



**INTERNATIONAL CIVIL AVIATION ORGANIZATION**  
**CAR/SAM REGIONAL PLANNING AND IMPLEMENTATION GROUP**  
**(GREPECAS)**

**REPORT OF THE**  
**FIFTH MEETING OF THE AIR TRAFFIC MANAGEMENT/  
COMMUNICATIONS, NAVIGATION AND SURVEILLANCE SUBGROUP**  
**(ATM/CNS/SG/5)**

**FINAL REPORT**

**(Lima, Peru 13-17 November 2006)**

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## **History of the Meeting**

### **ii.1 Place and Duration of the Meeting**

The Fifth Meeting of the ATM/CNS Subgroup (ATM/CNS/SG/5) of GREPECAS was held at the Hotel Melia Lima, in Lima, Peru. The Meeting commenced on 13 November ended on 17 November 2006. The Reports of the ATM/COMM/5 and CNS/COMM/5 Meetings were reviewed and approved by the ATM/CNS Subgroup on 17 November 2006.

### **ii.2 Opening Ceremony and other matters**

Mr. Jose Miguel Ceppi, Regional Director of the ICAO SAM Regional Office, and Secretary of GREPECAS welcomed the participants to this Meeting and highlighted importance of this Subgroup. Afterwards, Mr. Luis Rivera, General Director of Civil Aviation of Peru, welcomed the Subgroup to Lima and officially inaugurated the Meeting.

### **ii.3 Organization, Officers and Secretariat**

The Meeting was chaired by Mr. Claudio Arellano from Mexico, Chairman of the ATM/CNS Subgroup. Mr. José Antonio Díaz de la Serna, Acting Regional Director of the ICAO NACC Regional Office and Secretary of the GREPECAS ATM/CNS Subgroup acted as Secretary of the Meeting. Mr. Carlos Stehli, Acting Regional Deputy Director of the ICAO SAM Regional Office, also attended the Meeting. Mr. Jorge Fernández, Regional Officer, ATM/SAR, SAM Office, Secretary of the ATM Committee, was assisted by Mr. Víctor Hernández, Regional Officer ATM/SAR, NACC Office, and Mr. Aldo Martínez, Regional Officer CNS, NACC Office, Secretary of the CNS Committee, was assisted by Mr. Onofrio Smarrelli, Regional Officer CNS SAM Office.

### **ii.4 Working Languages**

The working languages of the Meeting were English and Spanish. The documentation and the Report of the Meeting were issued in both languages.

### **ii.5 Agenda**

The following agenda was adopted:

#### **FIRST PART**

- Agenda Item 1: Review of the corresponding actions of the ANC with regard to the report of the GREPECAS/13 Meeting concerning the ATM/CNS/SG
- Agenda Item 2: General report of the particular issues of the ALLPIRG/5 Meeting to be taken into account by the ATM/CNS Subgroup.

Agenda Item 3: General report on the activities of the Regional Project RLA/98/003 – *Transition to the CNS/ATM systems in the CAR/SAM Regions.*

## **SECOND PART**

Agenda Item 4: Review of the report of the meeting of the ATM Committee.

Agenda Item 5: Review of the report of the meeting of the CNS Committee.

Agenda Item 6: Organization of the future work of the ATM/CNS Subgroup:

6.1 Review of the terms of reference and work programme of the ATM/CNS Subgroup.

6.2 Tentative meeting programme of the Subgroup, the Committees and other necessary contributory bodies.

Agenda Item 7: Other Business.

### **ii.6 Schedule and Working Methods**

The Meeting held its sessions as a Whole on Monday 13 November 2006 and on Friday 17 November 2006 from 0900 to 1130 and from 0900 to 1600 hours, respectively, with appropriate breaks. The CNS Committee The ATM and CNS Committees held their sessions from 13 to 16 November 2006, from 11:30 to 16:00 the first day and from 09:00 to 16:00 hours thereafter, with appropriate breaks. The Meeting agreed to create Ad hoc Groups when necessary.

### **ii.7 Attendance**

The Meeting was attended by 80 delegates from 20 Member States of the ATM/CNS Subgroup, and 5 International Organizations.

**ii.8 Conclusions and Decisions**

The ATM/CNS Subgroup records its activities in the form of Draft Conclusions, Draft Decisions, and Decisions, as follows:

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

***Draft Decisions:** Decisions that require approval by GREPECAS prior to their implementation*

***Decisions:** Decisions that deal with matters of concern to the ATM/CNS Subgroup and its Committees.*

**ii.9 List of Draft Decisions**

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**List of Documentation****ATM/CNS SUBGROUP****Working Papers**

<b>Number</b>	<b>Agenda Item</b>	<b>Title</b>	<b>Date</b>	<b>Presented by</b>
WP/01	--	Draft Agenda and Explanatory Notes	25/07/06	Secretariat
WP/02	--	Work Schedule ad Working Method.	13/09/06	Secretariat
WP/03	1	Review of actions formulated by GREPECAS/13 Meeting concerning the ATM/CNS Subgroup	13/09/06	Secretariat
WP/04	3	General report on the activities of Regional Project RLA/98/003 – Transition to CNS/ATM Systems in the CAR/SAM Regions	20/09/06	Secretariat
WP/05	6	Future work of the ATM/CNS Subgroup	13/09/06	Secretariat
WP/06	4 and 6	Review of the report of the fifth meeting of the ATM Committee. <b>Reserved (ATM Committee)</b>		Secretariat
WP/07	5 and 6	Review of the report of the fifth meeting of the CNS Committee. <b>Reserved (CNS Committee)</b>		Secretariat
WP/08	2	Report on the outcome of, and follow-up to, the Fifth Meeting of the ALLPIRG/Advisory Group (ALLPIRG/5)	04/10/06	Secretariat

**Information Papers**

<b>Number</b>	<b>Agenda Item</b>	<b>Title</b>	<b>Date</b>	<b>Presented by</b>
IP/01 <b>Revised</b>	--	General Information.	12/10/06	Secretariat
IP/02	--	List of Working and Information Papers.	24/10/06	Secretariat
IP/03	7	The United States preparations for Pandemic Influenza	23/10/06	United States
IP/04	7	Civil/Military Air Traffic Management Summit (CMAC)	23/10/06	United States
IP/05	7	Next generation Air Transportation System (NGATS)	23/10/06	United States

**ATM Committee****Working Papers**

<b>Number</b>	<b>Agenda Item</b>	<b>Title</b>	<b>Date</b>	<b>Presented by</b>
WP/01	1	Agenda Items, Working Methods, Schedule and Work Plan	14/09/06	Secretariat
WP/02	1	Review of CAR/SAM RVSM matters	04/10/06	Rapporteur GT/SAM
WP/03	1	Assessment of the actions to be taken to reduce LHD	16/10/06	Rapporteur GT/GTE
WP/04	2	CAR/SAM Regions Roadmap on Performance-Based Navigation (PBN)	24/10/06	Rapporteur GT/PBN
WP/05	2	CAR/SAM Regions Air Traffic Flow Management (ATFM) Operational Concept	16/10/06	Rapporteur GT/ATFM
WP/06	2	Interphase Control Document (ICD) for the integration of CAR/SAM Regions ATM automated systems	10/10/06	Rapporteur GT/AUTO/TF/2
WP/07	3	Situation of ATM contingency plans in the CAR/SAM Regions and form for the regional contingency plans catalogue	17/10/06	Secretariat
WP/08	4	Deficiencies identified in the ATM and SAR fields	10/10/06	Secretariat
WP/09	4	GREPECAS Pending Conclusions and Decisions related with ATM and SAR	30/10/06	Secretariat
WP/10	5	Draft amendment to the CAR/SAM Regional Plan for the implementation of CNS/ATM Systems –ATM Evolution tables	12/10/06	Secretariat
WP/11	6	ICAO Strategic Objectives and Global Plan Initiatives (GPIs)	29/09/06	Secretariat
WP/12	6	Review of the Terms of reference, Work Programme and New Work Programme of the ATM Committee	24/10/06	Secretariat
WP/13	7	West Atlantic Route System (WATRS) plus airspace redesign and separation reduction initiative	16/10/06	United States
WP/14	7	International Cricket Council Cricket World Cup 2007 ATFM Tasks	31/10/06	Trinidad y Tobago
WP/15	2	Traffic Flow Management	27/10/06	Mexico

### Information Papers

Number	Agenda Item	Title	Date	Presented by
IP/01	--	List of working papers and information papers	09/11/06	Secretariat
IP/02	2.2	Gestión de Afluencia de Tránsito (Tarea ATM-ATFM/400)	27/10/06	Cuba
IP/03	7	Operational Approval For Required Navigation Performance 10 (RNP 10) West Atlantic Route System (WATRS) Plus Airspace Redesign and Separation Reduction Initiative	27/10/06	USA
IP/04	2.2	Action plan for ATFM implementation in Central America	31/10/06	Cocesna

### CNS Committee

#### Working Papers

Number	Agenda Item	Title	Date	Prepared and Presented by
WP/01	--	Draft Agenda, Explanatory Notes, Modality, Working Methods, Organization and Schedule of the CNS/COMM/5 Meeting	30/08/06	Secretariat
WP/02	1.1	Review of the integration/interconnection and development status of the regional digital networks	24/10/06	Secretariat
WP/03	1.2	Review of the air-ground data links implementation plan	25/10/06	Secretariat
WP/04	1.3	Review of the ATN Regional Plan and Implementation	26/10/06	Secretariat
WP/05	1.3	Federal Aviation Administration (FAA) ATN AMHS Implementation Plan	12/10/06	United States
WP/06	1.3	Strategy to Implement ATN/AMHS Service in the Region	12/10/06	United States
WP/07	1.4	Study of a communication system to support the migration towards the meteorological messages interchange (METAR/SPECI y TAF) in BUFR format code	03/11/06	Secretariat
WP/08	2	Gradual deactivation of NDB Stations	20/10/06	Secretariat
WP/09	2.1	Review of the results of the SBAS augmentation projects carried out in the CAR/SAM Regions	26/10/06	Secretariat
WP/10	2.2	Study of a SBAS/GBAS regional implementation system	31/10/06	Secretariat
WP/11	3.1	Follow-up to the development of surveillance systems and the regional implementation study of the SSR in Mode S	03/11/06	Secretariat
WP/12	3.2	Study of the regional ADS systems	27/10/06	Secretariat

Number	Agenda Item	Title	Date	Prepared and Presented by
		implementation		
WP/13	4	Report of the First ATM Automation Task Force Meeting	10/10/06	Rapporteur
WP/14	5	Review of the Deficiencies in the CNS Systems of the CAR/SAM Regions	28/09/06	Secretariat
WP/15	6	Proposal of amendments to the Terms of Reference and Work Programme of the CNS Committee	29/09/06	Secretariat
WP/16	7.1	Proposal on the future work of the CNS Committee	31/10/06	Secretariat
WP/17	3.2	ADS B Study and Implementation Working Group	31/10/06	SITA
WP/18	2.1	GNSS implementation in the CAR/SAM Regions	31/10/06	SPAIN

### Information Papers

Number	Agenda Item	Title	Date	Prepared and Presented by
IP/01	--	List of Working and Information Papers	08/11/06	Secretariat
IP/02	1.4	Federal Aviation Administration (FAA) BUFR Code AMHS Implementation Plan	23/10/06	United States
IP/03	2	Federal Aviation Administration (FAA) Ground Based Augmentation System (GBAS) Program Status	27/10/06	United States
IP/04	2	Status of the U.S. Wide Area Augmentation System (WAAS)	27/10/06	United States
IP/05	3.2	Federal Aviation Administration (FAA) Automatic Dependent Surveillance – Broadcast (ADS-B) Program Office Roadmap	27/10/06	United States
IP/06	3	FANS development in CAR/SAM Region	31/10/06	SITA
IP/07	3.2	Regional ADS-B Service Concept	31/10/06	SITA
NI/08	2.2	Suministro 4080 de la GJU – Galileo Cooperation Project for Latin America – Proyecto Celeste <i>Available only in Spanish</i>	31/10/06	Spain
NI/09	2.2	Estado de los sistemas SBAS actuales <i>Available only in Spanish</i>	31/10/06	Spain

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<b>Number</b>	<b>Agenda Item</b>	<b>Title</b>	<b>Date</b>	<b>Prepared and Presented by</b>
NI/10	2.1	Trabajos realizados en las actividades de SACCSA <i>Available only in Spanish</i>	31/10/06	Members of the RLA/03/902 Project
IP/11	2.2	Ionosphere effects on GNSS	31/10/06	Secretariat

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**Agenda Item 1:           Review of the corresponding actions of the ANC with regard to the report of the GREPECAS/13 Meeting concerning the ATM/CNS/SG**

1.1           The Secretariat presented to the Meeting a summary concerning the actions taken by the Air Navigation Commission on items related to the ATM/CNS Subgroup based on the report of GREPECAS/13 Meeting. The Meeting was also informed in respect to the review that ACG/6 Meeting made in respect to the terms of reference and work programme of the Subgroup.

1.2           Regarding non specific air traffic management or communications/navigation activities, the Meeting took note that the Commission noted that GREPECAS had reviewed the outcome of the 35<sup>th</sup> session of the Assembly and taken follow-up actions on the basis of the analysis of various resolutions and decisions.

1.3           The Meeting was also informed on the actions taken by the ANC in respect to air navigation planning and implementation deficiencies/problems in the CAR/SAM Regions. In particular, the Meeting took note of the following deficiencies.

1.3.1           *Aerodrome maintenance deficiency:* With reference to Conclusion 13/90, which called upon ICAO to establish a SIP with the objective of addressing region-wide aerodrome maintenance deficiencies, WG noted that this particular SIP had already been approved by the Council in March 2006.

1.3.2           *Addressing deficiencies:* Regarding deficiencies, the WG noted that GREPECAS had reviewed, analyzed and prioritized the list of air navigation deficiencies. Subsequently, to follow-up, GREPECAS had called upon States to develop and implement an action plan for each deficiency (Conclusion 13/92 refers) as well as to provide information to the Lima and Mexico Regional Offices by 30 June 2006.

1.3.3           *Last resort action:* Continuing the discussions on deficiencies, the WG recognized that the Regional Offices and PIRGs had been addressing this ongoing issue with the cooperation of States, international organizations and other entities through missions, as well as through letters, meetings and telephone communication. Furthermore, even though a number of deficiencies remain unresolved, only a few States responded with an action plan to eliminate the deficiencies. The WG recalled that, when efforts to eliminate deficiencies prove unsuccessful after exhausting all alternatives, GREPECAS/12 had agreed to apply a “last resort action” (Decision 12/124 refers). Taking Decision 12/124 into account, the WG endorsed the approach of GREPECAS in Conclusion 13/92 and invited the Secretary General to urge States of the CAR/SAM Regions to eliminate urgent deficiencies by 31 December 2007 and, at that point, application of “last resort action” would be considered.

#### 1.4 **Matters related to Air Traffic Management**

1.4.1 *RNP and RNAV implementation:* The WG was informed by the Secretariat the Meeting established seven major work projects in an effort to implement the new business planning processes and to align the work of GREPECAS with the revised Global Plan, in follow-up to ALLPIRG/5. One of these projects, Optimization of the ATS Route Structure, addresses Conclusion 13/69. Another major project: Improve Demand and Capacity balancing, addresses Decisions 13/64 and 13/65. It was noted that the WG congratulated GREPECAS on taking a proactive approach to the new business planning processes and was pleased to note that the Secretariat is working directly with States to develop work breakdown structures for these projects for placement in the Business Plan which will eventually serve in reviewing the work of the PIRGs.

1.4.2 *Aeronautical phraseology:* Supporting the proposal developed by GREPECAS for an amendment on aeronautical phraseology in the *Procedures for Air Navigation Services — Air Traffic Management* (PANS-ATM, Doc 4444), it was informed that the WG endorsed Conclusion 13/63 and called upon the Secretary General to initiate the necessary amendment process to Chapter 12 of Doc 4444.

1.4.3 *ATM contingency plans:* The Meeting took note that the WG congratulated GREPECAS on the development of guidelines for use by the States to prepare their ATM contingency plans (Conclusion 13/68 refers). Recognizing that the approach of GREPECAS in Conclusion 13/68 is consistent with Strategic Objective E: Continuity — *Maintain the continuity of aviation operations*, the WG requested the Secretary General to call upon GREPECAS to develop a catalogue of regional contingency plans in support of the continuity of civil aviation operations during natural and/or human events that lead to disruptions.

#### 1.5 **Matters related to Communications/navigation/surveillance**

1.5.1 *VSAT networks:* Sharing the view of GREPECAS on the need to provide interoperability amongst regional digital ground-ground networks (Conclusion 13/70 refers), the Meeting was informed that the WG noted that the two network management groups had met twice, and work is in progress to improve interoperability.

1.5.2 *Air-ground data links:* The Meeting noted that the WG noted that GREPECAS had developed regional strategies for the implementation of air-ground data links (Conclusion 13/72 refers) and the deployment of an aeronautical telecommunication network (ATN) (Conclusion 13/78 refers) in the CAR/SAM Regions. The strategy for ATN indicated that, in the near term, the focus is on implementation of ground-ground applications such as AMHS and ATS interfacility data communications (AIDC) and will take into account, during the mid-term, any new ATN applications that will be defined by ICAO.

1.5.3 *SBAS*: Referring to the studies conducted for a regional satellite-based augmentation system (SBAS) solution in the CAR/SAM Regions (Conclusion 13/84 refers), the WG noted that it was technically and operationally impracticable to extend coverage of the wide area augmentation system (WAAS) and European Geostationary Navigation Overlay Service (EGNOS) into the CAR/SAM Regions and that further studies would continue in order to determine an appropriate regional solution.

1.5.4 *Data link for ADS-B*: With regard to the strategy developed for the implementation of automatic dependent surveillance — contract (ADS-C) and automatic dependent surveillance — broadcast (ADS-B) (paragraph 3.6.3.75 of the meeting report and Decision 13/54 refer), the Meeting was informed that the WG noted that GREPECAS has selected the Mode S extended squitter as the data link for ADS-B for near-term implementation and that the region would consider, in the mid-term, the implementation of new data links for ADS-B.

1.5.5 *WRC-2007*: On the subject of protection of the aeronautical frequency spectrum, the WG recognized the ongoing contribution of the CAR/SAM Regions in addressing this issue in a number of fora, such as the Inter-American Telecommunication Commission (CITEL), and the Organization of American States (OAS), as well as regional preparatory meetings. In this connection, the WG noted Conclusion 13/89 concerning preparations for the forthcoming International Telecommunication Union (ITU) World Radiocommunication Conference — 2007 (WRC-2007) and requested the Secretary General to urge States to continue to participate at various levels in different fora to provide support for the ICAO position.

1.6 The Meeting took note when reviewing the work programme of the ATM/CNS Subgroup in the ACG/6 meeting, that no changes were reported to the continuous tasks, the ACG noted that the DGAC Conference on Safety Strategy and the ALLPIRG/5 Meeting (20-24 March 2006) could result in changes to the Terms of Reference as well as the Work Programme. The results of these two events would be submitted to GREPECAS/14 for its consideration. The Meeting noted the progress made by both the CNS and ATM Committees where some tasks were either completed or progressed as reflected in their work programmes.

1.7 Finally in respect to the planning activities of GREPECAS, the Meeting took note that GREPECAS/14 Meeting will be held in San José, Costa Rica from 16 to 20 April 2007, and that a meeting of the Subgroup is planned in September 2007 in the CAR region.

**Agenda Item 2: General report of the particular issues of the ALLPIRG/5 to be taken into account by the ATM/CNS Subgroup**

*Results of the ALLPIRG/5 Meeting*

2.1 Under this Agenda Item the Meeting reviewed the results of the Fifth Meeting of the ALLPIRG/Advisory GROUP (ALLPIRG/5), and more specifically those Conclusions which required action/support from the planning and implementation regional groups.

2.2 The role of ALLPIRG to coordinate the implementation of Regional Plans, and provide advice to the Council on CNS/ATM Systems implementation matters leading to achieving a global air traffic management (ATM) system was recognized.

2.3 In respect to the Global Air Navigation Plan, the Meeting was apprised of the elements that ALLPIRG requested the Secretariat to address when finalizing the revised Global Plan: a) the establishment of a mechanism to ensure integration of the Global Plan into the regional plans; b) the overall planning and implementation processes kept as simple as possible; c) ICAO Headquarters to ensure maximum transfer of knowledge; d) aircraft operations integrated into relevant initiatives; e) the performance framework finalized so that partners have a better understanding of how to meet performance objectives; and f) safety is adequately addressed in the Global Plan Initiatives (GPIs). In particular, it was noted that an approach to the implementation of GPIs that includes review at each PIRG.

2.4 The Meeting noted that ICAO would provide a series of workshops on the Business case model developed for the implementation of CNS/ATM Systems. Likewise, the preparation of on-line searchable air navigation plan (ANP) database using the ICAO geographic information system (GIS) portal was welcomed as a means to improve the efficiency and provide conditions for electronic updates and timely provision of up-to date Global ANP information for all users. Likewise, note was taken on the presentation of the ICAO Global air navigation plan (ANP) database and geographic information systems (GIS) portal to ensure the currency, coordination and implementation of regional air navigation systems and to contribute to the development of national, inter-regional and global air navigation plans. (Conclusion 5/5).

2.5 On the environmental benefits of CNS/ATM Systems the Meeting took note of the work of the ICAO Committee on Aviation Environmental Protection (CAEP) and the methodologies for the assessment of these benefits at the Global and regional levels. The Meeting recognized the importance of supporting the related Conclusions 5/7, 5/8 and 5/9, calling for actions by States to review the route system and terminal area improvements which should be fulfilled in the near term (2008).

2.6 The Meeting took note of the outcome and follow-up to the DGCA Conference for the Aviation Safety. It was specially recognized that the PIRGs could play an important role to ensure that Meeting's recommendations be implemented more efficiently. Likewise, the Meeting took note of the implementation of the European Coordination Center for Aviation Incident Reporting Systems software ECCAIRS to encourage States to share safety data.

2.7 The Meeting was appraised that ICAO was in the process of reviewing the current required navigation performance (RNP), concept to meet the increasing demands of airspace planners and aircraft operators for performance based navigation (PBN), and agreed to the action on Conclusion 5/13 b), to implement RNAV, and RNP where required and in accordance with the GREPECAS work on the subject.

2.8 Under the subject of Uniform Methodology the Meeting was reminded by the Secretariat in respect to the lack of response by the States/Territories on the preparation of Action Plans to eliminate air navigation deficiencies, and to the lack of access to the GREPECAS secure on-line database of deficiencies to update the information contained therein.

2.9 To facilitate the reference, all Conclusions from ALLPIRG/5 related with action by PIRGs are included in the **Appendix** to this part of the Report.

2.10 The meeting was given a complete presentation on the Global Plan and its amendments, which provided a clear idea to ATM and CNS Committees about the relationship of the present Global Plan initiatives GPI's with the committees' tasks and the strategic objectives evolution in the industry areas coordinated with ICAO. Likewise, a relation of transition documents being developed in ICAO Headquarters was provided, including air navigation plans and their relationship with ICAO geographical information contained in the web site (GIS).

**APPENDIX**

**PROPOSED FOLLOW-UP ON CONCLUSIONS DEVELOPED BY THE ALLPIRG/5 MEETING**

ALLPIRG/5 Conclusions	Relationship with Strategic Objective & Global Plan Initiatives (GPIs)	Follow-up task	To be initiated by
<b>Conclusion 5/1 — Workshops on the Global Plan for Regional Offices</b>			
That, in support of the Global Plan, ICAO conduct workshops in the Regional Offices to provide training on planning tools and methodologies as well as strengthening the interaction between technical officers at Headquarters and Regional Offices.	Increases efficiency (Strategic objective D) Relates to all GPIs	Conduct workshops in the Regional Offices to provide training on planning tools and methodologies	ICAO Headquarters
<b>Conclusion 5.2 — Implementation of Global Plan Initiatives (GPIs)</b>			
That, recognizing that the evolution continues from a systems-based to a performance-based approach to planning and implementation of the air navigation infrastructure, the regional planning groups:	Increases efficiency (Strategic objective D) Relates to all GPIs		
a) note that the Global Plan is a significant component in the development of regional and national plans and that, together with the global ATM operational concept, provide an effective architecture for achieving a harmonized and seamless Global ATM system;		Note that the Global Plan is a significant component in the development of regional and national plans	All
b) identify GPIs that most closely align with the well established implementation plans of their respective regions;		Identify GPIs that most closely align with the implementation plans of their respective regions	ICAO Regional Offices, PIRGs, States, and international organizations
c) select GPIs that would be most effective in achieving the objectives of the region while ensuring continuation of the work already accomplished;		Select GPIs that would be most effective in achieving the objectives of the region	ICAO Regional Offices, PIRGs, States, and international organizations
d) implement GPIs that take into account the Initiatives across regions, to align work programmes and to develop national and regional plans that facilitate achieving a Global ATM system;		Implement GPIs in the development of national and regional plans	ICAO Regional Offices, PIRGs, States, and international organizations
e) utilize the planning tools as the common planning and implementation mechanism, thereby ensuring proper coordination and global integration; and		Utilize the planning tools as the common planning and implementation mechanism	ICAO Regional Offices, PIRGs, States, and international organizations
f) review, at each PIRG meeting as a part of its regular agenda, the progress achieved and challenges identified in the implementation of GPIs using a common template.		Review, at each PIRG meeting as a part of its regular agenda, the progress achieved and challenges identified in the implementation of GPIs	ICAO Regional offices and PIRGs

ALLPIRG/5 Conclusions	Relationship with Strategic Objective & Global Plan Initiatives (GPIs)	Follow-up task	To be initiated by
<b>Conclusion 5/3 — Workshop on the business case model for communications, navigation, and surveillance/air traffic management (CNS/ATM) Systems</b>			
That, in support of the development of business cases for the implementation of CNS/ATM Systems, ICAO convene a training workshop for States at the Regional Offices through an appropriate mechanism, such as Special Implementation Projects (SIPs).	Increases efficiency (Strategic objective D) Relates to all GPIs	ICAO to convene a training workshop for States at the Regional Offices through the SIPs mechanism	ICAO Headquarters
<b>Conclusion 5/4 — Application of the business case model for CNS/ATM Systems implementation</b>			
That PIRGs, States and airspace users:  a) note that business cases for the implementation of CNS/ATM Systems leading to a global ATM system is a key element in the development of regional, subregional and national plans;	Increases efficiency (Strategic objective D) Relates to all GPIs	Note that business cases for the implementation of CNS/ATM Systems is a key element in the development of regional, subregional and national plans	All
b) consider the application of the model for the development of business cases in the formulation of national and subregional plans with a view to facilitating the achievement of a global ATM system; and		Apply the model for the development of business cases in the formulation of national and subregional plans	ICAO Regional Offices, PIRGs, States, and international organizations
c) establish, with ICAO's assistance and within the limits of the programme budget, a network of experts on cost-effectiveness, cost-benefit analyses and business cases for the implementation of CNS/ATM Systems in order to share expertise and to provide assistance to the Regional Offices.		Establish a network of experts on cost-effectiveness, cost-benefit analyses and business cases for the implementation of CNS/ATM Systems	ICAO Headquarters

ALLPIRG/5 Conclusions	Relationship with Strategic Objective & Global Plan Initiatives (GPIs)	Follow-up task	To be initiated by
<b>Conclusion 5/5 — ICAO Global air navigation plan (ANP) database and geographic information system (GIS) portal</b>			
<p>Recognizing that access to an ICAO Global ANP database and associated planning services through a web-based ICAO GIS portal would constitute an invaluable tool in supporting, integrating and monitoring the planning and implementation of harmonized regional, interregional and global air navigation infrastructures, the regional planning groups:</p> <p>a) note the progress made by the Secretariat in accordance with Recommendation 1/14 of AN-Conf/11 and the ICAO Global ANP database;</p>	<p>Increases efficiency (Strategic objective D) Relates to all GPIs</p>	<p>Note the progress made in the development of ICAO Global ANP database</p>	<p>ALL</p>
<p>b) note the ongoing efforts by the Secretariat in harmonizing formats of all the ANP tables together with the inclusion of temporal information in the tables that would assist the regional planning groups in monitoring and analysing the implementation progress;</p>		<p>Harmonize formats of all the ANP tables</p>	<p>ICAO Headquarters</p>
<p>c) note the intent to expand the ANP tables to include Global Plan Initiatives (GPIs), as appropriate; and</p>		<p>Include GPIs in the ANP tables</p>	<p>ICAO Headquarters</p>
<p>d) utilize, through the ICAO GIS portal, the ICAO Global ANP database and associated planning services so as to ensure the currency, coordination and implementation of regional air navigation planning and to contribute to the further development of air navigation plans as the framework for the efficient implementation of new air navigation systems and services at the national, regional, interregional and global levels.</p>		<p>Utilize the ICAO Global ANP database and associated planning service</p>	<p>ICAO Regional Offices, PIRGs, States, and international organizations</p>
<b>Conclusion 5/6 — Development of planning tools</b>			
<p>That ICAO, in the development of planning tools and services, should accommodate requirements established by the Regional Offices, as well as to take into account similar tools developed by other organizations such as EUROCONTROL.</p>	<p>Increases efficiency (Strategic objective D) Relates to all GPIs</p>	<p>Develop planning tools by taking into account regional requirements and experience gained by other organizations</p>	<p>ICAO Headquarters</p>

ALLPIRG/5 Conclusions	Relationship with Strategic Objective & Global Plan Initiatives (GPIs)	Follow-up task	To be initiated by
<b>Conclusion 5/7 — Environmental benefits of CNS/ATM Systems</b>			
That PIRGs and States:	Minimizes environmental impact (Strategic objective C)		
a) use the Committee on Aviation Environmental Protection (CAEP) provided CO <sub>2</sub> conversion factor in the analysis of environmental benefits of implementing CNS/ATM Systems;		Use the CAEP provided CO <sub>2</sub> conversion factor in the analysis of environmental benefits of implementing CNS/ATM Systems	ICAO Regional Offices, PIRGs and States
b) prioritize the implementation of voluntary, operationally-based improvements in their air traffic management systems, with emphasis on fuel savings, emissions reductions and noise benefits, and also to mitigate costs to the industry;		Prioritize the implementation of voluntary, operationally-based improvements in their air traffic management systems	ICAO Regional Offices, PIRGs and States
c) provide feedback to ICAO on studies conducted on the environmental benefits of implementing CNS/ATM Systems; and		Provide feedback to ICAO on studies conducted on the environmental benefits of implementing CNS/ATM Systems	ICAO Regional Offices, PIRGs and States
d) share air traffic data to improve future CAEP assessments, in line with State letter AN 1/17-03/86.		Share traffic data with CAEP	ICAO Regional Offices, PIRGs, States and international organizations
<b>Conclusion 5/8 — Globally coordinated air traffic services (ATS) routes</b>			
That PIRGs:	Increases efficiency (Strategic objective D) Relates to GPI 7		
a) establish a global consolidated, prioritized list of routes and terminal area (TMA) improvements in close coordination with airspace users; and		Establish a global consolidated, prioritized list of routes and terminal area (TMA) improvements	ICAO Headquarters, ICAO Regional Offices and PIRGs
b) work with neighbouring PIRGs/States/air navigation service providers (ANSPs) to accelerate international route improvements.		Work with neighbouring PIRGs/States/ANSPs to accelerate international route improvements	ICAO Regional Offices, PIRGs and States

ALLPIRG/5 Conclusions	Relationship with Strategic Objective & Global Plan Initiatives (GPIs)	Follow-up task	To be initiated by
<b>Conclusion 5/9 — Terminal area (TMA) structure and area navigation</b>			
<p>That States:</p> <p>a) employ area navigation in all TMAs, including appropriate arrival and departure procedures, to improve efficiency and reduce emissions in the vicinity of airports; and that, in special cases where there are particularly challenging obstacles and where air traffic density is very high and additional approach paths are possible, the more precise and contained required navigation performance (RNP) procedures be employed; and</p>	<p>Increases efficiency (Strategic objective D) Relates to GPI 5</p>	<p>Employ area navigation in all TMAs, including appropriate arrival and departure procedures</p>	<p>ICAO Regional Offices, PIRGs and States</p>
<p>b) review operations, procedures and training of controllers to ensure the optimum management of air traffic services.</p>		<p>Review operations, procedures and training of controllers to ensure the optimum management of air traffic services</p>	<p>ICAO Regional Offices, PIRGs and States</p>
<b>Conclusion 5/10 — Environmental benefits of RVSM introduction and regional expertise</b>			
<p>That ICAO:</p> <p>a) undertake a study on the environmental benefits of the introduction of RVSM and to ensure that this information is transmitted to policy makers; and</p>	<p>Minimizes environmental impact (Strategic objective C) Relates to GPI 2</p>	<p>Study the environmental benefits of the introduction of RVSM</p>	<p>ICAO Headquarters</p>
<p>b) seek appropriate support from recognized expert organizations in its work on quantifying the environmental benefits of RVSM, noting the support offered by EUROCONTROL in this regard.</p>		<p>Seek support from recognized expert organizations in its work on quantifying the environmental benefits of RVSM</p>	<p>ICAO Headquarters</p>

ALLPIRG/5 Conclusions	Relationship with Strategic Objective & Global Plan Initiatives (GPIs)	Follow-up task	To be initiated by
<b>Conclusion 5/11 — Air traffic management (ATM) safety management</b>			
That ICAO:	Increases safety (Strategic objective A)		
a) urge States to give priority to the establishment and effective operation of their ATM safety management and safety regulatory functions;		Give priority to the establishment and effective operation of their ATM safety management and safety regulatory functions	States
b) support the development of sufficient expertise levels in the industry through formal training in ATM safety issues and, by cooperation through regional bodies, promote collective means to optimize the effectiveness of training provision; and		Develop formal training in ATM safety issues	ICAO Regional Offices, PIRGs, States, and international organizations
c) develop further measures to enable the implementation of a “just-culture” reporting environment to facilitate the reporting of ATM occurrences.		Implement a “just-culture” reporting environment to facilitate the reporting of ATM occurrences	ICAO Regional Offices, PIRGs and States
<b>Conclusion 5/12 — Coordination between regional monitoring agencies (RMAs)</b>			
That the ICAO EUR/NAT Office act as the initial focal point for the required coordination between RMAs in order to:	Increases efficiency (Strategic objective D) Relates to GPI 2		
a) facilitate the exchange of monitoring and operational data between RMAs;		Facilitate the exchange of monitoring and operational data between RMAs	ICAO EUR/NAT Office
b) facilitate the exchange information about best practices between RMAs;		Facilitate the exchange information about best practices between RMAs	ICAO EUR/NAT Office
c) ensure that incident reports are correctly disseminated to the appropriate RMA;		Ensure that incident reports are correctly disseminated to the appropriate RMA	ICAO EUR/NAT Office
d) provide a forum to manage changes to monitoring requirements; and		Provide a forum to manage changes to monitoring requirements	ICAO EUR/NAT Office
e) ensure the maintenance of the RMA Handbook.		Ensure the maintenance of the RMA Handbook	ICAO EUR/NAT Office

ALLPIRG/5 Conclusions	Relationship with Strategic Objective & Global Plan Initiatives (GPIs)	Follow-up task	To be initiated by
<b>Conclusion 5/13 — Implementation of performance-based navigation concept</b>			
<p>That, to increase awareness and understanding of the performance-based navigation concept and its elements:</p> <p>a) ICAO organize workshops and training activities; and</p>	<p>Increases efficiency (Strategic Objective D) Relates to GPI 5</p>	<p>Organize workshops and training activities</p>	<p>ICAO Headquarters</p>
<p>b) where area navigation (RNAV) or required navigation performance (RNP) implementations are required, these will be implemented by PIRGs and States according to the performance-based navigation concept.</p>		<p>Implement performance-based navigation concept</p>	<p>ICAO Regional Offices, PIRGs, States, and international organizations</p>
<b>Conclusion 5/14 — A regional online database of air navigation deficiencies</b>			
<p>That, PIRGs consider establishing and maintaining a regional online database of air navigation deficiencies that ensures transparency and provides a secure access to authorized users.</p>	<p>Increases safety (Strategic objective A)</p>	<p>Establish and maintain a regional online database of air navigation deficiencies</p>	<p>ICAO Regional Offices and PIRGs</p>
<b>Conclusion 5/15 — Last resort action to resolve regional air navigation deficiencies</b>			
<p>That, when efforts to eliminate deficiencies prove unsuccessful after exhausting all alternatives, PIRGs adopt the following last resort action, which consists of the two parts:</p> <p>a) propose the inclusion of an alternate facility/procedure in the air navigation plan (ANP); or</p> <p>b) when a corrective action as a) above cannot be recommended, provide the State(s)/Territory(ies)/users and ICAO with an analysis concerning risk associated with such a deficiency.</p>	<p>Increases safety (Strategic objective A)</p>	<p>Implement last resort action when efforts to eliminate deficiencies prove unsuccessful after exhausting all alternatives</p>	<p>ICAO Regional Offices and PIRGs</p>

ALLPIRG/5 Conclusions	Relationship with Strategic Objective & Global Plan Initiatives (GPIs)	Follow-up task	To be initiated by
<b>Conclusion 5/16 — Implementation of very small aperture terminals (VSATs)</b>			
That PIRGs:  a) discourage the proliferation of VSAT networks where one/some of the existing ones can be expanded to serve the new areas of interest;	Increases efficiency (Strategic Objective D) Relates to GPI 22	Discourage the proliferation of VSAT networks	ICAO Regional Offices, PIRGs and States
b) work towards integrated regional/interregional digital communication networks with a single (centralized) operational control and preferably based on the Internet Protocol (IP); and		Work towards integrated regional/interregional digital communication networks	ICAO Regional Offices, PIRGs, States, and international organizations
c) give due consideration to managed network services (e.g. a virtual private network (VPN)), subject to availability and cost-effectiveness.		Give due consideration to managed network services	ICAO Regional Offices, PIRGs, States, and international organizations
<b>Conclusion 5/17 — Provisions for digital communication networks</b>			
That ICAO:  a) expedite the development of provisions relating to the use of the Internet Protocol Suite (IPS) in the aeronautical telecommunication infrastructure; and	Increases efficiency (Strategic Objective D) Relates to GPI 22	Expedite the development of provisions relating to the IPS in the aeronautical telecommunication infrastructure	ICAO Headquarters
b) initiate the development of provisions governing the end-to-end performance of digital communication networks, irrespective of the technologies and protocols utilized therein.		Develop provisions governing the end-to-end performance of digital communication networks	ICAO Headquarters
<b>Conclusion 5/18 — Changes to the Regional Supplementary Procedures (SUPPs) (Doc 7030)</b>			
That ICAO  a) restructure the SUPPs (Doc 7030) by the complete reordering and reorganization of the material;	Increases efficiency (Strategic Objective D) Relates to all GPIs	Restructure the SUPPs by the complete reordering and reorganization of the material	ICAO Headquarters
b) align the area of application of the SUPPs with the area of application of the regional air navigation plans (ANPs); and		Align the area of application of the SUPPs with the area of application of the ANPs	ICAO Headquarters

ALLPIRG/5 Conclusions	Relationship with Strategic Objective & Global Plan Initiatives (GPIs)	Follow-up task	To be initiated by
c) make SUPPs available on a CD as well as on the ICAO website.		Make SUPPs available on ICAO website	ICAO Headquarters

**Agenda Item 3:           General report on the activities of the Regional Projects RLA/98/003 –  
                                  *Transition to the CNS/ATM systems in the CAR/SAM Regions***

3.1           The Secretariat presented for the Meeting's consideration information on the regional technical cooperation project RLA/98/003 - Transition to the CNS/ATM systems in the CAR/SAM Regions. It also highlighted the importance that these ICAO mechanisms have for the implementation of air navigation multinational services/facilities, in order to improve safety and provide the necessary support in terms of training, meetings/seminars and workshops with a view to strengthening and/or establishing regional implementation mechanisms.

3.2           The Meeting recognized that the ICAO technical cooperation mechanism has proven throughout the years to be an effective tool in the CAR/SAM Regions for developing regional/national CNS/ATM transition plans.

3.3           The Meeting took note that based on Recommendation 8/5 from the Tenth Air Navigation Conference which required ICAO to consider within the framework of technical co-operation, the provision of assistance necessary for the tests, trials and development to facilitate the implementation of the CNS/ATM systems, particularly in developing States. The Project RLA/98/003 included tasks to help States to develop their National CNS/ATM Plans in harmony with the Regional Air Navigation Plan for the Transition to CNS/ATM within the methodology of GREPECAS.

3.4           The Meeting recalled the objectives of Project RLA/98/003.

- (a) advise States on the national planning for the transition to the new CNS/ATM systems in accordance with the programme agreed for the Region;
- (b) advise States on the definition of implementation options which are most appropriate for their own reality, including the definition of the required systems specifications ;
- (c) provide States information and advise on the cost/benefit analysis regarding the implementation of the various options of the new systems, and
- (d) assist States in the implementation of the 1984 World Geodetic System (WGS-84) and the establishment of an integrated automated aeronautical information system for the Region.

3.5           Under the immediate objective 1, the Meeting learned that the Project conducted a survey on the current status of CNS/ATM facilities and services available in each State, as well as the situation of airline fleets in order to analyze the 18 main air traffic flows of the region. The information obtained served to lead further actions by the Project for the implementation of RNAV route, RVSM and RNP10 and supported the restructuring of the ATS routes network in the CAR/SAM regions, which covers 64 implemented RNAV routes. Likewise the planning activities for performance based navigation with a route map and ATFM planning.

3.6 Under the immediate objective 2, the “guidance material for the transition to ICAO Global ATM in the CAR/SAM Regions” was developed, and was recently updated with the outcome from the Eleventh Air Navigation Conference. Some advisory visits to States were also carried out which included presentations to improve the ATM, institutional considerations and implementation options. Also the Planning and Evaluation Tool (PET) for the implementation of CNS/ATM systems was developed jointly with two seminars on CNS/ATM Institutional Aspects.

3.7 During the current year the Project has been working on the development of a first draft of a multinational agreement for the creation of a Regional Multinational Organization (RMO). Progress in this regard will be presented in the Task Force Meeting and Seminar on institutional aspects to be carried out in Rio de Janeiro, Brazil from 11 to 13 December 2006.

3.8 Finally on the immediate objective 3, an expert on WGS-84 was hired under the Project who carried out advisory visits to the project Member States in order to verify their implementation status and four seminars on WGS-84 and aeronautical information issues were carried out, training more than 150 specialists of the CAR and SAM regions.

3.9 The Meeting took note that States have recognized that project RLA/98/003 is an important tool for implementation and for carrying out training events on critical aspects of the CNS/ATM system, and has provided active leadership in the coordination, planning and implementation process of the CNS/ATM system. Therefore, support should continue to efforts carried out by Project RLA/98/003.

**Agenda Item 4: Review of the Report of the meeting of the ATM Committee**

4.1 The plenary Meeting of the ATM/CNS Subgroup, when reviewing Agenda Item 4 of the Report of the ATM Committee, noted a draft conclusion requesting the approval of a Draft Amendment to the CAR/SAM Regional Plan for the Implementation of CNS/ATM Systems. This document was called Plan for the Transition of the ATM Operational Concept and was presented to the ATM Committee in working paper WP/10.

4.2 When discussing the abovementioned document, several comments come up on the need to approve changes to the CAR/SAM regional plan, even when significant amendments are still being made by ICAO Headquarters to the ATM Global Plan. Implications of such amendments were not known by the ATM Committee when reviewing the proposed document.

4.3 On the other hand, note was taken that the contribution of other GREPECAS Subgroups was requested in order for them to present their own changes to the Plan, updating as necessary, their work programmes and terms of reference to reflect the ICAO strategic objectives.

4.4 In view of the comments of not trying to get ahead to the final changes to the Global Plan that ICAO Headquarters was carrying out, and trying to avoid immediate changes to the proposed document, there were opinions towards approving the ATM part of the document, while at the same time other Subgroups be requested to review their relevant working area. It was also mentioned that the proposed document should be a dynamic instrument for GREPECAS, and therefore, could be changed whenever necessary.

4.5 The Meeting was informed that in order to update the Air Navigation Plans information in a dynamic way, electronic tools, that will be available to regional groups and States through the Web, are being developed by ICAO Headquarters. It was also noted that the proposed document, in its present form, duplicated parts of the World Plan and that there were elements requiring a mayor coordination between the NACC and SAM Regional Offices.

4.6 Taking into account all arguments presented, the Meeting considered that effort devoted to developing a base document for updating the CAR/SAM ANP that also envisage ICAO Strategic Objectives and the roadmap elements coordinated with the industry has been of great value, taking into consideration changes being carried out to the Air Navigation World Plan.

4.7 The Meeting considered advisable that the ATM Committee continue the review and update of the document as well as its delivery to the other GREPECAS Subgroups for their contribution, on the understanding that the final document approval could be carried out until the complementary parts are received, giving enough time for the completion of the final changes to the World Plan and the use of the electronic documentation as a result of ICAO Headquarters updating work. Taking into consideration all above, the Meeting modified ATM Committee draft decisions ATM 5/12 and ATM 5/13 as follows

**DRAFT  
DECISION ATM/5/12**

**DRAFT PLAN FOR THE TRANSITION TO ATM  
SYSTEM IN THE CAR/SAM REGIONS**

That, aimed at presenting GREPECAS the Plan for the Transition to ATM Systems in the CAR/SAM Regions:

- a) the ATM Committee continue reviewing Chapters 1, 2, 3 and 4 of the above document and present results to the ATM/CNS/SG/6; and
- b) the CNS Committee consider developing Chapters 1, 5, 6 and 7 of the above document and present results to the ATM/CNS/SG/6

**DRAFT  
DECISION ATM/5/13**

**CONSIDERATION OF THE DRAFT PLAN FOR THE  
TRANSITION TO ATM SYSTEMS IN THE CAR/SAM  
REGIONS BY OTHER GREPECAS SUBGROUPS**

That the ATM/CNS Subgroup Secretariat forward to the AGA/AOP, AIS and MET Subgroups and Institutional Aspects Task Force the Draft Plan for the transition of ATM Systems in the CAR/SAM Regions, in order to consider the development of the Chapters related to their relevant areas.

**Please refer to Attachment 1 to this Report**

**Agenda Item 5:           Review of the Report of the meeting of the CNS Committee**

5.1                   With respect to the Report of the CNS Committee, all Draft Conclusions included in it were approved by the Subgroup without changes.

**Please refer to Attachment 2 to this Report**

**Agenda Item 6: Organization of the future work of the ATM/CNS Subgroup:****6.1 Review of the terms of reference and work programme of the ATM/CNS Subgroup**

6.1.1 The Secretariat reported to the Meeting the result of the presentation made to GREPECAS/13 Meeting, examining the Conclusions/Decisions of the Subgroup, which included actions by the Air Navigation Commission.

6.1.2 Apart from the report of the fourth meeting presented to GREPECAS/13, it was important for the ATM/CNS Subgroup to note other items reviewed by the GREPECAS/13 meeting which will have any impact on the work of the Subgroup in order to take any actions and/or changes to the terms of reference and work programme of the Subgroup.

6.1.3 Not only the meetings of GREPECAS are relevant to the work of this Subgroup but also the meetings from other Contributory Bodies of GREPECAS, or Meetings outside GREPECAS that have relevance to the future work of this Subgroup have to be taken into account.

6.1.4 The GREPECAS/13 meeting was presented with a proposal to include three new items in the work programme of the ATM/CNS Subgroup, taking into account the need to develop planning documentation for a gradual implementation of the communications, navigation and surveillance infrastructure that would take into account the ATM requirements and, therefore, the operational requirements of the users in the CAR and SAM Regions.

6.1.5 The proposal was based on the CNS/ATM systems planning taking into account the new Global ATM concept, and on the premise that the new ATM systems implementation would be framed within this concept. The proposal required the need for more detailed operational requirements as opposed to the present Air Navigation Plans containing mainly tables of the ATM and CNS system requirements.

6.1.6 Likewise, the proposal was also based on the premise that the Subgroup should develop a CAR/SAM strategy for navigation as well as strategies for communications and surveillance. It was sustained that in order to carry out these new tasks the Subgroup needed to add tasks to develop such strategies and to consider the possibility of modifying the methodology of the Subgroup to allow it to form task groups comprising ATM and CNS experts to perform these new proposed tasks, and to consider extending the plenary sessions to allow for additional coordination of the independent work of each ATM and CNS Committees.

6.1.7 Following the review of these considerations, the Meeting agreed to submit these proposals to the ATM/CNS Subgroup. The Secretariat explained that the proposal mentioned in 6.1.4 to 6.1.6 above, was made before updatings of the Global Plan that have not already been fully defined, and would have to be taken into account by the Subgroup when reviewing the terms of reference and work programme.

6.1.8 The ACG/6 Meeting reviewed the work programme of the ATM/CNS Subgroup approved by the GREPECAS/13 where no changes were reported to the continuous tasks. The ACG noted that the DGAC Conference on Safety Strategy and the ALLPIRG/5 Meeting (20-24 March 2006) could result in changes to the Terms of Reference as well as the Work Programme. The results of these two events would be submitted to GREPECAS/14 for its consideration.

6.1.9 The Terms of Reference and the Work Programme of the ATM/CNS Subgroup, as approved by GREPECAS/13, and later on reviewed by ACG/6 were considered appropriate by the Meeting, however, note was taken that the Subgroup's steering committee met to review them and concluded that it was necessary that the Subgroup takes over the Automatization Task Force with the existing terms of reference, work programme and composition in order that the Conclusions presented to the Subgroup with different numbering corresponding to the ATM and CNS Committees came out as being of the Subgroup. Likewise, it was concluded that it would be appropriate to add an additional task to the Subgroup regarding the supervision of the Automatization Task Force work and that the Secretariat would present this proposal to GREPECAS/14. In this regard, the changes made to the Subgroup's tasks as well as the terms of reference and work programme of the Automatization Task Force reporting to the ATM/CNS Subgroup are included in the **Appendix** to this part of the report.

## **6.2. Tentative Meeting Programme of the Subgroup, the Committees and other Contributory Bodies**

6.2.1 The Meeting reviewed the Tentative Meeting Programme approved by the ACG which considered the holding of the ATM/CNS/SG/6 Meeting in 2007, and when asking for proposals, an invitation from the delegate of the Dominican Republic was received to hold the sixth meeting of the ATM/CNS Subgroup in the Dominican Republic in 2007.

6.2.2 The future work of the ATM and CNS Committees was examined by these Contributory Bodies in their respective meetings, included under their reports on Agenda Items 4 and 5.

6.2.3 Based on the above, the Meeting formulated the following Draft Decision:

### **DRAFT**

### **DECISION ATM/CNS/5/01**

### **TERMS OF REFERENCE AND WORK PROGRAMME OF THE ATM/CNS SUBGROUP**

That the work programme of the ATM/CNS Subgroup be approved as presented in the **Appendix A.**

**APPENDIX****AIR TRAFFIC MANAGEMENT/COMMUNICATIONS,  
NAVIGATION AND SURVEILLANCE SUBGROUP (ATM/CNS/SG)****1. Terms of reference**

- a) To promote and follow-up the implementation of the CNS/ATM systems required in the CAR/SAM ANP and to place special emphasis on identifying, evaluating and proposing, according to the established procedures, the corresponding corrective actions to the /deficiencies affecting air operations.
- b) To carry out permanent coordination with various GREPECAS Contributory Bodies in order to ensure appropriate integration of all tasks contributing to the implementation of the CAR/SAM ANP.
- c) To develop and harmonize, in the CAR/SAM Regions, action plans to facilitate implementation of CNS/ATM systems, in order to reach a consistent and coordinated implementation, especially in multinational projects of regional/inter-regional nature, taking into account homogeneous areas and main air traffic flows contained in the CAR/SAM FASID.
- d) Taking into consideration the material prepared by the different ICAO groups of experts in the CNS/ATM field, develop guidance material to keep and upgrade the technical and operational quality for the provision of CNS/ATM services.

**2. Work programme**

TASK NUMBER	TASK DESCRIPTION	PRIORITY	DATE	
			START	END
ATM/CNS/1	Follow up, coordinate and manage the work of the CNS and ATM Committees.	A	Permanent	
ATM/CNS/2	To establish inter- and intra-regional coordination on CNS/ATM systems applications.	A	Permanent	
ATM/CNS/3	To inform on the development of the new air navigation systems, SARPs development, as well as the work of the ICAO CNS/ATM Groups of Experts.	A	Permanent	
ATM/CNS/4	Refer urgent (U) priority deficiencies, with proposed corrective action, to the Aviation Safety Board.	A	Permanent	
ATM/CNS/5	Supervise the work programme of the Automation Task Force	A	Permanent	

3. **Priority**

- A** High priority tasks, on which work should be speeded up.
- B** Medium priority tasks, on which work should commence as soon as possible, but without detriment to priority **A** tasks.
- C** Tasks of lesser priority, on which work should commence as time and resources allow, but without detriment to Priority **A** and **B** tasks.

4. **Composition**

The ATM/CNS Subgroup is composed by the joint membership of the members of the ATM and CNS Committees.

5. **Chairperson**

Chairman	Mr. Claudio Arellano (Mexico)
Vice-Chairman	Mr. Julio Cesar de Souza Pereira (Brazil)

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**TERMS OF REFERENCE, WORK PROGRAMME AND COMPOSITION OF  
THE ATM AUTOMATION TASK FORCE**

**1. Terms of Reference**

1.1 In accordance with the guidelines set by the ATM and CNS Committees of the GREPECAS ATM/CNS Subgroup, develop the assigned tasks in order to prepare CAR/SAM regional guidance material for the evolutionary implementation of ATM automation.

**2. Work Programme**

No.	Task	Priority	End Date
1	Review and update the Interface Control Document (ICD) for ATS Interfacility Data Communications for its use in the short and medium term in the CAR/SAM Regions.	A	30/11/06
2	Analyse and prepare proposals for updating the regional strategy for the evolutionary implementation of ATM automation in the CAR/SAM Regions according to the new ICAO Global Air Navigation Plan (Doc 9750) and other related initiatives.	A	30/11/06
3	Review and make recommendations on proposals from the RLA/98/003 or other Subregional groups pertaining to ATM automation.	A	30/06/07
4	Prepare general guidance material containing references on the ATM automation functions and its evolutionary improvement for ATS units.	A	30/06/07

**3. Composition**

Arrile Torino (Brazil), José Arturo García Torres (Colombia), Ramón Navarro (Cuba), José Luis Fernández Rosario (Dominican Republic), Roger Prudent (France), Marc Paulemon (Haiti), Sergio Valencia (México), Panama, Juan de Mata (Spain), C. Martin Cacioppo (United States), José Ramón Oyuela (COCESNA) and IFATCA.

*Note: Composed by ATM and CNS experts.*

**4. Coordinator**

Sergio Valencia (Mexico)

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**Agenda Item 7: Other business**

7.1 Under this Agenda Item the Secretariat briefly presented the information provided by the United States on three issues considered as important for the ATM/CNS Subgroup.

7.2 The first issue referred to the pandemic influenza indicating that the United States has undertaken a massive planning effort to stop, slow and limit the spread of the possible pandemic influenza and sustain services that are essential to protecting its citizens and maintaining its economy. The United States has developed a National Strategy for Pandemic Influenza and a supporting Implementation Plan, as well as plans for each department within the Federal government.

7.3 In a second Information Paper the Meeting was presented with information on a Civil/Military Air Traffic Management Summit (CMAC), intended to achieve a global cooperation in the areas of air traffic and air defense. The CMAC 2007 is co-sponsored by Air Traffic Control Association (ATCA), American Association of Airport Executives (AAAE) and the U.S. Department of Defense; and will be held from 26 February to 1 March 2007 in Bangkok, Thailand. The program of this important summit will include formal presentations by world and industry leaders and subject matter experts, workshops, discussions, findings and recommendations on such topics as:

- Air Navigation Service Providers – Issues, Challenges and Successes
- Military Air Traffic Requirements – Issues, Challenges and Successes
- Regulatory/Standards Alignment
- National Security and Sovereignty Considerations
- Travel, Tourism and the Olympics/Special Events – Real Tests of Cooperation
- Airport Infrastructure of the Future
- Tour of the new Suvarnabhumi Airport in Bangkok
- Economic Impact of Aviation
- Industry's Role in Harmonizing Civilian and Military Operations Globally

The Meeting encouraged delegates to attend this upcoming summit along with their military counterparts.

7.4 The third Information Paper presented information on the Next Generation Air Transportation System (NGATS). Today's U.S. air transportation system<sup>1</sup> demands are outpacing the ability to increase system capacity. Operating and maintenance costs of the air traffic system are outpacing revenues and the air carrier industry is going through a period of dramatic change. Security requirements established in the wake of the September 11 attacks significantly impact costs and the ability to efficiently move people and cargo. In addition, growth in air transportation is provoking community concerns over aircraft noise, pollution, and congestion. Adapting our current air transportation paradigm will not be sufficient to meet these challenges. Instead, transformation of today's system is required to ensure a healthy, environmentally friendly, globally interoperable air transportation system for 2025. In 2002, the U.S. Congress established the Joint Planning and Development Office (JPDO) to define a national strategy for developing the Next Generation Air Transportation System (NGATS). The NGATS vision for 2025 enables the safe, efficient and reliable movement of large numbers of people and goods throughout the air transportation system in a way that is consistent with national security objectives. Our NGATS vision is founded upon an underlying set of principles and enabled by a series of key capabilities that will free the U.S of many current system constraints, support a wider range of operations, and deliver an overall system capacity up to 3 times current operating levels.

7.5 Before closing the Meeting, the President thanked the participation of Delegates and International Organizations as well as Presidents and Vice-presidents and Secretaries of the ATM and CNS Committees. In particular and taking into account the possible and last participation of the Secretary of the CNS Committee, he referred to the excellent work performed by the CNS Officer, Mr. Aldo Martínez, for his professional and outstanding contribution, wishing him on his behalf and that of the Subgroup a well deserved retirement.

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<sup>1</sup> The current air transportation system is a complex array of systems and services used by an ever broadening collection of stakeholders. The term "the air transportation system" means all activities and components related to the safe passage of people and goods by air. This includes related federal lines of business, as well as private industry, state, and local activities.