | 3 | Report of the SAR/7 Meeting | Secretariat |
| WP/14 | 4.1 | Proposed New Air Navigation Deficiencies Methodology *(Revised)* | Secretariat |
| WP/15 | 4.2 | Current situation of Air Navigation Deficiency in the CAR/SAM Region | Secretariat |
| WP/16 | 5.1 | Report of the ACG/8 Meeting | Secretariat |
| WP/17 | 5.2 | Review of the GREPECAS Terms of Reference and Work Programme ***(Revised)*** | Secretariat |
| WP/18 | 5.3 | GREPECAS Membership Representation | Secretariat |
| WP/19 | 3.1 | Implementation of the South-Atlantic interoperability initiative to reduce emission (SAIRE) | Secretariat |
| WP/20 | 3.1 | OPTIMI (Oceanic Position Tracking Improvement and Monitoring) | Brazil |
| WP/21 | 3.1 | Implementation of navigation elements in support of PBN | Spain |

| Number | Agenda Item | Title | Prepared and Presented by |
|---|---|---|---|
| WP/22 | 3.1 | Standard aerodrome inspection methodology under the ISO international standard | Colombia |
| WP/23 | 3.1 | Achievements of the Dominican Republic following RAD 14 implementation | Dominican Republic |
| WP/24 | 6 | The role of civil aviation during natural disasters ***(Revised)*** | Colombia |
| WP/25 | 3.1 | The process of air traffic controllers specialization for the use of ATS surveillance | Brazil |
| WP/26 | 3.1 | Development and publication of procedures for air navigation (PANS-OPS) ***(Revised)*** | Brazil |
| WP/27 | 3.1 | English proficiency assessment | Brazil |
| WP/28 | 3.1 | Flexible use of airspace (FUA) operation Cruzeiro do Sul (CRUZEX V) ***(Revised)*** | Brazil |
| WP/29 | 5 | Transition to the new organization of GREPECAS ***(Revised)*** | Secretariat |
| WP/30 | 6 | Use of general aviation for unlawful activities ***(Revised)*** | Colombia |
| WP/31 | 3.1 | Flight inspection activities in Brazil | Brazil |
| WP/32 | 3.5 | Implementation plan for a Test Bed for the SBAS / SACCSA in the CAR/SAM Regions | Secretariat |
| WP/33 | 3.1 | AIRAC Compliance<br>The importance of complying with the aeronautical information regulation and control (AIRAC) schedule | IATA |
| WP/34 | 4 | ASB/10 Meeting Report | Secretariat |

## LIST OF INFORMATION PAPERS

| Number | Agenda Item | Title | Prepared and Presented by |
|---|---|---|---|
| IP/01 | -- | General Information ***(Revised)*** | Secretariat |
| IP/02 | -- | List of Working and Information Papers ***(Revision 2)*** | Secretariat |
| IP/03 | 3.1 | Air Navigation Plan of Colombia | Colombia |
| IP/04 | 3.1 | GPS-Enhanced Aircraft Guidance System Project | Colombia |
| IP/05 | 2 | Issues related to the implementation of the integrated management system (SIG/IDAC) and the safety management system (SMS) ***(Revised)*** | Dominican Republic |
| IP/06 | 2 | Issues related to safety oversight inspections for air navigation, aerodrome, and aeronautical meteorological services ***(Revised)*** | Dominican Republic |
| IP/07 | 3.1 | Unmanned aerial vehicle access to the Brazilian airspace | Brazil |
| IP/08 | 3.1 | Introduction to automatic dependent surveillance-broadcast (ADS-B) in Brazilian airspace | Brazil |
| IP/09 | 3.1 | Integrated system for air movement management (SIGMA) | Brazil |
| IP/10 | 3.1 | Advanced system of information management for air traffic and reports of operational interest (SAGITARIO) | Brazil |
| IP/11 | 3.1 | Automated system for meteorological observation management | Brazil |

| Number | Agenda Item | Title | Prepared and Presented by |
|---|---|---|---|
| | | and record (WEBMET) | |
| IP/12 | 3.1 | Activities carried out by Brazil to upgrade the DATA-LINK system | Brazil |
| IP/13 | 3.1 | Brazilian aeronautical search and rescue system | Brazil |
| IP/14 | 3.1 | Replacing AISWEB site by portal AIS | Brazil |
| IP/15 | 3.1 | Activities undertaken by brazil for the deployment of GBAS (Ground Based Augmentation System) | Brazil |
| IP/16 | 3.1 | Migration from AIS to AIM in Brazil | Brazil |
| IP/17 | 2 | IOSA – The IATA Operational Safety Audit Programme | IATA |
| IP/18 | 2 | IATA Safety audit for ground operations ***(English only)*** | IATA |
| IP/19 | 3.1 | Continuous descent arrival (CDA) ***(English only)*** | IATA |
| IP/20 | 6 | Laying the foundations for a more risk-based ICAO Annex 17-Security: Security Management Systems ***(English only)*** | IATA |
| IP/21 | 3.1 | Progress of the Project RLA/03/902 – SACCSA PHASE III A | Secretariat |
| NI/22 | 3.1 | Modernización de los sistemas de radares de vigilancia de la República Dominicana ***(Spanish only)*** | Dominican Republic |

## LIST OF DISCUSSION PAPERS

| Number | Agenda Item | Title | Prepared and Presented by |
|---|---|---|---|
| DP/01 | 5 | Management of the GREPECAS mechanism | Rapporteur of the Ad Hoc Group |

## LIST OF PRESENTATIONS

| | |
|---|---|
| Proposed new GREPECAS Organization | Secretariat |
| Presentation on ASCA – Academia Superior de Ciencias Aeronáuticas | Dominican Republic |

**Agenda Item 1 Follow-up on the results of the GREPECAS/15 meeting**

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

- WP/02 Rev.**,** WP/03 Rev., WP/04 Rev. (Secretariat)

### 1.1 Review of the status of implementation of GREPECAS/15 Conclusions that were considered by the ANC

1.1.1 The Secretariat presented WP/02 to the Meeting with the action taken by the Air Navigation Commission (ANC) during the review and approval of the report of the Fifteenth Meeting of the CAR/SAM Regional Planning and Implementation Group (GREPECAS), held in Rio de Janeiro, Brazil, from 13 to 17 October 2008. The Meeting took note of the specific action taken by the ANC and the follow-up by the States and Secretariat on GREPECAS/15 conclusions and decisions, presented in Appendix C to the aforementioned paper. Regarding the review of the safety assessment methodology, the ANC highlighted that the collision risk analysis should take into account the ATM system as a whole. The withdrawal of M and N errors from the safety analysis was not supported by the ANC.

1.1.2 The Meeting agreed that there is a need for ICAO to study the safety assessment methodology using qualitative methods, and that operational errors should be assessed using safety management systems (SMS).

1.1.3 The Meeting noted that the GREPECAS/15 report did not contain any specific matters that required action by the Council, and thus, the report was not submitted. GREPECAS acknowledged the ANC for its valuable guidance on various activities of the Group, which would be taken into account for the development of the CAR/SAM work programme.

### 1.2 Review of the status of implementation of GREPECAS/15 Decisions and Conclusions that were not considered by the ANC

1.2.1 The Secretariat also presented WP/03 showing action taken by CAR/SAM States/Territories/International Organizations and the ICAO Secretariat regarding implementation of the conclusions and decisions adopted by the GREPECAS/15 Meeting, which were presented in Appendix A to the aforementioned paper.

1.2.2 The Meeting took note that the Secretariat needed to receive timely information from States and International Organizations regarding action to be taken for implementation of the conclusions formulated by the Group to achieve effective follow-up until implementation of conclusions and decisions is achieved. Accordingly, it formulated the following conclusion:

**CONCLUSION 16/1 ACTION PLAN FOR THE IMPLEMENTATION OF GREPECAS CONCLUSIONS**

That, in order to enable the Secretariat to follow-up on the implementation of GREPECAS conclusions:

a) once the GREPECAS Meetings reports are received, the States, Territories and International Organizations of the CAR/SAM Regionsshall complete the Action Plan used for this purpose and submit it to the corresponding ICAO Regional Office within a period not greater than 30 days; and

b) the ICAO NACC and SAM Regional Offices follow-up on the activities included in the action plans.

### 1.3 Review of the status of implementation of GREPECAS outstanding conclusions

1.3.1 In WP/04, the Secretariat presented a review of the status of implementation of outstanding GREPECAS conclusions prior to its Fifteenth Meeting (GREPECAS/15), listing the actions taken to date. The Meeting agreed that the ICAO NACC and SAM Regional Offices should follow-up on the activities envisaged in the action plans for the implementation of GREPECAS outstanding conclusions in order to provide the support to the States/Territories that so require and formulated the following decision:

**DECISION 16/2 FOLLOW-UP ON GREPECAS OUTSTANDING CONCLUSIONS**

That, starting from the GREPECAS/16 Meeting:

a) the ICAO NACC and SAM Regional Offices follow-up on the activities contemplated in the action plans for the implementation of GREPECAS outstanding conclusions, in order to provide the required support to the States/Territories that so require; and

b) the review of the status of implementation of outstanding conclusions corresponding to the next-to-last and previous meetings of GREPECAS be excluded from the agenda of future GREPECAS meetings and instead, be presented to States by the Secretariat as an information paper.

**Agenda Item 2 Flight Safety and RASG-PA activities**

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

- WP/05, WP/06 Rev., WP/07 Rev. (Secretariat)
- IP/05 Rev., IP/06 Rev. (Dominican Republic), IP/17, IP/18 (IATA)

***Regional Aviation Safety Group – Pan America (RASG-PA) Activities Update***

2.1 Regarding WP/05, the Meeting noted that the work of RASG-PA was based on the implementation of the ICAO Global Aviation Safety Plan (GASP), which unifies all aviation sectors, including industry and States. It also took note of the work modality of the Group, its meeting schedule, operational structure, and various activities. The Meeting took note of the importance of active participation by the States in its activities.

2.2 The RASG-PA work strategy is based on the analysis of all safety information that can be shared amongst aircraft manufacturers, IATA, ICAO, the States, etc., for the production of an annual safety report that identifies the main safety risks. Thus, a consensus can be reached amongst all stakeholders as to where to focus efforts to enhance safety. Information is then further analysed by the Regional Aviation Safety Team (RAST) to ultimately define detailed implementation plans (risk mitigation actions).

2.3 The RASG-PA meeting reports, as well as other important material related to detailed activities of the group and instruction, can be found at: www.mexico.icao.int/RASGPA.html

2.4 Based on the successful results of the First Pan American Aviation Safety Summit held in Sao Paulo, Brazil, from 19 to 23 April 2010, and in order to promote training and aviation safety RASG-PA members approved the joint sponsorship of the Second Annual Pan American Aviation Summit, which will be held in Mexico City, Mexico, from 15 to 16 June 2011. Moreover, during the week of the Summit, in order to consolidate events, additional safety training is being planned at the same venue; RAST-PA will also convene a meeting. Combining events is an overall objective of RASG-PA to minimize expense and assemble participants from all different aviation perspectives.

2.5 The Meeting became aware of the importance of supporting the work being carried out by RASG-PA and agreed on the need for the Secretariat to ensure close coordination between GREPECAS and RASG-PA in order to avoid unnecessary duplication of efforts and to develop procedures to be submitted to GREPECAS for the adoption of actions on the conclusions adopted by RASG-PA. Accordingly, it formulated the following decision:

**DECISION 16/3 COORDINATION BETWEEN GREPECAS AND RASG-PA**

That the Secretariat develop, for consideration by GREPECAS:

a) a coordination mechanism to avoid duplication of efforts between GREPECAS and RASG-PA; and

b) a procedure whereby one group may propose actions to the other group.

***Status and outlook of the Regional Safety Oversight Cooperation (SRVSOP)***

2.6 Through the information presented in WP/06, the Meeting took note of the activities of the Regional Safety Oversight Cooperation System (SRVSOP), its origins and work strategy, which is based on the implementation of a process for the development, harmonization, and adoption of Latin American aeronautical regulations, known as LARs. In this regard, the Meeting noted that the SRVSOP had started the development of the AGA LAR set as a way of standardizing aerodrome certification requirements and procedures in the States, improving the level of safety, and thereby, improving runway safety, as well as giving prescriptive support to implementation of the Safety Management System (SMS) at aerodromes.

2.7 In response to a consultation by the Dominican Republic as to how they could participate in this process, it was clearly stated that since the SRVSOP was the result of an agreement between the Latin American Civil Aviation Commission (LACAC) and ICAO, it corresponds to LACAC promoting and accepting the accession by its members. Likewise, the meetings of SRVSOP panels were open to the participation of observers.

***Addressing the global issue of runway safety***

2.8 WP/07 explained that runway incursions (RI) continued to be a major issue, while runway excursions (RE) exceeded by far all other occurrence categories. GREPECAS was also provided with an update on the ICAO Runway Safety Programme, which had been expanded to cover RI and RE, and other safety-related aspects of runway occurrences, as well as on activities aimed at the application of a multidisciplinary approach to runway safety enhancement worldwide.

2.9 The Meeting took note that as part of the ICAO Runway Safety Programme ICAO would convene a Global Runway Safety Symposium (GRSS) in Montreal, on 24-26 May 2011 (www.icao.int/GRSS2011/), with a view to identifying a common framework and coordinating a global effort to improve runway safety, in partnership with various international organizations. Likewise, the Meeting noted that as part of the regional activities emerging from the GRSS Symposium a CAR/SAM runway safety workshop would be conducted under the modality of a Special Implementation Project (SIP) tentatively from 11to 14 October, in Mexico City, Mexico.

2.10 The Meeting was also apprised of the development of provisions, The Procedures for Air Navigation Services (PANS), and guidance material by ICAO to mitigate runway excursions, runway incursions and other occurrences and activities related to runway safety.

2.11 While discussing this item, Barbados informed the Meeting that the aerodrome certification process should be taken into account for resolving some of the issues associated with these runway safety occurrences. Cuba also informed the Meeting that some runway incursions that had occurred at its airports had been originated by lack of compliance with standard aeronautical phraseology by pilots and air traffic controllers.

2.12 In view of global developments in the area of runway safety, the Meeting urged the States that had not yet done so to establish a runway safety programme to prevent and mitigate serious runway-related accidents and incidents.

## Agenda Item 3 Performance framework for Regional Air Navigation Planning and Implementation

### 3.1 Global, Inter-Regional and Intra-Regional Activities Concerning Air Navigation Systems in the CAR/SAM Regions

- Under this agenda item, 11 working papers, grouped by area, were presented and discussed in the following order: AGA: WP/22 (Colombia) and WP/23 (Dominican Republic); AIM: WP/33 (IATA); ATM/SAR: WP/19, WP/26, WP/28, WP/27 and WP/25 (Brazil); CNS: WP/20 (Brazil), WP/21 (Spain) and WP/31 (Brazil).
- 15 information papers were also grouped: AIM: NI/14 and NI/16 (Secretariat); ATM/SAR: NI/07, NI/09 (Brazil), IP/19 (IATA) and NI/13 (Brazil); CNS: NI/04 (Colombia), NI/08, NI/10, NI/12, NI/15 (Brazil), NI/21 (Secretariat) and NI/22 (Dominican Republic); MET: NI/11 (Brazil); and Other Aspects: NI/03 (Colombia).

***AGA***

3.1.1 In WP/22, the Meeting was presented with information about the publication and implementation of the Dominican Aeronautical Regulation 14 *(Reglamento Aeronáutico Dominicano 14* - RAD 14), which incorporated ICAO Standards and Recommended Practices (SARPs) for the design and operation of airports in the Dominican Republic. Likewise, the Meeting was informed that in order to adhere to new Civil Aviation Law 491-06, approved in 2006, the Dominican Republic had developed the Dominican Aeronautical Regulation (RAD-14, Vol. I) for regulating the design and operation of aerodromes, which was approved and published in 2008. Within this context, the Meeting urged States that had not yet developed regulations for the design and operation of aerodromes to do so given the convenience of establishing the required regulation in their respective States.

***AIM***

3.1.2 The Meeting took note of WP/33 presented by IATA, which highlighted the importance for States to publish aeronautical information in compliance with AIRAC periods. Cuba and JEPESSEN agreed that, especially for certain events and/or conditions considered as critical both within and outside of the electronic aeronautical information/data exchange environment, AIRAC periods should be applied by States sufficiently ahead of time so that the information may be used by users without affecting safety.

***ATM/SAR***

3.1.3 With the presentation of WP/19, the Meeting took note of the South Atlantic Interoperability Initiative to Reduce Emissions (SAIRE) aimed at expediting the implementation of environmentally friendly procedures on oceanic routes between Europe and South America (EUR/SAM) through the operation of integrated flight tests to validate operational methods for reducing $CO_2$ emissions.

3.1.4 In this regard, the SESAR Joint Undertaking and the ATM authority of Brazil signed a Letter of Understanding in August 2010, which highlighted the opportunity to establish an AIRE-like consortium for reducing the environmental impact of traffic flows between Europe and South America (EUR/SAM), and thus improving energy efficiency and reducing aircraft noise levels through the development and implementation of environmental procedures favouring all flight phases.

3.1.5 The Meeting supported the initiative, and several States and users offered their support to the project. The Secretariat also provided information on the NAM/CAR/SAM workshop on State action plans for reducing $CO_2$ emissions to be held in Mexico City, Mexico, from 2 to 4 May 2011**.**

3.1.6 Brazil presented WP/26, including a summary of the action taken for the implementation of quality assurance and safety oversight guidelines with a view to the development and publication of Procedures for Air Navigation (PANS) through a technical training programme serving as a certified technical rating mechanism for the development of procedures.

3.1.7 Brazil also informed that it had been providing training support through an ICAO SAM Regional Office project. This training is available in English and Spanish for CAR/SAM States.

3.1.8 Regarding WP/28Rev., the Meeting was apprised of a large-scale military operation (Operation CRUZEX V) with low impact on civil aviation, applying the flexible use airspace (FUA) concept, which was facilitated by civil/military integration in the Brazilian airspace.

3.1.9 Based on the application of flexible use airspace (FUA), the Air Navigation Management Centre (CGNA) planned the activation of a parallel military coordination structure for inclusion in the exercise management and in the ATC units involved, one of its objectives being to demonstrate the feasibility of sharing the airspace between civil and military aircraft.

3.1.10 The Meeting took note that the civil/military coordination philosophy facilitated the planning and implementation of military operations and created the necessary conditions for mitigating possible adverse effects on civil aviation.

3.1.11 The Meeting also took note of the NAM/CAR/SAM seminar/workshop on civil/military cooperation to be held in Lima, Peru, from 16 to 19 August 2011.

3.1.12 Through WP/27, the Meeting took note of the Brazilian experience concerning assessment of English language proficiency for air traffic controllers of the Brazilian Airspace Control System (*SISCEAB*) conducted according to the guidelines contained in ICAO Doc 9835 and the test validation process.

3.1.13 The Meeting deemed it relevant for CAR/SAM States to use the Brazilian model to achieve English language proficiency and to enhance safety. It also highlighted the need for training in standard phraseology.

3.1.14 The Meeting was reminded that the date for compliance with the language proficiency standard was 5 March 2011. In this regard, it was noted that the Secretary General had sent a State Letter in regard to compliance with Assembly Resolution A37-10 – *Knowledge of the English language used for radiotelephonic communications*, which included the following main actions:

a) Contracting States that will not meet language proficiency requirements by 5 March 2011, should send ICAO their compliance plans before that date. These plans should be updated periodically after March 2011 until achieving full compliance. States are urged to review such plans in order to make operational decisions that do not discriminate nor create unfair economic advantages; and

b) ICAO will check the compliance plans submitted by the States to make sure that they are complete and include deadlines and identifiable landmarks, and will use the Continuous Monitoring Approach (CMA) for data collection.

3.1.15 Some States informed on the progress made in the area of English language proficiency pursuant to the recommendations of Assembly Resolution 37-10.

3.1.16 Regarding WP/25, the Meeting took note of the process of specialization of air traffic controllers in Brazil for obtaining technical rating certificate (CHT) for ATS surveillance, including the strategies and results that have permitted a reduction in the time required for rating air traffic controllers. The increased number of ATCOs has created the need to restructure training in order to address the growing number of professionals entering the system and reduce the time required for obtaining the CHT and professional license.

3.1.17 In addition to expanding the learning environment, the Instituto de Control del Espacio Aéreo (ICEA) Simulation Laboratory has been implemented with characteristics that simulate the operational environment, including consoles, operational scenarios, air traffic movements in each operational sector, and communication systems identical to those found in the main ATC units of Brazil with a view to facilitating the adaptation of ATCOs to the operational environment when starting the "on-the-job training" phase.

***CNS***

3.1.18 Regarding WP/20, the Meeting viewed with interest the agreement signed by Brazil and the European SESAR Joint Undertaking for the implementation of the Oceanic Position Tracking Monitoring and Improvement (OPTIMI) programme, as well as the extension of the latter to other CAR/SAM airspaces for covering the Atlantic Southern and Central Oceanic areas and considered that OPTIMI activities should be analyzed at the next SAT/FIT meeting (SAT/FIT/6 and SAT/16) to be held in Recife, Brazil, from 3 to 6 May 2011.

3.1.19 The Meeting, upon reviewing WP/31, took note of the flight inspection methods being implemented in Brazil for the new GNSS and GBAS RNAV procedures. The methods presented were based on the establishment of standards for LNAV procedures, APV BARO/VNAV approaches, and (GBAS) GLS approaches. These methods were developed based on the broad experience of Brazil, flight inspection criteria, the Brazilian Flight Inspection Manual, and ICAO and FAA reference documents. Within this context, the Meeting considered that the information presented should be shared with other flight inspection agencies of the CAR/SAM Regions in order to exchange experiences with a view to harmonizing air navigation inspection procedures.

3.1.20 WP/21 contained a description of navigation infrastructure elements and considerations in support of PBN implementation:

1) use of DME/DME to support RNAV operations;
2) use of SBAS for APV 200 operations; and
3) use of GBAS for CAT I operations, and in the future, CAT II/III operations.

3.1.21 The Meeting noted that some aircraft lacked GNSS capacity, and in case of GNSS failure, an alternate infrastructure based on DME/DME or DME/DME/INS was required, as well as proper deployment of DME stations to cover the designated operational coverage (DOC) area required to support PBN implementation. Regarding this issue, the Meeting concluded that these activities were contemplated within Project A2, Task A2.4 of the PBN Programme of the CNS/ATM Subgroup.

3.1.22 Likewise, the Meeting took note of possible ionosphere effects on SBAS and GBAS systems and their inclusion in the analysis of GNSS implementation alternatives in the CAR/SAM Regions for the purpose of developing PBN implementation plans.

3.1.23 The technical coordinator of the ICAO Regional Technical Cooperation Project RLA/03/902 advised the Meeting that he was willing to provide additional information on the results of the real-time demonstration of the SBAS/SACCSA signal broadcast carried out during the Seventh Coordination Meeting of Project RLA/03/902 held in San Carlos de Bariloche, Argentina, from 11 to 15 October 2010.

### 3.2 AERMET/SG/10 Meeting Report

Under this agenda item, the following working paper was presented:

- WP/08 Rev. (Secretariat).

3.2.1 The Meeting took note of the report (WP/08) of the Tenth Meeting of the GREPECAS Aeronautical Meteorology Subgroup (AERMET/SG/10) held in Buenos Aires, Argentina, from 19 to 23 October 2009. The Group formulated 15 conclusions, which were approved through the GREPECAS fast-track procedure on 20 July 2010, and are listed in the **Appendix** to this part of the report. It also formulated 5 decisions.

3.2.2 The following issues were addressed by the AERMET Subgroup:

- Implementation of the World Area Forecasting System (WAFS)
- Implementation of the International Satellite Communications System (ISCS)
- Implementation of the International Airways Volcano Watch (IAVW)
- Implementation of SIGMET information
- Exchange of OPMET information
- Regional MET requirements for ATM
- Review of the CAR/SAM ANP/FASID, Part VI – MET
- MET Information and ATM
- Implementation of the MET quality system

3.2.3 The Meeting took note that the United States, as WAFS provider State, could not extend the ISCS-G2 beyond 2012, and for WAFS and OPMET data broadcasts, the proposal was to use a combination of third generation ISCS (ISCS-G3) and an internet-based service called WAFS Internet File Server (WIFS) or WIFS only . The latter system would allow States, through use of the public Internet, to access all WAFS forecasts and OPMET information currently available through the ISCS.

3.2.4 Within this context, the Meeting was apprised by the Secretariat that according to tests carried out in some States, it had been noted that the WIFS was transmitting only the information required in Annex 3 and OPMET information.

3.2.5 It was also noted that as a result of the revision of the regional meteorological procedures listed in Part VI – Meteorology of the CAR/SAM ANP Basic and FASID (Doc 8733), in keeping with the structure of the current practices of CAR/SAM operational requirements, the CAR/SAM ANP Basic and FASID, Part VI – MET had been amended.

### 3.3 AGA/AOP/SG/7 Meeting Report

Under this agenda item, the following working paper was presented:

- WP/09 (Secretariat).

3.3.1 The Meeting reviewed and took note of the report (WP/09) of the Seventh Meeting of the GREPECAS Aerodromes and Ground Aids/Aerodrome Operational Planning Subgroup (AGA/AOP/SG/7) that was held in Buenos Aires, Argentina, from 9 to 13 November 2009. The AGA/AOP/SG/7 Meeting formulated 4 conclusions, which are presented in the **Appendix** to this report and were approved through the GREPECAS fast track procedure on 20 July 2010. The Subgroup had dealt with the following matters:

- Deficiencies and air navigation subjects in the AGA field
- Certification of Aerodromes/Safety management systems
- State Safety Programme/Safety management systems
- Runway Safety
- AGA-related performance objectives contained in the NAM/CAR Regional Performance-based Air Navigation Implementation Plan
- Task Force Activities, CARSAMPAF and ALACPA
- 
- Terms of reference, work programme and composition of the AGA/AOP/SG with a performance-based approach

3.3.2 Following the presentation of the AGA/AOP/SG/7 report, the Chairman of the Subgroup referred to WP/22 provided by Colombia, the same that relates to the systematic methodology for aerodrome inspections under the international ISO standard. He pointed out the importance of having a template for aerodrome inspection in place as proposed, with reference to the standard, method used for standards compliance and the final qualification issued by the inspector.

3.3.3 With regards to WP/22, which makes reference to the adoption of a methodology following international ISO guidelines, the Secretariat referred to Safety Management System (SMS) and Quality Management System (QMS) mentioning that even though they have common aspects they are different concepts. SMS is supported by quality principles, it is safety oriented, including human and organizational factors while the QMS is product oriented with organizational services. When an SMS is implemented, the airport operator includes quality principles within the system complying with standards in Annex 14.

3.3.4 Cuba mentioned that they have already established and implemented a SMS in four phases, having finished the process in December 2010. Within this process, safety hazards were identified and risks were assessed, taking mitigation measures to mitigate them accordingly.

### 3.4 AIM/SG/12 Meeting Report

Under this agenda item, the following working paper was presented:

- WP/10 (Secretariat).

3.4.1 The Meeting was informed, through WP/10, of the work carried out by the GREPECAS Aeronautical Information Management Subgroup at its twelfth meeting (AIM/SG/12), held from 23 to 27 November 2009, in Lima, Peru. The main issues addressed at the meeting were the following:

- follow-up on the action taken by the GREPECAS/15 and AIM/SG/11 Meetings;
- review of the reports of the AIM Subgroup task forces;
- AIS-to-AIM transition planning; and
- review of AIM implementation processes.

3.4.2 The Meeting placed special emphasis on the implementation by CAR/SAM States of the "ICAO AIS-to-Aeronautical Information Management (AIM) Transition Roadmap." In this regard, the quality, integrity, availability, and timeliness of aeronautical information/data managed by the AIS during this AIM transition stage should meet the requirements for the exchange of aeronautical information/data in electronic format. In this sense, the representative of IATA, supported by the representative of Cuba, placed special emphasis on the importance of publishing international NOTAM information in English in view of its safety implications.

3.4.3 It was also highlighted that in order to achieve the first phase of AIM transition, States needed to assign high priority to the implementation of the World Geodetic System – 1984 as a whole, and to the QMS. Likewise, the Meeting took note that the Secretariat will conduct a survey for CAR/SAM States in 2011 to obtain information on the level of implementation of e-TOD and the Plans that have been developed for its implementation in order to allow the ICAO Regional Offices to provide required assistance.

3.4.4 The Subgroup had formulated eight conclusions that were approved through the GREPECAS fast-track procedure on 20 July 2010, which are listed in the Appendix to this part of the report. It also formulated two decisions.

3.4.5 Cuba requested the Secretariat to announce the dates of planned regional educational events in a timely manner in order to allow States to schedule and budget participation in this events.

### 3.5 CNS/ATM/SG/1 and CNS/ATM/SG/2 Meeting Reports

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

- WP/11, WP/32 (Secretariat).

3.5.1 The Meeting reviewed the reports (WP/11) of the CNS/ATM/SG/1 and CNS/ATM/SG/2 meetings held in Lima, Peru, from 15 to 19 March 2010, and in Mexico City, Mexico, from 16 to 19 November 2010, respectively.

***First Meeting of the CNS/ATM/SG***

***Review of CNS/ATM Developments at Global and CAR/SAM Level***

3.5.2 The Subgroup felt that since the Directors of Civil Aviation of the NAM/CAR Regions had already approved the NAM/CAR Regional Performance-Based Air Navigation Implementation Plan (NAM/CAR RPBANIP), and since the SAM Region was implementing some of the performance objectives approved by GREPECAS, the SAM Region should also prepare a performance-based implementation plan that included all air navigation areas, as well as metrics to measure the achievement of performance objectives.

3.5.3 The Subgroup, taking into account the need to have a common and clearly defined approach to performance monitoring and measurement and the need to agree on a uniform set of metrics for the CAR/SAM Regions, adopted a CAR/SAM performance monitoring and measurement program.

***Review of Outstanding Matters of the ATM/CNS/SG, ATM/COMM, and CNS/COMM and their Respective Task Forces, in order to take them into account in the CNS/ATM Subgroup Work Programme***.

***ATM matters***

3.5.4 In order to harmonize ATFM implementation in the CAR/SAM Regions, the Subgroup examined and approved the ATFM Manual for the CAR/SAM Regions.

***CNS matters***

3.5.5 The Subgroup approved the document entitled CAR/SAM Strategy for the evolution of air navigation systems to support the implementation of performance-based navigation (PBN), which appears in Appendix D to WP/11 of this Meeting.

3.5.6 Likewise, the Subgroup felt the need to collect information on existing and future avionics in the CAR/SAM Regions for purposes of planning and conducting the cost-benefit analysis of the implementation of air navigation systems.

3.5.7 The Subgroup took note of ATN planning/implementation activities in the CAR/SAM Regions and approved an Internet Protocol (IP) addressing scheme for the inter- and intra-regional communication links that would support ATN ground-ground applications.

3.5.8 The Meeting approved the document entitled Unified Surveillance Strategy for the CAR/SAM Regions, which appears in Appendix E to WP/11 this Meeting. It also considered that improvements should be introduced in the ADS-B-related activities being carried out by CAR/SAM States/Territories/International Organizations.

***Implementation of the new ICAO Flight Plan (FPL) Format***

3.5.9 The Subgroup took note of the CAR/SAM regional strategy for the implementation of Amendment 1 to Edition 15 of Doc 4444 aimed at supporting States/Territories/International Organizations in such implementation.

***Review of the Work Organization of the New CNS/ATM Subgroup taking into account the Performance-Based Project Methodology for the Implementation of the Work Programme***

3.5.10 The Subgroup took note of the activities that the State Project Coordinator, together with the ICAO Regional Officer responsible for coordinating the associated program, would be conducting to review the tasks of project work programmes, the identification of the parties responsible for task implementation, the definition of deliverables for each task, and the breakdown of tasks in sub-tasks.

***Search and Rescue Services***

3.5.11 The Subgroup analyzed and approved the document entitled Manual on Quality assurance in Search and Rescue Services, which appears in Appendix F to WP/11 of this Meeting.

***Training for Developing the Competencies of Aeronautical Professionals***

3.5.12 The Subgroup felt that CAR/SAM civil aviation training centers should continue striving to improve training for aeronautical professionals and to develop medium-term plans for the development of the structure and programs that will respond to new challenges.

3.5.13 The Subgroup received information about a draft guide for the development of a GNSS training program for the provision of technical training in the GBAS and SBAS systems, and considered the importance for States/Territories/International Organizations to promote the implementation of GNSS training plans.

3.5.14 The first meeting of the CNS/ATM Subgroup had formulated nine conclusions and two decisions, which had been approved through the GREPECAS fast-track procedure on 20 July 2010. These conclusions are contained in the Appendix to this part of the report.

***Second Meeting of the CNS/ATM Subgroup***

***Follow-up to the Status of Implementation of Performance-Based Navigation System Plans for the CAR and SAM Regions and the Latest Amendments to ATM- and CNS-related SARPs***

3.5.15 The Meeting was informed of the first results of Phase II of Project RLA/03/902-SACCSA, and in order to support the continuity of project activities, approved the following conclusion:

**CONCLUSION 16/4 SUPPORT FOR THE COMPLETION OF PROJECT RLA/03/902 SACCSA STUDIES AND PARTICIPATION IN THE TEST-BED IMPLEMENTATION**

In view of the first results obtained by the SACCSA Project – Phase III-A and its contribution to the implementation of PBN, and in order to support the completion of this Project, CAR/SAM States/Territories/International Organizations are urged to:

a) facilitate/coordinate with their corresponding national authorities access and provision of data to the SACCSA Project from networks with 1-second GPS receiving stations with FTP or NTRIP access and RINEX files; and

b) taking into consideration the objectives indicated in Appendix B to Agenda Item 2 of the report of the CNS/ATM/SG/2 Meeting, consider participation in the SACCSA-SBAS test-bed implementation by notifying ICAO Regional Offices by **30 June 2011**.

3.5.16 The Meeting recognized the importance of having information available on training requirements and capacity in the CAR/SAM Regions and approved the following conclusion:

**CONCLUSION 16/5 CNS/ATM FIELDS TRAINING PROGRAMME FOR THE COMPETENCY OF AERONAUTICAL PROFESSIONALS FOR THE CAR/SAM REGIONS**

That to train aeronautical professionals with regard to necessary competencies, CAR/SAM States/Territories/International Organizations:

a) follow-up and take into consideration the recommendations of the Symposium on Next Generation Aeronautical Professionals (NGAP) and the results of the NGAP Task Force;

b) in coordination with the ICAO Regional Offices, establish a training programme that responds to the performance objectives identified in the CAR and SAM Regions performance-based implementation plans for the 2012-2016 period; and

c) inform the ICAO Regional Offices on the progress made in the development of this programme, by 30 September 2011.

***Analysis of the Progress Achieved with the Implementation of CNS/ATM Subgroup Work Programmes***

3.5.17 The Meeting noted with concern the insufficient experts designated by States to support the work of the projects and recognized that the presence of State experts was critical for the achievement of project objectives, in keeping with the work methodology and structure of the CNS/ATM Subgroup. The experts designated by States/Territories/International Organizations should have the full support of their organizations. In this regard, the Subgroup had reported to the ACG/8 Meeting that the CAR/SAM States/Territories/International Organizations that have nominated experts for the CNS/ATM Subgroup projects provide them with total support of resources and time aimed at achieving the accomplishment of assigned tasks, as indicated in the CNS/ATM Subgroup work methodology and structure.

3.5.18 Through WP/32 and pursuant to Conclusion 16/4, *"Support to the completion of studies and participation in the implementation of a test-bed for Project RLA/03/902-SACCSA,"* included under paragraph 3.5.15 of this Report, the ICAO Regional Technical Cooperation Project RLA/03/902-SACCSA presented its proposal for SBAS/SACCSA test-bed implementation, describing its basic objectives, composition, implementation strategy with various implementation options, and funding.

3.5.19 The Secretariat clarified that the request of PRN codes for the SBAS/SACCSA test-bed did not correspond to ICAO, and should be done once the activities of the implementation plan had been specified. Requests should be submitted directly to the GPS Directorate.

***Report of the Scrutiny Working Group (GTE)***

3.5.20 In WP/12, the Meeting reviewed the report of the Tenth Meeting of the Scrutiny Working Group (GTE). It noted that M and N errors were still the two main categories, accounting for approximately 94-97% of reported LHDs, which were not caused by RVSM operation but rather by the common aircraft handover procedures between ATC units, in most cases. The assessment revealed that the collision risk in the CAR/SAM Regions significantly exceeding the TLS reference of $5.0 \times 10^{-9}$ of fatal accidents per hour of flight.

3.5.21 It was recognized that height deviations generated by ATC operational errors and in-flight contingencies occurred all over the airspace regardless of whether or not separation minima were applied. Therefore, risk mitigation actions should not be limited to RVSM airspace.

3.5.22 The Meeting agreed on the need for air navigation service providers (ANSP) to conduct a safety assessment of all incidents and ATC operational errors based on ICAO SMS provisions.

3.5.23 The Meeting took note that according to GREPECAS Conclusion 15/36 several bilateral and multilateral meetings had been held to address the adverse trends identified between two or three FIRs. The purpose was to minimize operational errors and LHDs. A subsequent multilateral meeting will be carried out from 4 to 6 April 2011, between the Miami, San Juan, Port-au-Prince, and Santo Domingo ACCs. The objectives of this meeting are to review contingency plans, ATS Letters of Agreement, safety management issues, the mitigation of duplicated flight plans, the allocation of SSR codes and coordination procedures.

3.5.24 GREPECAS endorsed the proposed revised terms of reference presented in the Appendices to WP/12, taking into account ATS safety requirements in the CAR/SAM Regions, and considered the performance-based work programme in the GREPECAS organization as indicated in Agenda Item 5 of this report.

***Search and Rescue (SAR)***

3.5.25 The Secretariat presented WP/13 – *Report of the Search and Rescue (SAR) Meeting for the North American, Caribbean and South American Regions* held in Puntarenas, Costa Rica, from 18 to 22 May 2009, where the following issues were addressed:

- Implementation of ELT on 406 MHz
- National procedures for the search of aircraft using ELT on 121.5 MHz
- Rescue Coordination Centres (RCCs), SAR Points-of-Contact (SPOCs)
- Risk management in practice and Safety Management Systems (SMS) for SAR services
- SAR results and USOAP findings
- Requirements and profiles of SAR personnel and inspectors, and training programs
- Model of SAR multilateral agreement and catalogue of SAR agreements in effect

3.5.26 In view of the need to harmonize the SAR system in the CAR/SAM Regions, the Meeting included a performance-based work programme for improving SAR services for the CAR/SAM Regions in the new GREPECAS organization presented under Agenda Item 5 of this report.

## APPENDIX A

## CONCLUSIONS OF THE GREPECAS SUBGROUPS APPROVED THROUGH THE FAST-TRACK PROCEDURE

| Conclusion and Strategic Objective | Title of Conclusion/Decision | Text of Conclusion/Decision |
|---|---|---|
| **AERMET/SG/10** | | |
| **16/6 C** | **MIGRATION FROM ISCS-G2 TO WIFS** | That, taking into consideration the proposed migration from ISCS-G2 to WIFS, ICAO encourages States to take appropriate measures to obtain access using the WIFS to the WAFS products provided by WAFC Washington. |
| **16/7 C** | **TRANSITION OF ISCS-G2 AND IMPLEMENTATION OF THE WAFS FILE SERVER** | That, with the goal of providing the users with enough time to undertake an orderly transition, the WAFC Washington Provider State is invited to:<br>a) extend the service ISCS-G2 until 30 June 2012; and<br>b) provide an operational WAFS Internet File Server (WIFS) no later than March 2010. |
| **16/8 C** | **WIFS USER GUIDE** | That:<br>a) the WAFC Washington Provider State be invited to consider the possibility of providing the WIFS User Guide also in Spanish; and<br>b) if the request in paragraph a) is not possible, ICAO take the necessary action for the translation of the referred guide. |
| **16/9 A** | **GUIDE ON THE INTERNATIONAL AIRWAYS VOLCANO WATCH (IAVW)** | That the Secretariat develop regional guidance in Spanish to explain the contents of Doc 9766, *Handbook on the International Airways Volcano Watch (IAVW) – Operational Procedures and Contact List*. |
| **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:<br>a) priority is given to the analysis of most common errors in the headings of SIGMET;<br>b) the results be sent to the ICAO SAM Office; and<br>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. |
| **16/11 C** | **PARTICIPATION OF STATES' MEMBERS IN THE MEETINGS OF ICAO OPERATIONS GROUPS OR STUDY GROUPS IN MONTREAL** | That States that have experts in ICAO Operations Groups and Study Groups in Montreal are encouraged to make the maximum efforts for them to participate in the meetings. |

**** Note:** ICAO has established the following Strategic Objectives for the period 2011-2013:*

*A.* ***Safety** – Enhance global civil aviation safety*
*B.* ***Security –** Enhance global civil aviation security*
*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*

| Conclusion and Strategic Objective | Title of Conclusion/Decision | Text of Conclusion/Decision |
|---|---|---|
| **16/12 C** | **BACK-UP MWOs IN THE CAR/SAM STATES** | That:<br>a) in order to comply with paragraph 14 of ANP Basic, Part VI – MET, if a MWO is temporarily not functioning another could assume its obligations; the back-up list included as Appendix B to WP/08 to this part of the report should be taken into account;<br>b) the Secretariat make the necessary updates to CAR/SAM Regional SIGMET Guide. |
| **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. |
| **16/14 C** | **FORMAT FOR OPMET INFORMATION EXCHANGE CONTROLS** | That in order to improve the OPMET exchange:<br>a) the name of "coordinate controls of OPMET exchange for the CAR/SAM Regions" be changed to "COM/MET coordinated controls of OPMET exchange for the CAR/SAM Regions"; and<br>b) the format for the controls of OPMET exchange be modified, in the sense of having one format for METAR and TAF exchange controls and SPECI reception on the basis of CAR/SAM FASID Table MET 2B, and another for the reception SIGMET and special air-reports, on the basis of Appendix I to the *Guide for the preparation, dissemination and use of SIGMET information in the CAR/SAM Regions,* including in the latter the ATS unit location indicators providing services to the FIR, UIR and SRR.<br>*Note. – The Secretariat will prepare the format that should be used starting the next control.* |
| **16/15 C** | **CAR/SAM GUIDE FOR OPMET EXCHANGE** | That in order to enable the application of ICAO procedures for OPMET information exchange, the States use the CAR/SAM Guide for OPMET Exchange included in Appendix C to WP/08 to this part of the report. |
| **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. |
| **16/17 C** | **AMENDMENT TO CAR/SAM ANP BASIC AND FASID, PART VI - MET** | That:<br>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<br>b) Table MET 2B of the CAR/SAM Facilities and Services Implementation Document (FASID):<br>i. be eliminated from CAR/SAM FASID; and<br>ii. be included as an Appendix to the CAR/SAM Guide for OPMET exchange. |
| **16/18 C** | **CAR/SAM MET REGIONAL PERFORMANCE OBJECTIVES** | That the CAR/SAM MET Regional Performance Objectives and associated performance framework forms as contained in Appendix E to WP/08 of this meeting are adopted. |

| Conclusion and Strategic Objective | Title of Conclusion/Decision | Text of Conclusion/Decision |
|---|---|---|
| **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, conducts a Seminar/Workshop for the CAR/SAM Regions. |
| **16/20 C** | **UPDATED COURSE ON AMENDMENT 75 TO ANNEX 3 FOR MET AND ATS PERSONNEL** | That the States plan an update course on Amendment 75 to Annex 3 for MET and ATS personnel, once they receive from ICAO the approval of the referred amendment. |
| **AGA/AOP/SG/7** | | |
| **16/21 A** | **UPDATED STATUS ON AERODROME CERTIFICATION** | That States submit to their respective ICAO NACC and SAM Regional Offices a report on the implementation status of airport certification no later than 28 February 2010. |
| **16/22 A** | **WORKSHOPS ON STATE SAFETY PROGRAMME AND SAFETY MANAGEMENT SYSTEM (SSP AND SMS) COURSES** | That the ICAO NACC and SAM Regional Offices organize workshops on the implementation of the SSP by States and SMS for aerodrome operators during 2010. |
| **16/23 A** | **BEST PRACTICES TO PREVENT RUNWAY INCURSIONS AND RUNWAY EXCURSIONS** | That States submit to NACC and SAM Regional Offices:<br>a) A report on best practices used to prevent runway incursions/excursions at airports;<br>b) That this report be submitted no later than 30 March 2010. |
| **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. |
| **AIM/SG/12** | | |
| **16/25 C** | **PLAN FOR THE IMPLEMENTATION OF PRINCIPLES ON HUMAN FACTORS FOR AIM** | That States/Territories/International Organizations, in support of GREPECAS Conclusion 15/30 *"Guide for the application of principles on human factors in AIS/MAP"*, adopt the *"Plan for the implementation of principles on human factors for AIM"*. |
| **16/26 C** | **APPROVAL OF UPDATES TO THE GUIDANCE MANUAL FOR THE IMPLEMENTATION OF A QUALITY MANAGEMENT SYSTEM ORIENTED TO THE AERONAUTICAL INFORMATION MANAGEMENT (AIM)** | That States/Territories/International Organizations, approve the revisions to the Guidance Manual for the Implementation of a Quality Management System considering the transition from AIS to the Aeronautical Information Management (AIM), contained in the Appendix to this working paper. |

| Conclusion and Strategic Objective | Title of Conclusion/Decision | Text of Conclusion/Decision |
|---|---|---|
| **16/27 C** | **CAR/SAM TRAINING GUIDE FOR THE AIM COURSE** | That the AIM Subgroup:<br>a) propose to GREPECAS the adoption of the "CAR/SAM Training Guide for the AIM Course" (*);<br>b) coordinate with the ICAO NACC and SAM Regional Offices and the national and regional training centres, for the distribution of the guide to serve as a reference in the development of modules for the CAR/SAM AIM course; and<br>c) consider, within the Roadmap for AIS-AIM transition, the initiation of AIM training course based on this reference guide, starting in 2011. |
| **16/28 C** | **CAR/SAM MANUAL ON HUMAN FACTORS IN THE AERONAUTICAL INFORMATION MANAGEMENT (AIM)** | a) Submit the Manual on Human Factors in the Aeronautical Information Service to the consideration of GREPECAS; and<br>b) Take into account this manual for the implementation of training programmes for AIS/MAP personnel. |
| **16/29 C** | **REFERENCE FOR THE DEVELOPMENT OF TRAINING PROGRAMMES IN TECHNICAL ENGLISH LANGUAGE FOR AIS/MAP PERSONNEL IN CAR/SAM STATES** | That CAR/SAM States, Territories and International Organisations consider Doc 9835 AN/453 – *Manual on the Implementation of ICAO Language Proficiency Requirements*, as a reference when formulating their training programmes in the English language, adapting it as necessary based on the performance requirements for AIS personnel, in support to the ATM Operational Global Plan. |
| **16/30 C** | **ROADMAP FOR THE TRANSITION FROM AIS TO AIM** | That CAR/SAM States and Territories:<br>a) Consider the guidelines, steps and timeline for the Transition from AIS to AIM presented in the "Roadmap for the transition from AIS to AIM";<br>b) inform the corresponding ICAO Regional Office progress and/or difficulties on the implementation of SARPs associated to the implementation guide, not later than 5 May 2010;<br>c) develop the corresponding AIM air navigation regional plans with the related PFFs and with the Regional Plans as a reference, according to GREPECAS conclusion 15/1 in its paragraphs a) and b), and in the AIM Roadmap; and<br>d) Inform to the ICAO CAR/SAM Regional Offices on the progress of the implementation requested in the above paragraph, no later than 29 October 2010. |
| **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. |
| **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, to achieve the transition from AIS to AIM in the States, Territories and International Organizations of the CAR/SAM Regions. |

| Conclusion and Strategic Objective | Title of Conclusion/Decision | Text of Conclusion/Decision |
|---|---|---|
| **CNS/ATM/SG/1** | | |
| **16/33 A & C** | **ADOPTION OF PERFORMANCE MONITORING AND MEASUREMENT PROGRAMME FOR THE CAR/SAM REGIONS** | Considering the importance to monitor and measure the achievement of the performance objectives defined for the CAR/SAM Regions, that States, Territories and International Organizations of CAR/SAM Regions:<br>a) adopt the set of metrics related to key performance areas of access, capacity, cost effectiveness, efficiency, environment, flexibility, predictability and safety; described in Appendix A of this part of the report, to monitor and measure the implementation advances of the regional performance objectives;<br>b) incorporate these metrics into their performance monitoring programmes, collect relevant data and submit to the ICAO Lima and Mexico regional offices on a regular basis;<br>c) coordinate with ATM community members to promote information and data collection; and<br>d) inform ICAO Regional Offices of their advances by 30 November 2010. |
| **16/34 C** | **FOLLOW-UP, PARTICIPATION AND COOPERATION TO ICAO RLA/03/902 REGIONAL PROJECT** | That with the objective of concluding technical-financial viability studies of the SBAS implementation within the CAR/SAM Regions, under the ICAO RLA/03/902 regional project, the States, international organizations and users are invited to:<br>a) Participate in Phase III of the RLA/03/902 – SACCSA project and promote cooperation between national entities and make progress on development with support of educational institutions so as to provide scientific and technical support; and<br>b) Increase coordination and exchange of information on the results obtained and experience gained in RLA/03/902 project, GBAS national projects and other initiatives regarding GNSS implementation. |
| **16/35 A & C** | **ADOPTION OF THE CAR/SAM ATFM MANUAL** | That, considering the importance to harmonize the implementation of ATFM in the CAR/SAM Regions, the States, Territories and International Organizations of the CAR/SAM Regions adopt the ATFM Manual shown in Appendix A to the report of the CNS/ATM/SG/1 Meeting. |
| **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:<br>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;<br>b) IATA include the aforementioned information in the IATA database, informing the ICAO CAR/SAM Regional Offices about the response to this request; and<br>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. |

| Conclusion and Strategic Objective | Title of Conclusion/Decision | Text of Conclusion/Decision |
|---|---|---|
| **16/37 C** | **PROPOSED ROUTING SCHEME FOR IPV4 FOR INTER AND INTRA REGIONAL COMMUNICATIONS LINKS FOR ATN GROUND TO GROUND APPLICATIONS** | That the CAR/SAM Regions use the IPv4 routing scheme for inter and intra regional communications links in ATN ground to ground applications for described in Appendix E to the report of the CNS/ATM/SG/1 Meeting. |
| **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:<br>a) Continue with the data collection and analysis, in accordance with GREPECAS guidelines (GREPECAS/15 report, Appendix Q);<br>b) Search for the exchange of data between States, particularly with regard to coverage superposition and analysis criteria;<br>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;<br>d) Inform airspace users on any anomaly in the received ADS-B messages, in preparation of future ADS-B implementation; and<br>e) Duly inform the ICAO Regional Offices on the trial results, for their publication. |
| **16/39 A & C** | **IMPLEMENTATION OF THE NEW FLIGHT PLAN FORMAT IN THE CAR/SAM REGIONS** | That considering the importance of the implementation of Amendment 1 to the Fifteenth Edition of Doc 4444, whose application is foreseen for 2012, CAR/SAM States/Territories/International Organizations:<br>a) Adopt the strategy for the implementation of Amendment 1 to Doc 4444 (PANS-ATM) (15th edition) shown in Appendix J to the report of the CNS/ATM/SG/1 Meeting;<br>b) Develop action plans, taking into account the regional strategy and the action plan based in a performance scope, which includes as Appendix J to this working paper, for the harmonious implementation of the new ICAO flight plan format and the ATS messages related;<br>c) Designate experts who participate as points of contact to coordinate with other air navigation services providers of States/Territories/International Organizations from adjacent flight information regions (FIRs), implementation matters of ATS messages related with the implementation of the new ICAO flight plan format (FPL); and<br>d) Send the result of this implementation to the ICAO NACC and SAM Regional Offices, not later than 30 November 2011. |
| **16/40 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 CAR/SAM States/territories civil aviation authorities and international organizations, prepare aeronautical training programmes which contemplate regional air navigation and safety requirements. |

| Conclusion and Strategic Objective | Title of Conclusion/Decision | Text of Conclusion/Decision |
|---|---|---|
| **16/41 C** | **GNSS TRAINING** | That, taking into account that training of a larger number of experts is essential for the future implementation of GNSS systems in the CAR/SAM Regions, as well as the various ICAO recommendations for the provision of GNSS technical training, and the ICAO initiative on the next generation of aviation professionals:<br>a) States/Territories and International Organizations are urged to foster the training of national instructors, based, inter alia, on courses promoted by ICAO, as a way of supporting the internal dissemination of acquired knowledge;<br>b) The States/Territories and International Organizations that have not yet included GNSS in their training programmes, include this type of training in their plans as of 2010; and<br>c) ICAO is urged to include the necessary considerations on the technical training of professionals, e.g. training on GNSS systems, in the initiative on next generation aviation professionals and its corresponding instances. |

**Agenda Item 4 Air navigation deficiencies in the CAR/SAM Regions**

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

- WP/14 Rev., WP/15, WP/34 (Secretariat)

**4.1 Proposal of a new uniform methodology for the identification, assessment and reporting of air navigation deficiencies**

4.1.1 Under this agenda item the Meeting was informed on the results of the Tenth Meeting of the GREPECAS Aviation Safety Board (ASB/10) held in Punta Cana, Dominican Republic, on 28 March 2011. The Meeting took note of the comments made by the ASB/10 regarding the shortcomings of the current methodology. Also, since many priority "U" deficiencies had not been resolved, aircraft operators were applying risk management techniques to continue conducting their operations in a safe manner.

4.1.2 Regarding "U" deficiencies that had remained unresolved for many years, the ASB considered that States/Territories should be reminded to request ICAO assistance from the Regional Offices. In this sense, GREPECAS agreed to adopt the following conclusion:

**CONCLUSION 16/42 RESOLUTION OF AIR NAVIGATION DEFICIENCIES**

That States/Territories having difficulty in resolving priority "U" air navigation deficiencies request ICAO assistance to prepare action plans and coordinate support for resolving deficiencies if required.

4.1.3 The ASB/10 was also informed about the proposal by the Secretariat of a revised methodology for the identification, assessment and reporting of air navigation deficiencies, and recommended some improvements.

4.1.4 It also noted that the ASB/10 had discussed the concern of IATA regarding the low rate of response by States to Air Safety Reports (ASR) and suggested several improvements to the process. Finally, the ASB/10 recognized that under the new organization being contemplated for GREPECAS the Programmes and Projects Review ommittee would take on the functions of the ASB.

4.1.5 The Meeting proposed revised methodology for the identification, assessment and reporting of air navigation deficiencies presented in WP/14, which considered deficiencies as safety hazards and applied a hazard identification and risk assessment (HIRA) process. The Meeting noted that the lack of response by a State to an identified deficiency reported by the respective Regional Office was evidence of ineffective implementation, which could increase the level of risk in that State/Territory and generate the need for an ICAO audit under the new Continuous Monitoring Approach (CMA) of the ICAO USOAP.

4.1.6 The Meeting analyzed the proposed revised methodology and agreed to incorporate the following for improvements:

- Establish a period of three months for the State to conduct a risk analysis of new deficiencies, complete the respective forms, and send them to the corresponding ICAO Regional Office. The State/Territory could ask for a time extension from the Regional Office by providing the respective justification.

- Expand the field # 8 “Specific Requirement” in Attachment A to Appendix A to WP/14, to include a reference to the standard/recommended practice and ICAO Annex or a reference to the Air Navigation Plan requirement associated with the deficiency.

- Reflect in the methodology flow chart the fact that Regional Offices can also send information to the ANC and the ICAO Council regarding compliance problems without having to wait for a meeting of GREPECAS or the future Programme and Project Review Committee.

- Include two-way communications for reporting deficiencies to the States in order to avoid risk analysis of deficiencies considered by the State as not affecting safety or that have already been resolved.

- Incorporate procedures to ensure that the deficiencies database is kept constantly up-to–date, including the timely elimination of deficiencies from the GANDD once reported and validated to have been resolved..

4.1.7 In view of the foregoing, the Meeting adopted the following conclusion:

**CONCLUSION 16/43 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 ICAO ANC of the results.

### 4.2 Current status of air navigation deficiencies in the CAR/SAM Regions

4.2.1 WP/15 presented the list of priority “A” and “B” deficiencies of the CAR/SAM States/Territories in each air navigation area from the GREPECAS Air Navigation Deficiencies Database (GANDD).

4.2.2 The Meeting also examined the list of deficiencies that required urgent corrective action by the CAR/SAM States/Territories in each air navigation area, which are classified as priority “U” deficiencies, taken from the GANDD. Some States remarked that the GANDD listed deficiencies which had been resolved and other deficiencies which may in fact not be deficiencies. In this regard, the Meeting adopted the following conclusion:

**CONCLUSION 16/44 REVIEW OF EXISTING AIR NAVIGATION DEFICIENCIES**

That:

a) the revised methodology be applied to existing deficiencies contained in the GANDD within a reasonable time period but no later than 31 March 2012;

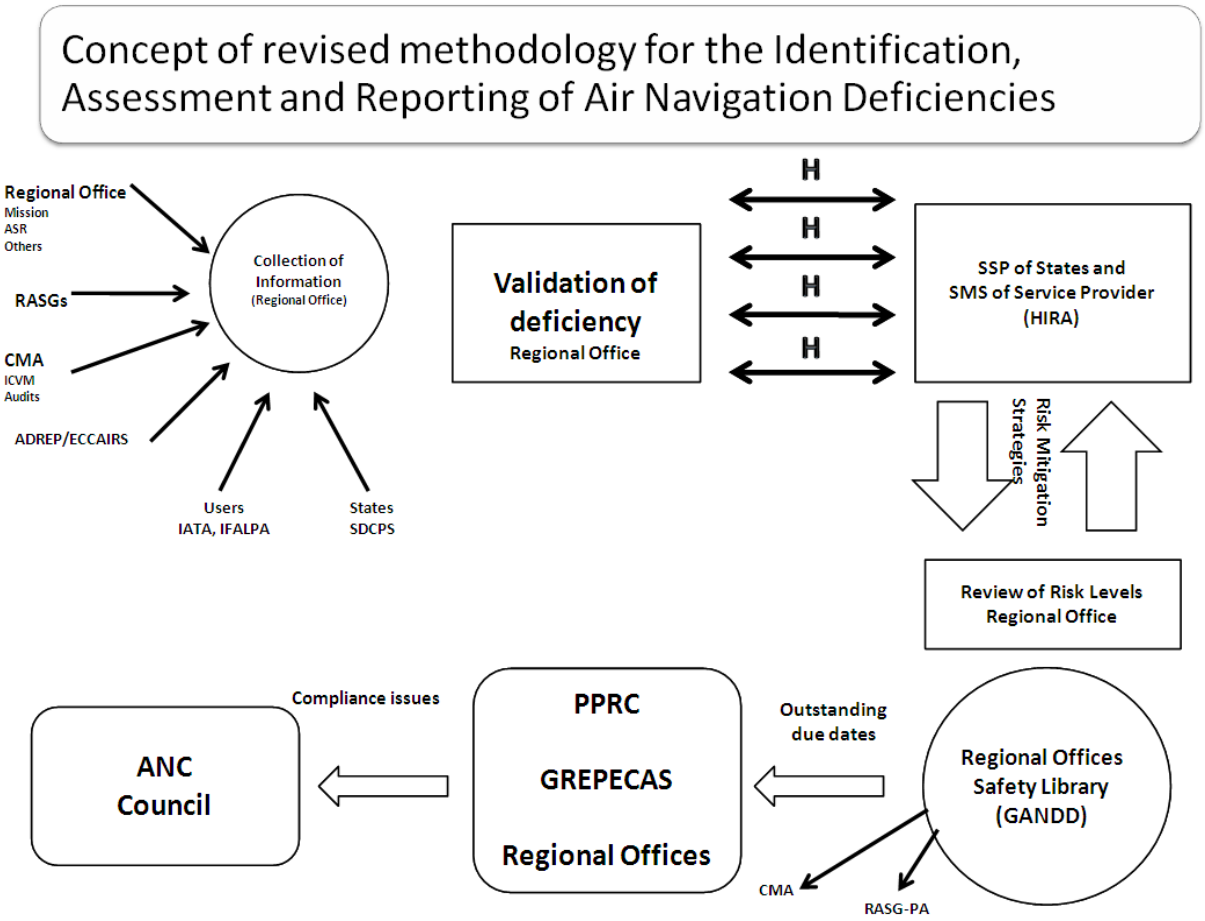
b) ICAO review and improve the GANDD in order to enable the update of deficiencies information in a more timely manner; and

c) ICAO review the procedures for the validation and elimination of the deficiencies contained in the GANDD by **30 June 2011**.

4.2.3 The Secretariat informed the Meeting that the deficiencies contained in the GANDD are available at both the Lima Regional Office website at: http://www.lima.icao.int/MeetProg/GREPECAS/g_welcome.asp?o=g&wLanguage=S and at the Mexico Regional Office website, located at: http://www.mexico.icao.int/gandd2.html.

**APPENDIX A**

**REVISED METHODOLOGY FOR THE IDENTIFICATION, ASSESSMENT AND REPORTING OF AIR NAVIGATION DEFICIENCIES**




1. The Regional Office, upon identifying or receiving a report of a deficiency from sources approved by the Council (State/Territory, IATA, and IFALPA), assesses the report and verifies its validity.

2. The deficiency report duly validated by the corresponding Regional Office is sent to the State concerned through the designated focal point, using the Hazard Identification and Risk Assessment (HIRA) Form that appears in **Attachment 1** to this procedure.

   *Note: In case of criterion discrepancies regarding the need to make the next step of the process which entails risk analysis, the State might coordinate with its Regional Office the corresponding actions to deal with deficiencies.*

3. The State enters the deficiency report into its safety system for the corresponding investigation.

4. The State safety system, using its internal procedures, assesses the risk generated by the deficiency and the underlying factors and hazards, expressed in terms of probability and severity:

   a) Determines the risk tolerability index.
   b) Identifies missing or inadequate defences.
   c) Implements mitigation measures to control risk indices or values defined as intolerable, reducing the operational risk to an acceptable level.
   d) Disseminates the information according to its procedures.

*5.* The State will have three months to return to the corresponding Regional Office the form containing the risk mitigation recommendations report (RMRR) that appears in **Attachment 2** to this procedure, duly completed and signed, and will insert a summary of the developed action plan in the GANDD.

*Note 5.1: In case of criterion discrepancies in the risk assessment of the reported deficiency/hazard, the corresponding Regional Office could suggest to the State to review the analysis.*

*Note 5.2: The State/Territory may request its Regional Office an extension to the response deadline with the corresponding justifications.*

6. If no information is received from the State about the reported deficiency within a period of three months, this will be considered as objective evidence of the ineffectiveness of the SSP and/or SMS. This information will be reported to the USOAP/CMA, which could increase the level of risk of this State and activate any of the USOAP/CMA intervention tools.

7. The Regional Office will inform GREPECAS about the result of the risk mitigation assessment and recommendations by the State.

8. Based on the result of the analysis of the deficiency, the information could be sent to the ICAO Air Navigation Commission on behalf of GREPECAS, the Regional Office or the PPRC.

9. A statistical report of CAR and SAM deficiencies will be provided to RASG-PA for inclusion in the annual safety report of that mechanism.

**Deficiency: A deficiency is a situation where a facility, service, or procedure does not comply with **a regional air navigation plan approved by the Council, or with related ICAO standards and recommended practices**, and which situation has a negative impact on the safety, regularity and/or efficiency of international civil aviation.*

**Hazard: A hazard is a condition or an object with the potential to cause injuries to personnel, damage to equipment or structures, loss of material, or reduction of ability to perform a prescribed function.*

*Note: Within this context, deficiencies are considered hazards.*

## ATTACHMENT 1 TO APPENDIX A

| DEFICIENCY (HAZARD) IDENTIFICATION AND RISK ASSESSMENT REPORT | |
|---|---|
| **1. Description of identified deficiency:** | |
| | |
| **2. State/Territory/Organization:** | |
| **3. Report N°:** | |
| **4. Date of identification:** | |
| **5. Deficiency reported by:** | |
| **6. Air Navigation Area Facility/service involved:** | |
| | |
| **7. Specific requirement:** | |
| **8. Potential consequences of the hazard caused by the deficiency:** | |
| **9. Mitigation currently implemented (if known):** | |
| **10. Remarks:** | |
| **11. Report prepared by: (ICAO Officer)** | |

| DEFICIENCY (HAZARD) IDENTIFICATION AND RISK ASSESSMENT REPORT | | | | | | |
|---|---|---|---|---|---|---|
| | | RISK SEVERITY | | | | |
| | | Catastrophic A | Hazardous B | Major C | Minor D | Negligible E |
| RISK PROBABILITY | Frequent 5 | *5A* | *5B* | *5C* | *5D* | *5E* |
| | Occasional 4 | *4A* | *4B* | *4C* | *4D* | *4E* |
| | Remote 3 | *3A* | *3B* | *3C* | *3D* | *3E* |
| | Improbable 2 | *2A* | *2B* | *2C* | *2D* | *2E* |
| | Extremely Improbable 1 | *1A* | *1B* | *1C* | *1D* | *1E* |

| | |
|---|---|
| **5A, 5B, 5C, 4A, 4B, 3A** | **Intolerable region (equivalent to U-priority deficiencies)**<br>Unacceptable under the existing circumstances |
| **5D, 4C, 4D, 3B, 3C, 2A, 2B, 5E, 2C, 4E, 3D** | **Tolerable region (equivalent to A-priority deficiencies)**<br>Acceptable based on risk mitigation. It may require management decision. |
| **1A, 1B, 1C, 1D, 1E, 2E, 3E, 2D** | **Acceptable region (equivalent to B-priority deficiencies)**<br>Acceptable |
| **Probability** | Is defined as the likelihood that an unsafe event or condition might occur |
| **Frequent:** | • Likely to occur many times (has occurred frequently) |
| **Occasional:** | • Likely to occur sometimes (has occurred infrequently) |
| **Remote:** | • Unlikely to occur, but possible (has occurred rarely) |
| **Improbable:** | • Very unlikely to occur (not known to have occurred) |
| **Extremely improbable:** | • Almost inconceivable that the event will occur |
| **Severity:** | Is defined as the possible consequences of an unsafe event or condition, taking as reference the worst foreseeable situation. |
| **Catastrophic** | • Equipment destroyed<br>• Multiple deaths |
| **Hazardous** | • A large reduction in safety margins, physical distress or a workload such that the operators cannot be relied upon to perform their tasks accurately or completely<br>• Serious injury<br>• Major equipment damage |
| **Major:** | • A significant reduction in safety margins, a reduction in the ability of the operators to cope with adverse operating conditions as a result of increase in workload, or as a result of conditions impairing their efficiency<br>• Serious incident<br>• Injury to persons |
| **Minor:** | • Nuisance<br>• Operating limitations<br>• Use of emergency procedures<br>• Minor incident |
| **Negligible:** | • Little consequences |

## EXPLANATION OF THE "DEFICIENCY (HAZARD) IDENTIFICATION AND RISK ASSESSMENT" FORM

1. **Description of identified deficiency:** Specifies the deficiency identified or the occurrence of the event, validated by the corresponding Regional Office.

2. **State/Territory/Organization:** Identifies the name of the State/Territory/Organization involved.

3. **Report N°:** Unique Code that identifies the deficiency by State.

4. **Date of identification:** Indicates the DD/MM/YY of the report of the deficiency identified or of the occurrence of the event, as applicable.

5. **Deficiency reported by:** Indicates the source that identified and reported the deficiency.

6. **Air Navigation Area Facility/service involved or activity:** Specifies the air navigation area directly involved in the identified deficiency. More than one area may be listed.

7. **Specific requirement:** Standard/Recommended Practice of ICAO Annex or the reference to the requirement of the deficiency-related Air Navigation Plan requirement. If known, the specific error or failure that affected the operation is included

8. **Potential consequences of the deficiency caused by the deficiency:** Initial assessment of the consequence of the identified deficiency, either by the source reporting the deficiency, or by the Regional Office that sends the report.

9. **Mitigation currently implemented (if known):** If known, existing defences are included.

10. **Remarks:** Observations or comments on the identified deficiency may be included.

11. **Report prepared by (ICAO Officer):** The reporting ICAO Regional Office and Official is specified.

## ATTACHMENT 2 TO APPENDIX A

| RISK MITIGATION RECOMMENDATIONS REPORT | | | | |
|---|---|---|---|---|
| **1. Description of identified deficiency:** | | | | |
| | | | | |
| **2. State/Territory/Organization:** | | | | |
| **3. Report N°:** | | | | |
| **4. Date of identification:** | | | | |
| **5. Level of risk before mitigation measures are adopted:** | | | | |
| **6. Solution # 1** | | | | |
| **7. Description of the solution:** | | | | |
| **8. Estimated cost and time for implementation of this solution:** | **9. Revised risk assessment if only this solution is to be implemented:** | **10.Probability:** | | |
| **$** | | **11. Severity:** | | |
| | | **12. Level of risk:** | | |
| **13. Potential implementation problems:** | | | | |
| **14. Solution # 2** | | | | |
| **15. Description of the solution:** | | | | |
| **16. Estimated cost and time for implementation of this solution** | **17. Revised risk assessment if only this solution is to be implemented:** | **18.Probability:** | | |
| **$** | | **19. Severity:** | | |
| | | **20. Level of risk:** | | |
| **21. Potential implementation problems:** | | | | |

| RISK MITIGATION RECOMMENDATIONS REPORT | | | | |
|---|---|---|---|---|
| **22. Solution # 3** | | | | |
| **23. Description of the solution:** | | | | |
| **24. Estimated cost and time for implementation of this solution** **$** _____ | **25. Revised risk assessment if only this solution is to be implemented:** | **26.Probability:** | | |
| | | **27. Severity:** | | |
| | | **28. Level of risk:** | | |
| **29. Potential implementation problems:** | | | | |
| | | | | |
| **30. Recommended solution(s):** | | | | |
| **31. Estimated cost and time for implementation of recommended solution(s):** | **$** | | | |
| **32. Revised risk assessment if implemented as recommended:** | | | | |

| | | RISK SEVERITY | | | | |
|---|---|---|---|---|---|---|
| | | **Catastrophic A** | **Hazardous B** | **Major C** | **Minor D** | **Negligible E** |
| **RISK PROBABILITY** | **Frequent 5** | ***5A*** | ***5B*** | ***5C*** | ***5D*** | ***5E*** |
| | **Occasional 4** | ***4A*** | ***4B*** | ***4C*** | ***4D*** | ***4E*** |
| | **Remote 3** | ***3A*** | ***3B*** | ***3C*** | ***3D*** | ***3E*** |
| | **Improbable 2** | ***2A*** | ***2B*** | ***2C*** | ***2D*** | ***2E*** |
| | **Extremely Improbable 1** | ***1A*** | ***1B*** | ***1C*** | ***1D*** | ***1E*** |

| | |
|---|---|
| **33. Report prepared by (State/Territory/Organization):** | |

## EXPLANATION OF THE "RISK MITIGATION RECOMMENDATIONS REPORT"

The State concerned shall complete the form based on the following explanations:

1. **Description of identified deficiency:** Complete with the same text contained in the deficiency or event occurrence report, validated by the corresponding Regional Office.

2. **State/Territory/Organization:** Complete with the name of the State/Territory/Organization.

3. **Report N°:** Complete with the same code of the identified hazard reported by the Regional Office and to which the risk mitigation recommendations refer.

4. **Date of identification:** Complete with the date (DD/MM/YY) of completion of the form.

5. **Level of risk before mitigation measures are adopted:** Complete with the level of risk estimated with the current mitigation measures.

6. **Solution # 1:** Identifies the number of solution.

7. **Description of the solution:** Complete with a brief description of the first solution to be implemented.

8. **Estimated cost and time for implementation of this solution:** Complete with the estimated cost of implementing the first solution.

9. **Revised risk assessment if only this solution is to be implemented:** Associated to boxes 10, 11 and 12.

10. **Probability:** Complete with the coded and plain-language Probability index that would be achieved with the implementation of this mitigation measure.

11. **Severity:** Complete with the coded and plain-language severity index that would be achieved with the implementation of this mitigation measure.

12. **Level of risk:** Complete with the coded and plain-language tolerability index resulting from the implementation of this mitigation measure.

13. **Potential implementation problems:** Complete with a brief description of the potential implementation problems that might prevent the application of the identified solution.

14. **Solution # 2:** Identifies the number of solution or scenario.

15. **Description of the solution:** Complete with a brief description of the second solution to be implemented.

16. **Estimated cost and time for implementation of this solution:** Complete with the estimated cost of implementing the second solution.

17. **Revised risk assessment if only this solution is to be implemented:** Associated to boxes 18, 19, and 20.

**18.** **Probability:** Complete with the coded and plain-language Probability index that would be achieved with the implementation of this mitigation measure.

**19.** **Severity:** Complete with the coded and plain-language severity index that would be achieved with the implementation of this mitigation measure.

**20.** **Level of risk:** Complete with the coded and plain-language tolerability index resulting from the implementation of this mitigation measure.

**21.** **Potential implementation problems:** Complete with a brief description of the potential implementation problems that might prevent the implementation of the identified solution.

**22.** **Solution # 3:** Identifies the number of solution or scenario.

**23.** **Description of the solution:** Complete with a brief description of the third solution to be implemented.

**24.** **Estimated cost and time for implementation of this solution:** Complete with the estimated cost of implementing the third solution.

**25.** **Revised risk assessment if only this solution is to be implemented:** Associated to boxes 26, 27 and 28.

**26.** **Probability:** Complete with the coded and plain-language Probability index that would be achieved with the implementation of this mitigation measure.

**27.** **Severity:** Complete with the coded and plain-language severity index that would be achieved with the implementation of this mitigation measure.

**28.** **Level of risk:** Complete with the coded and plain-language tolerability index resulting from the implementation of this mitigation measure.

**29.** **Potential implementation problems:** Complete with a brief description of the potential implementation problems that might prevent the implementation of the identified solution.

**30.** **Recommended solution(s):** Complete with the solution(s) to be implemented for reducing the tolerability index to an acceptable level.

**31.** **Estimated cost and time for implementation of the recommended solution(s):** Complete with the estimated cost of the solutions to be implemented.

**32.** **Revised risk assessment if implemented as recommended:** Complete with the risk assessment once the solution(s) described above has (have) been implemented.

**33.** **Report prepared by (State/Territory/Organization):** Complete with the name of the corresponding aeronautical authority or individual or area generating the report.

**Agenda Item 5 Management of the GREPECAS Mechanism**

**5.1 ACG/8 Meeting Report**
**5.2 Review of GREPECAS Terms of Reference and Work Programmes**
**5.3 GREPECAS Membership**

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

- WP/16 Rev., WP/29 Rev., WP/17 Rev., WP/18 (Secretariat)

5.1 The Secretariat presented WPs/16, 17, 18, 29 on the Report of the ACG/8 Meeting and the proposed new GREPECAS organization, Terms of Reference and work methodology and associated transition plan. The Meeting recalled that the objectives for improvements to the GREPECAS mechanism included the following, which had been mandated by the ICAO Council, ANC and GREPECAS at its 15th Meeting:

- Increase effectiveness – more tangible/measurable and performance-based results
- Enhance efficiency – reduce time to achieve approvals, actions and results; improved internal coordination between different bodies, participants and responsibilities; project management methodology
- Reduce costs – less, shorter and smaller site meetings; more remote access meetings, teleconferences and correspondence
- Align GREPECAS with contemporary ICAO strategic objectives, programmes, projects, activities and tasks methodology and the following mandates:
  - Global Air Navigation Plan (GANP)
  - Global ATM Operational Concept
  - performance-based approach (PBA) air navigation planning and implementation
  - future revised CAR/SAM Air Navigation Plan (ANP)
  - regional CAR and SAM performance-based air navigation implementation plans
- Recognize that GREPECAS is primarily an inter-regional CAR/SAM air navigation planning mechanism, to support the separate but harmonized regional CAR and SAM implementation plans and mechanisms

5.2 The Meeting recalled the GREPECAS/15 Meeting decisions, which included the following:

- AVSEC/COMM removed from GREPECAS
- Disbanded IA/TF and HRT/SG
- AIS/MAP renamed AIM
- Re-organized ATM/CNS/SG into CNS/ATM/SG and disbanded the ECC, ATM/COMM and CNS/COMM, and by default its respective Task Forces
- Adopted PBA and PFF methodology
- Other sub-groups to adopt the same methodology in the future based on the experience of the CNS/ATM/SG

5.3 The CNS/ATM/SG completed the following at its first meeting, which were refined and updated accordingly at the second meeting:

- Replaced the former ATM and CNS Committees and respective task forces with programmes and projects
- ICAO Regional Officers were nominated to coordinate Programmes
- State Officers were designated to coordinate projects
- State experts were identified to contribute to project execution
- Adopted project management methodology
- Applied performance-based approach

5.4 As a result of the GREPECAS mandate and CNS/ATM/SG experience, the ACG at its eighth meeting endorsed a proposed new GREPECAS organization for presentation at the GREPECAS/16 Meeting, which involved the following:

- Apply the new CNS/ATM/SG work methodology to other GREPECAS subgroups and task forces
- Transform all Subgroups into programmes and projects
- Incorporate SAR and GTE projects and activities within programmes as appropriate
- CAR and SAM Regional Officers as programme coordinators
- CAR and SAM State Officers as project coordinators
- CAR and SAM State Officers as project experts
- Project management methodology
- Performance-based approach

5.5 The Secretariat clarified that projects refer to its generic definition and are not limited to ICAO Technical Cooperation projects which are an example of one type of project. Technical Cooperation projects are an implementation tool, the same as working groups, Special Implementation Projects (SIPs), etc. Projects will comprise the following components, which need to be documented in a brief Project Document and schedule:

- Objectives
- Description
- Activities
- Responsibilities
- Resources – experts and budget
- Results - outcomes, outputs, deliverables
- Schedule- timelines, milestones, deadlines
- Dependencies
- Metrics / Indicators
- Risks

5.6 It is proposed that GREPECAS meet once every three years shortly after the ICAO Assembly in order to provide required direction to its organization based on Assembly resolutions. In the interim, the GREPECAS work programme will be directed by the Programmes and Projects Review Committee (PPRC), which will also prepare annual GREPECAS reports to be approved by GREPECAS using the fast-track mechanism and submitted by the Secretariat to the ANC for further submission to the Council, if applicable.

5.7 The proposed new GREPECAS organization is illustrated in **Appendix A** to this part of the report. The Meeting sustained extensive discussion on the proposal, and the Chairman convened a closed meeting of Heads of Delegation of member States to decide the matter. During this closed meeting, the following States/Territories confirmed their immediate approval of the proposed new GREPECAS organization: Barbados, Colombia, France, Guyana, Haiti, Jamaica, Panama, Trinidad and Tobago, and United Kingdom. The remaining States/Territories (Brazil, Chile, Cuba, Curacao, Dominican Republic, Ecuador, Guatemala, Mexico, Paraguay, United States Uruguay and Venezuela) approved the new proposed GREPECAS organization in principle but requested an additional time period for further review and consultation within their State/Territory authorities and ratification, along with any possible identified clarification and refinements. The Meeting therefore adopted the following Decisions:

**DECISION 16/45 NEW GREPECAS ORGANIZATION**

That in order to implement CAR/SAM performance-based regional plans in compliance with the Global Air Navigation Plan and Global ATM Operational Concept:

a) the GREPECAS organization be modified as described in Appendix A to this part of the report; and

b) the Secretariat circulate a letter to States/Territories, accompanied by an explanatory note and the revised GREPECAS Procedural Handbook, requesting ratification of the new GREPECAS organization and inviting suggestions for further refinement within 30 days, including reference to non-response being taken as acceptance without comment.

5.8 Those CAR States that require an extension of time shall send such a request to the Secretariat, which shall not extend beyond 30 May 2011, to allow the Directors of Civil Aviation of the CAR Region to review the matter at their meeting to be held in June 2011.

**DECISION 16/46 REVISED GREPECAS TERMS OF REFERENCE**

The revised GREPECAS Terms of Reference, which incorporate the ICAO Council requirement to coordinate with RASG-PA are presented in Appendix B to this part of the report.

**DECISION 16/47 TRANSFORMATION OF GREPECAS SUBGROUPS**

That the work currently in progress by the GREPECAS AERMET, AGA/AOP, AIM and CNS/ATM Subgroups, and their respective task forces, where applicable, as presented in the Appendices B – E of WP/17 be transformed into programmes and projects.

5.9 Subject to final acceptance of the new GREPECAS organization and work methodology, the next steps were summarized by the Secretariat as follows based on the proposed transition plan for Subgroup transformation presented in Appendix B to WP/29, subject to confirmation following further consultation with States/Territories, including a sufficient notice period for the announcement of meetings:

- Revise the GREPECAS Procedural Handbook
- Subgroup chairpersons and secretaries to plan and prepare for the new organization and work methodology

- AERMET, AGA/AOP and AIM Subgroup/Programme transition meetings to be held in 2011 to define projects and State coordinators and experts
- Project management training workshop in the last quarter of 2011
- PPRC Meeting early in 2012 to approve the projects in each programme

5.10 A principal component of the new GREPECAS organization is the establishment of the PPRC, which will replace and perform the functions previously assigned to the ACG and ASB with the exception of those responsibilities that are internal and routine Secretariat duties, which will be performed by ICAO. The PPRC will have the following key functions:

- Direct the program and project activities including the addition and deletion of programmes and projects
- Approve the program and project results
- Review long outstanding high safety risk air navigation deficiencies, which are not resolved in a timely manner and advise the Secretariat regarding reporting to the ICAO ANC and Council
- Prepare the annual GREPECAS progress reports for the ICAO ANC
- Maintain the GREPECAS Procedural Handbook
- Schedule GREPECAS meetings
- Prepare the draft GREPECAS meeting agendas

5.11 PPRC, Programme, and Project meetings will be held as required using the appropriate modality for efficiency and effectiveness and subject to budget making full use of virtual meetings. However, it is expected that PPRC and Programme meetings will be convened annually subject to justification and the availability of a venue and budget. The venue will usually be either the CAR or SAM Regional Offices.

5.12 The Chairman established an Ad-hoc Group to examine the membership of the PPRC. The following 16 States participated in the Ad-hoc Group: Barbados, Brazil, Chile, Colombia, Cuba, Dominican Republic, France, Guatemala, Haiti, Jamaica, Mexico, Paraguay, Spain (as Observer), Trinidad and Tobago, United States, and Venezuela. The representative of Dominican Republic was elected as Rapporteur of the Ad-hoc Group and presented the report on the discussions in DP/01, which was accepted by the Meeting.

5.13 The Meeting accepted the proposal that the membership include a core group of 16 States to limit the number to a manageable number, which represents half the number of States in the CAR and SAM regions. In order to maintain a balance, it was also agreed that 8 States from each the CAR and SAM Regions constitute representation. However, the Meeting also recognized that the PPRC will neither exclude any State wishing to participate in any of their meetings nor will it limit the number of participants of a State; non-member States may participate in the meetings if the agenda includes a subject of interest. Furthermore, the Meeting accepted that the international organizations listed in the GREPECAS Procedural Handbook will participate in the Committee as Observers when relevant to the Committee meeting agenda, as will any affected States from other Regions. Programme Coordinators could be invited to attend meetings, when required, to present corresponding project progress reports and results.

5.14 Concerning the criteria to select which States will comprise the 8 States from each Region, the Meeting considered several options but determined that it was not within the authority of the representatives participating in the Meeting to define the criteria that will determine which States are to be selected and, therefore, referred this decision to the Directors of Civil Aviation who will meet in the CAR Region in June and in the SAM Region in October 2011.

5.15 Notwithstanding, the Meeting offered for the future discussion several options of possible criteria to select the States, presented as follows for reference:

- States providing air navigation services for one or more FIRs
- Size of the FIR
- Level of aviation activity
- Level of aviation development
- States that volunteer
- States grouped by political or other agreements
- States grouped by geographic proximity
- States grouped by similarities
- State rotation scheme

5.16 The Meeting agreed on the proposed membership for the GREPECAS Programmes and Projects Review Committee as reflected in its Terms of Reference presented in **Appendix C** to this part of the report. The Meeting therefore adopted the following decision:

**DECISION 16/48 TERMS OF REFERENCE, WORK PROGRAMME, AND COMPOSITION OF THE GREPECAS PROGRAMMES AND PROJECTS REVIEW COMMITTEE**

That:

a) the Programmes and Projects Review Committee (PPRC) be established with the terms of reference, work programme and composition shown in Appendix C to this part of the report; and

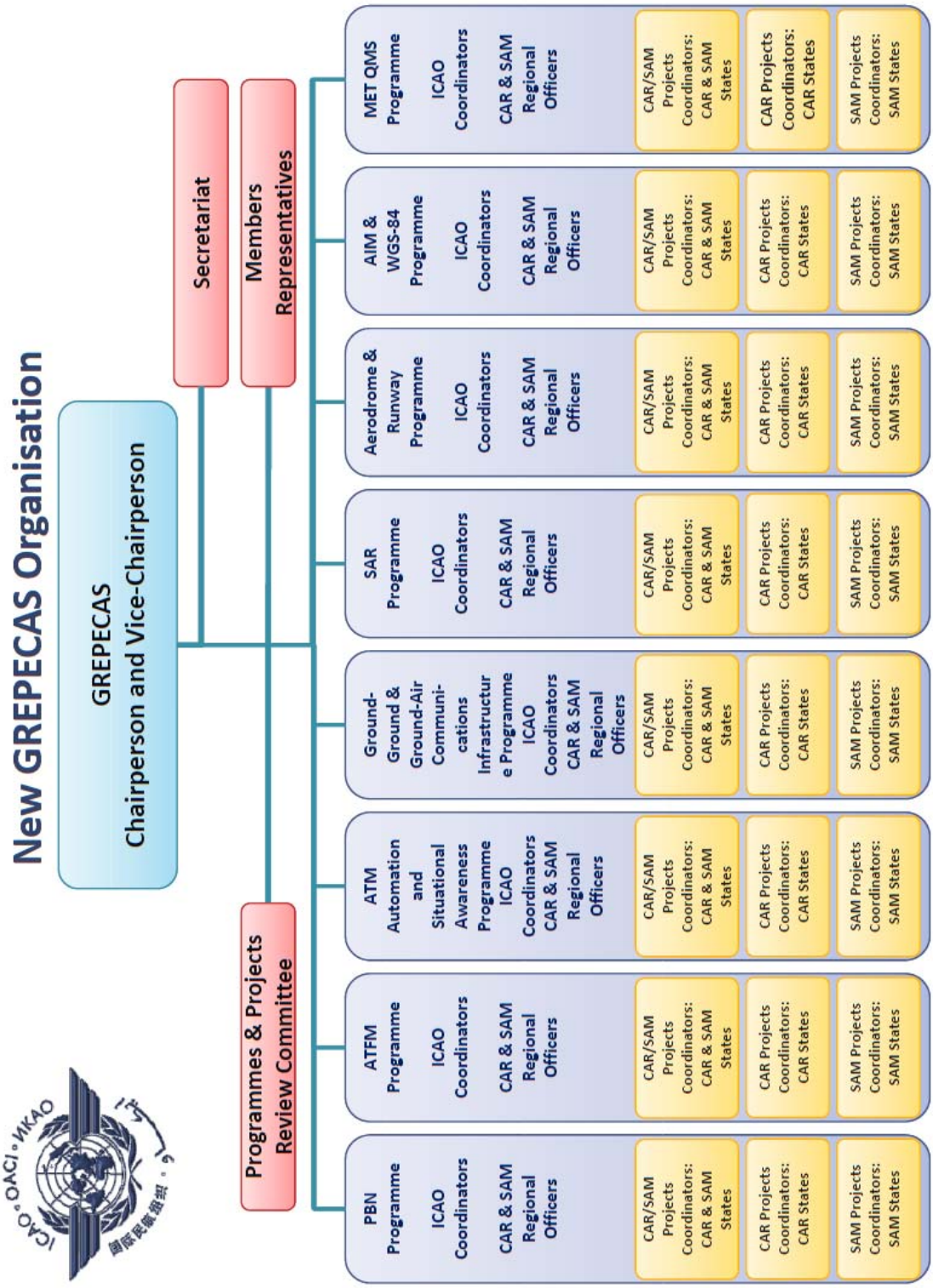
b) the Secretariat present the requirement for the selection and commitment of States to become members of the PPRC to the upcoming Directors of Civil Aviation Meetings in the CAR and SAM Regions.

5.17 The Meeting fully recognized that GREPECAS work progress and results are dependent on States to contribute the necessary resources to GREPECAS projects in the form of project coordinators and experts and provide the assigned individuals the time (release from normal duties) and budget to facilitate their participation in the activities in order to achieve the expected results as committed. The Meeting therefore adopted the following conclusion:

**CONCLUSION 16/49 CONTRIBUTION FROM STATES TO THE GREPECAS RESOURCES**

That States, within their means, contribute the necessary resources to GREPECAS projects in the form of project coordinators and experts and provide the assigned individuals the allocation of adequate time, release from normal duties, and financial support to facilitate their participation in the activities to achieve the expected results as committed.

**APPENDIX A**


New GREPECAS Organisation
GREPECAS
Chairperson and Vice-Chairperson
Secretariat
Members Representatives
Programmes & Projects Review Committee
PBN Programme
ICAO Coordinators
CAR & SAM Regional Officers
ATFM Programme
ICAO Coordinators
CAR & SAM Regional Officers
ATM Automation and Situational Awareness Programme
ICAO Coordinators
CAR & SAM Regional Officers
Ground-Ground & Ground-Air Communi-cations Infrastructure Programme
ICAO Coordinators
CAR & SAM Regional Officers
SAR Programme
ICAO Coordinators
CAR & SAM Regional Officers
Aerodrome & Runway Programme
ICAO Coordinators
CAR & SAM Regional Officers
AIM & WGS-84 Programme
ICAO Coordinators
CAR & SAM Regional Officers
MET QMS Programme
ICAO Coordinators
CAR & SAM Regional Officers
CAR/SAM Projects Coordinators: CAR & SAM States
CAR Projects Coordinators: CAR States
SAM Projects Coordinators: SAM States

**APPENDIX B**

**PROPOSED REVISED TERMS OF REFERENCE OF THE CARIBBEAN/SOUTH AMERICAN PLANNING AND IMPLEMENTATION REGIONAL GROUP (GREPECAS)**

1. **Membership**

All ICAO Member States who are service providers in an air navigation region and part of that region's ANP should be included in the membership of that region's PIRG. Furthermore, user States are entitled to participate in any other PIRG meetings as a non-member. International organizations recognized by the Council may be invited as necessary to attend PIRG meetings as observers.

2. **The Terms of Reference of the Group are:**

a) continuous and coherent development of the CAR/SAM Air Navigation Plan and other relevant regional documentation in a manner that is harmonized with adjacent regions, consistent with ICAO SARPs and reflecting global requirements;
b) facilitate the implementation of air navigation systems and services as identified in the CAR/SAM air navigation plan with due observance to the primacy of air safety;
c) identification and addressing of specific deficiencies in the air navigation field; and

d) coordinate safety issues with RASG-PA.

3. **In order to meet the Terms of Reference the Group shall:**

a) review and propose when necessary, the target dates for implementation of facilities, services and procedures to ensure the coordinated development of the Air Navigation System in the CAR and SAM Regions;
b) assist the ICAO Regional Offices providing services in the CAR and SAM Regions in their assigned task of fostering implementation of the CAR/SAM Regional Air Navigation Plan;
c) in line with the Global Aviation Safety Plan (GASP), ensure the conduct of any necessary systems performance monitoring, identify specific deficiencies in the Air Navigation field, especially in the context of safety and propose corrective action;
d) ensure the development and implementation of an action plan by States to resolve identified deficiencies, where necessary;
e) develop amendment proposals for the update of the CAR/SAM Air Navigation Plan necessary to satisfy any changes in the requirements, thus removing the need for regular regional air navigation meetings;
f) monitor implementation of air navigation facilities and services and where necessary, ensure interregional harmonization, taking due account of cost/benefit analysis, business case development, environmental benefits and financing issues;
g) examine human resource planning and training issues and ensure that the human resource development capabilities in the region are compatible with the CAR/SAM Regional Air Navigation Plan;

h) review the Statement of Basic Operational Requirements and Planning Criteria and recommend to the Air Navigation Commission such changes to them as may be required in the light of developments;

i) invite financial institutions, as required, on a consultative basis and at a time it considers appropriate in the planning process to participate in this work;

j) ensure close cooperation with relevant organizations and State grouping to optimize the use of available expertise and resources;

k) conduct the above activities in the most efficient manner possible with a minimum of formality and documentation and call meetings of the GREPECAS only when the Secretary and the Chairperson, through the Programme and Project Review Committee, are convinced that it is necessary to do so; and

l) coordinate with RASG-PA.

## APPENDIX C

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

1. **Membership**

The GREPECAS Programmes and Projects Review Committee (PPRC) comprises the GREPECAS Chairperson, Vice-Chairperson, Secretary, and Co-Secretary, 8 States of the CAR Region and 8 States of the SAM Region (to be identified by the Directors of Civil Aviation of the States at a later date). 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 will in meetings as Observers when relevant to the agenda.

2. **The Terms of Reference of the Group 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 and global plan; and

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

3. **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;

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

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

e) prepare the draft agenda for GREPECAS meetings; and

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

**Agenda Item 6 Other business**

Under this agenda item the following working and information papers were discussed:

- WP/24 Rev., WP/30 Rev. (Colombia)
- IP/20 (IATA)

6.1 During the discussion of WP/24 – *The role of civil aviation during natural disasters*, which was related to the catastrophic natural disasters that recently occurred in Chile, Haiti and Japan and the important role that civil aviation plays in rescue and transportation of personnel and supplies to affected areas, the Meeting recalled that the model for ATS Contingency Plans, approved by GREPECAS Conclusion 13/68, contains many elements that can be applied for of initial coordination during natural disasters. The Secretariat informed that based on GREPECAS Conclusion 14/50, the ICAO NACC and SAM Regional Offices keep an ATS contingency plans catalogue for all CAR/SAM Region FIRs.

6.2 In this context, the Meeting agreed on the need to keep the point-of-contact (PoC) information and communication means required by the ATS contingency plans updated for immediate coordination of humanitarian flights and Search and Rescue (SAR) operations whenever necessary. SAR agreements should also be updated in accordance with the requirements contained in Annex 12.

6.3 Likewise, the Secretariat noted the coordination procedures for hurricanes and volcanic ash events available on the webpage of the ICAO NACC Regional Office for the ACC and ATFM units of the CAR/SAM Regions.

6.4 The Meeting recognized that due to the large variety of natural events and their consequences, as well as the role of aviation to support humanitarian aid operations, it is also necessary that ICAO review and amend the material related to Annex 11 so that States may develop and coordinate the immediate response plans during natural disasters in a timely manner.

6.5 The Meeting took note of WP/30 on the use of general aviation for unlawful activities and on the great efforts made by Colombia against the use of general aviation by drug traffickers and agreed that this matter should be discussed at the forthcoming meeting of the Aviation Security and Facilitation Regional Group (AVSEC/FAL/RG) Meeting to be held in Asuncion, Paraguay, from 25 to 27 May 2011.

6.6 Finally, the Secretariat informed the Meeting on the “Global Air Navigation Industry Symposium” to be held in ICAO Headquarters in Montreal, Canada, from 20 to 23 September 2011. For further information, visit the ICAO website: www.icao.int.

6.7 Dominican Republic provided a presentation to Meeting participants on their higher academy of aeronautical sciences - Academia Superior de Ciencias Aeronáuticas (ASCA).