



**NACC/DCA/3  
Report**

**INTERNATIONAL CIVIL AVIATION ORGANIZATION**

**FINAL REPORT**

**THIRD MEETING OF NORTH AMERICAN, CENTRAL AMERICAN  
AND CARIBBEAN DIRECTORS OF CIVIL AVIATION**

**(NACC/DCA/3)**

**Punta Cana, Dominican Republic**

**8-12 September 2008**

**INTERNATIONAL CIVIL AVIATION ORGANIZATION  
NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN OFFICE**

**INTERNATIONAL CIVIL AVIATION ORGANIZATION**

**FINAL REPORT OF THE  
THIRD MEETING OF NORTH AMERICAN, CENTRAL AMERICAN  
AND CARIBBEAN DIRECTORS OF CIVIL AVIATION  
(NACC/DCA/3)**

**(Punta Cana, Dominican Republic, 8-12 September 2008)**

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## **History of the Meeting**

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

The Third Meeting of North American, Central American and Caribbean Directors of Civil Aviation (NACC/DCA/3) was held at the Barceló Convention Center, Punta Cana, Dominican Republic, from 8 to 12 September 2008.

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

Mrs. Loretta Martin, Regional Director of the ICAO North American, Central American and Caribbean Regional Office, greeted the participants of the Meeting and highlighted the most important tasks to be addressed as related to the NAM/CAR Regions. Thence, Eng. José Tomás Pérez, Director of Civil Aviation and Secretary of State of the Dominican Republic, welcomed the Meeting to the Dominican Republic and officially inaugurated the Meeting. The following Dominican Republic authorities attended the opening ceremony: Lic. Andres Van Der Horts, Director of the Airports Department, Mr. Carlos Veras, Representative of the Dominican Republic on the ICAO Council, Gen. Lic. Carlos A. Robles Díaz, Director of the Airport Security Specialized Entity, Eng. Luis Rodríguez Ariza, President of the Civil Aviation Board, Gen. Juan Manuel Jiménez García, representing the Dominican Air Force, Mr. Santiago Rosa Martínez, Subdirector General of the IDAC.

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

The Meeting unanimously elected Mr. Santiago Rosa Martínez, Deputy Director of the “Instituto Dominicano de Aviación Civil” (IDAC) of the Dominican Republic as Chairman. Mrs. Loretta Martin, Regional Director of the ICAO NACC Office, acted as Secretary of the Meeting; she was assisted by Messrs. Víctor Hernández, Acting Deputy Regional Director, and Mr. Julio Siu, Regional Officer Communications, Navigation and Surveillance, all from the ICAO NACC Office.

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

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

## ii.5 **Agenda**

The agenda was adopted as follows:

**Agenda Item 1: Review of NACC/DCA, GREPECAS, DGAC CAP, E/CAR/DCA, C/CAR/DCA and Working Group Meetings**

**Agenda Item 2 Regional Technical Cooperation Activities**

**Agenda Item 3: Air Navigation Services**

- 3.1 Air Navigation Matters
  - General Matters
  - Aerodromes (AGA)
  - Air Traffic Management (ATM)
  - Communications, Navigation and Surveillance (CNS)
  - Meteorological Services (MET)
  - Aeronautical Information Services (AIS)
- 3.2 Air Navigation Deficiencies

**Agenda Item 4: Safety Oversight**

- 4.1 USOAP
- 4.2 Regional Safety Oversight Developments

**Agenda Item 5: Aviation Security (AVSEC)**

- 5.1 ICAO Universal Security Audit Programme
- 5.2 Regional AVSEC Activities

**Agenda Item 6: Other Business**

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

The Meeting held its sessions from 0900 to 1430 hours with two breaks.

## ii.7 **Attendance**

Although attendance was adversely affected by the events of hurricanes Gustav and Ike, the Meeting was attended by 22 delegates from 9 States/Territories of North America, Central America and the Caribbean, 1 State from the SAM Region and 3 International Organizations. The Meeting regretted the absence of Aruba, Bahamas, Belize, Canada, Cayman Islands, Costa Rica, Guatemala, Honduras, Mexico, Netherlands Antilles, Nicaragua, Trinidad and Tobago, Turks and Caicos Islands, ACI, CARICOM, IATA, IFALPA and PAHO.

## ii.8 **Conclusions and Decisions**

The Directors of Civil Aviation of the North America, Central America and the Caribbean recorded its activities as Conclusions and Decisions as follows:

**Conclusions:** Activities requiring communication to States/Territories/International Organizations.

**Decisions:** Internal activities of the Meetings of Directors of Civil Aviation of North America, Central America and the Caribbean.

## ii.9 **List of Conclusions**

<b>No.</b>	<b>Title</b>	<b>Page</b>
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## ii.10 **List of Decisions**

<b>No.</b>	<b>Title</b>	<b>Page</b>
3/2	APPROVAL OF THE NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN WORKING GROUP (NACC/WG)	3-2
3/3	APPROVAL OF THE NAM/CAR IMPLEMENTATION PLAN	3-3

**ii.11 List of Agreed Action Items****NACC/DCA/3/AI/1**

The ICAO NACC Office will send the draft final report of the NACC/DCA/3 Meeting for review and comments of the participants not later than **5 November 2008**.

**Agenda Item 3:*****Air Navigation Services*****3.1 Air Navigation Matters**

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**NACC/DCA/3/AI/2**

That States/Territories/International Organizations take note of ANP tables and update NDB Progressive Deactivation Plan available on the ICAO NACC website by **30 September 2008**.

**NACC/DCA/3/AI/3**

That States/Territories/International Organizations send delegates to the Airport Emergency Plans and Emergency Operations Centre Seminar/Workshop for the North American, Central American and Caribbean Regions (NAM/CAR) to be held from 29 September to 3 October 2008, in Tortola, British Virgin Islands.

**NACC/DCA/3/AI/4**

That States/Territories/International Organizations send delegates to attend the Aerodromes Certification Seminar/Workshop that will be conducted in Spanish at the COCESNA ICCAE facilities in El Salvador the first semester of 2009.

**NACC/DCA/3/AI/5**

That States/Territories complete the AGA surveys on aerodrome certification, implementation of SMS, and emergency operations centres (EOCs) that have been posted for download in the eDocuments section of the ICAO NACC website no later than **10 October 2008**. If no reply is received by this date, it will be assumed that States/Territories are not in compliance with the associated standards.

**NACC/DCA/3/AI/6**

That States/Territories complete the state questionnaire regarding the use of aeronautical studies to deal with aerodrome deficiencies contained in Appendix A to WP/22 and forward it to the NACC Regional Office before **15 October 2008**.

**Agenda Item 3:*****Air Navigation Services*****3.2 Air Navigation Deficiencies**

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**NACC/DCA/3/AI/7**

That States/Territories/International Organizations verify GANDD points-of-contact in accordance with the list of contacts presented in Appendix B to WP/13 and inform the NACC Office of changes by **26 September 2008**.

**NACC/DCA/3/AI/8**

That States/Territories/International Organizations identify problems in updating and/or using the GANDD by contacting Gabriel Meneses, NACC Office Focal Point ([gmeneses@mexico.icao.int](mailto:gmeneses@mexico.icao.int)) and copy: [icao\\_nacc@mexico.icao.int](mailto:icao_nacc@mexico.icao.int).

**NACC/DCA/3/AI/9**

That States/Territories/International Organizations carry out a risk evaluation of each State/Territory “U” deficiency in accordance with Draft Conclusion ASB 8/2, submitting their results not later than **26 September 2008**, for GREPECAS/15. ICAO NACC will have updates implemented no later than **28 September 2008**.

**Agenda Item 4: Safety Oversight****4.2 Regional Safety Oversight Developments**

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**NACC/DCA/3/AI/10**

That States/Territories/International Organizations provide the ICAO NACC Office with the nominations of high-level safety personnel as States / Territories / International Organizations representatives to the First Meeting of the RASG-PA to be held in Puntarenas, Costa Rica, from 10 to 14 November 2008, no later than **15 October 2008**.

**NACC/DCA/3/AI/11**

That States/Territories/International Organizations respond to the questionnaire on the present status of legislation, regulations and safety programmes related to GSI/3 -*Effective Error and Incident Reporting*, the protection of operational safety risk data, sent through letter Ref. N 1/17, EMX0890 dated 19 August 2008, before **15 September 2008**.

**NACC/DCA/3/AI/12**

That States/Territories/International Organizations nominate aviation legal experts to conduct a study on aviation legislation, regulations and safety programmes to support GSI/3 before **15 September 2008**.

**Agenda Item 5: Aviation Security (AVSEC)****ICAO Universal Security Audit Programme****NACC/DCA/3/AI/13**

That States/Territories ensure the effective implementation of State Corrective Action Plans (CAPs) in response to the recommendations of the USAP audit report before the follow-up visit of the First Cycle Audit, notifying ICAO of the progress of their action plans.

**Agenda Item 6:****Other Business****NACC/DCA/3/AI/14**

That States/Territories/International Organizations provide comments, suggestions and links regarding the new ICAO NACC Office website, before **10 October 2008**, (Ref. NA 6-1.6.1 EMX0882).

**NACC/DCA/3/AI/15**

That States/Territories complete and submit the electronic online survey on ICAO's Regional Programme Review in order to ensure future support and assistance of regional activities no later than **15 September 2008**.

**NACC/DCA/3/AI/16**

The ICAO NACC Office will forward, no later than **31 October 2008**, a draft calendar of events for 2009, indicating which events need to be hosted by States / Territories / International Organizations.

**NACC/DCA/3/AI/17**

The Fourth Meeting of North American, Central American and Caribbean Directors of Civil Aviation (NACC/DCA/4) will be held in May/June 2011.



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**LIST OF WORKING PAPERS AND INFORMATION PAPERS**

Number	Agenda Item	WORKING PAPERS		
		Title	Date	Prepared and Presented by
WP/01	---	Approval of the draft agenda and meeting work schedule	18/08/08	Secretariat
WP/02	1	Valid conclusions of previous NACC/DCA, DGAC CAP, E/CAR/DCA, and C/CAR/DCA meetings	25/08/08	Secretariat
WP/03	2.1	Results and Developments of the NACC/WG	07/08/08	Secretariat
WP/04	2.1	Development of ATM automation activities in the NAM/CAR Regions	07/08/08	Secretariat
WP/05	2.1	Registration of aircraft addresses with mode s transponders	07/08/08	Secretariat
WP/06	2.1	CAR/NAM regional implementation plan	19/08/08	Secretariat
WP/07	2.1	Aeronautical Information Management (AIM)	18/08/08	Secretariat
WP/08	2.1	Aerodrome Certification and Emergency Plans	09/08/08	Secretariat
WP/09	6	Guidelines for regional human resource and training planning	19/08/08	Secretariat
WP/10	2.1	Special Implementation Project (SIP) for the Enhancement of Aeronautical Meteorological Services in the Caribbean (CAR) Region	13/08/08	Secretariat
WP/11	2.1	Air navigation seminars and workshops for 2009	15/08/08	Secretariat
WP/12	2.1	Updating of the global air navigation plan	12/08/08	Secretariat
WP/13	2.2	Review of the current status of air navigation deficiencies	15/08/08	Secretariat
WP/14	3.2	Regional Safety Oversight Developments	25/08/08	Secretariat
WP/15	3.1	Progress Report on ICAO Audit Activities: USOAP	26/08/08	Secretariat
WP/16	3.2	Establishment of the Regional Aviation Safety Group – Pan America	20/08/08	Secretariat
WP/17	4.1	ICAO Universal Security Audit Programme	25/08/08	Secretariat
WP/18	4.2	Regional AVSEC Activities	25/08/08	Secretariat

WORKING PAPERS				
Number	Agenda Item	Title	Date	Prepared and Presented by
WP/19	5	Technical cooperation project for the CAR Region (RLA/08/000)	27/08/08	Secretariat
WP/20	6	ICAO NACC Regional Office new website	22/08/08	Secretariat
WP/21	2.1	Results of the ITU world radiocommunication conference (2007) (WRC-2007) and initial position of ICAO for WRC-2011	19/08/08	Secretariat
WP/22	2.1	Aerodrome demand and capacity	19/08/08	Secretariat
WP/23	2.1	Relevant events in the air navigation field	19/08/08	Secretariat
WP/24	6	Organizational review of ICAO's Regional programme	25/08/08	Secretariat
WP/25	2.1	The Federal Aviation Administration, office of airports, implementation of safety management systems	19/08/08	United States of America
WP/26	2.1	West Atlantic Route System Plus (WATRS plus) route structure redesign and separation reduction project post-implementation review	19/08/08	United States of America
WP/27	2.1	Affectations in Oral Circuits Service through MEVA Networks between Havana and Miami ACCs	29/08/08	Cuba
WP/28	2.1	Experience of Cuba and COCESNA in the Activation of the NOTAM Contingency Plan	29/08/08	Cuba
INFORMATION PAPERS				
Number	Agenda Item	Title	Date	Prepared and Presented by
IP/01	--	General information	15-08/08	Secretariat
IP/02	--	List of Working and Information Papers	04/09/08	Secretariat
IP/03	2.1	Survey for using the AIP audit assistant (AAA) and application in the quality process	18/08/08	Secretariat
IP/04	2.1	Current status of the Federal Aviation administration telecommunications programmes	19/08/08	United States of America
IP/05	1	Review of NACC/DCA, GREPECAS, DGAC CAP, E/CAR/DCA, C/CAR/DCA and working group meetings	31/08/08	Secretariat
IP/06	6	Tentative Schedule – 2009 ICAO NACC Office Meetings, Seminars, Courses and Workshops	03/09/08	Secretariat
NI/07	2.1	Avance en la Implantación del Sistema de Gestión de la Seguridad Operacional (SMS) en los Servicios de Tránsito Aéreo proporcionados por COCESNA ( <i>Spanish only</i> )	01/08/08	COCESNA



INFORMATION PAPERS				
Number	Agenda Item	Title	Date	Prepared and Presented by
NI/08	2.1	Intercambio de Datos Radar ( <i>Spanish only</i> )	01/08/08	COCESNA
NI/09	2.1	Sistemas AIS/MET de COCESNA ( <i>Spanish only</i> )	01/08/08	COCESNA
NI/10	2.1	Sistema AMHS de COCESNA ( <i>Spanish only</i> )	01/08/08	COCESNA
NI/11	2.1	Sistema DATIS de COCESNA ( <i>Spanish only</i> )	01/08/08	COCESNA
NI/12	2.1	Implantación de Sistemas ATM/CNS en la República Dominicana ( <i>Spanish only</i> )	05/09/08	Dominican Republic
NI/13	3.2	La Seguridad Operacional en los Estados Miembros de COCESNA ( <i>Spanish only</i> )	01/09/08	COCESNA

**Agenda Item 1:                      Review of NACC/DCA, GREPECAS, DGAC CAP, E/CAR/DCA, C/CAR/DCA and Working Group Meetings**

1.1                      As a result of the review of outstanding conclusions from previous Director meetings, taking into account the agreements reached during this Meeting, the status of conclusions and updated proposals are detailed as follows:

***NACC/DCA/1 and NACC/DCA/2 Meeting Conclusions***

1.2                      The Meeting agreed that the following Conclusions remain **valid**: 2/12, 2/18 and 2/26 (**July 2009** was set as the deadline for these conclusions).

1.3                      The Meeting agreed that the following Conclusions are **completed**: 1/12, 2/1, 2/2, 2/3, 2/8, 2/9, 2/10, 2/11, 2/13, 2/15, 2/16, 2/17, 2/21, 2/29, 2/30 and 2/31.

1.4                      Likewise, the Meeting formulated comments on the following Conclusions that were considered as **superseded**.

<b>Field</b>	<b>NACC/DCA Conclusion</b>	<b>Superseded by:</b>
ATM	1/8	GREPECAS Conclusion 14/4
ATM	1/10	GREPECAS Conclusions 14/46 and 14/51
GEN	1/20	GREPECAS Conclusions 13/61 and 14/60
GEN	1/21	NACC/DCA/3 Conclusion 3/11
GEN	1/22	NACC/DCA/3 Conclusion 3/12
AVSEC	1/28	NACC/DCA/3 Conclusion 3/10
AVSEC	2/4	NACC/DCA/3 Conclusion 3/10
FS	2/5	GREPECAS Conclusion 14/60
FS	2/6	GREPECAS Conclusion 14/4
FS	2/7	GREPECAS Conclusion 14/4
ATM	2/14	GREPECAS Conclusion 14/46
ATM	2/19	NACC/DCA/3 Conclusion 3/3
ATM	2/20	GREPECAS Conclusion 14/4
MET	2/22	NACC/DCA/3 Conclusion 3/8
MET	2/23	NACC/DCA/3 Conclusion 3/8
AIS/MAP	2/24	NACC/DCA/3 Conclusion 3/9
AIS/MAP	2/25	NACC/DCA/3 Conclusion 3/8
GEN	2/27	NACC/DCA/3 Conclusion 3/11
GEN	2/28	GREPECAS Conclusions 13/61 and 14/60

1.5                      In **Appendix A** to this part of the Report, a detailed review and comments on these Conclusions is presented.

***E/CAR/DCA Meeting Conclusions***

1.6 The Meeting agreed that the following Conclusions remain **valid**: 20/02, 20/04, 20/10, 21/2, 21/4 f) and 21/5.

1.7 The Meeting agreed that the following Conclusions are **completed**: 20/11, 21/4 a)-e) and 21/7.

1.8 Likewise, the Meeting formulated comments on the following Conclusions considered as **superseded**.

Field	E/CAR/DCA Conclusion	Superseded by:
AVSEC	20/9	NACC/DCA/3 Conclusion 3/10
MET / TC	21/1	NACC/DCA/3 Conclusion 3/8
AIM	21/3	NACC/DCA/3 Conclusion 3/9
AVSEC	21/6	NACC/DCA/3 Conclusion 3/10

1.9 In **Appendix B** to this part of the Report, a detailed review and comments on these Conclusions is presented.

***C/CAR/DCA Meeting Conclusions***

1.10 The Meeting agreed that the following Conclusion is **valid**: 9/2.

1.11 Likewise, the Meeting formulated comments on the following Conclusions considered as **superseded**.

Field	C/CAR/DCA Conclusion	Superseded by:
GEN	9/1	GREPECAS Conclusions 13/61, 14/59 and 14/60
GEN	9/7	NACC/DCA/3 Conclusion 3/10

1.12 In **Appendix C** to this part of the Report, a detailed review and comments on these Conclusions is presented.

***CAP/DGAC Meeting Conclusions***

1.13 The Meeting agreed that the following Conclusions are **valid**: 92/2, 93/2, 93/6, 93/7, 93/8, 93/9, 93/10, 93/11, 93/12, 93/13 y 93/14.

1.14 Likewise, the Meeting formulated comments on the following Conclusions considered as **superseded**.

Field	CAP/DGAC Conclusion	Superseded by:
ATM	93/1	NACC/DCA/3 Conclusion 3/4
CNS	93/3	NACC/DCA/3 Conclusion 3/5
CNS	93/4	NACC/DCA/3 Conclusion 3/7
CNS	93/5	NACC/DCA/3 Conclusion 3/9

1.15 In **Appendix D** to this part of the Report, a detailed review and comments on these Conclusions is presented.

1.16 The Meeting took note of the status of GREPECAS valid conclusions presented by the Secretariat in IP/05.

## APPENDIX A

### REVIEW OF THE VALID CONCLUSIONS OF THE NACC/DCA/2 AND NACC/DCA/1 MEETINGS

AREA	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS/ TARGET DATE	REQUIRED ACTION
ATM	<b>CONCLUSION 1/8      ATS      QUALITY ASSURANCE PROGRAMME</b> That the States/Territories/ATS Service Providers of the CAR Region: a) based on the guidance material for ATS quality assurance programmes approved by the CAR/SAM Regional Planning and Implementation Group (GREPECAS), implement ATS quality assurance programmes at their ATS units not later than <b>December 2003</b> , designating the individual responsible who will also be the focal point and coordinator of the aforementioned programmes; b) inform the ICAO NACC Regional Office on the designation; and c) participate actively at all events that seek to disseminate, provide training in, and implement ATS quality assurance programmes.	States / Territories	Superseded by GREPECAS/14, Conclusion 14/4.	Superseded	Take note
ATM	<b>CONCLUSION 1/10      NATIONAL      RNAV/RNP IMPLEMENTATION PROGRAMMES FOR THE CAR REGION</b> That civil aviation administrations in the Caribbean (CAR) Region develop, as soon as possible, national RNAV route and RNP implementation programmes that are consistent with the CAR/SAM regional RNAV route and RNP implementation programmes, allowing the study on the impact of the implementation of these routes and their RNP values on the airspace and air traffic services under their responsibility permitting the implementation of these elements in an integrated, harmonious and timely fashion in the CAR Region.	States / Territories	Superseded by GREPECAS/ Conclusion 14/46 and Conclusion 14/51.	Superseded	Take note
ATM	<b>CONCLUSION 1/12      ENGLISH LANGUAGE IN ATC</b> That the Directors of Civil Aviation of the CAR Region support the initiatives carried out within ICAO by the Proficiency Requirements in Common English Study Group (PRICE SG) in relation to the proposals for amendments that will be made to Annexes 1, 6, 10 and 11.	States/ Territories	Two seminars on Language Proficiency were held in January and February 2008, in which a 3 -year implementation plan was prepared for the Annex 1 procedures.	Completed	Take note

AREA	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS/ TARGET DATE	REQUIRED ACTION
GEN	<p><b>CONCLUSION 1/20 PRIORITY SOLUTION FOR AIR NAVIGATION DEFICIENCIES</b></p> <p>That States/Territories/International Organizations, with a view to resolving first and foremost their respective air navigation deficiencies, especially those that might have a negative effect on safety aspects presented in Appendix D,</p> <p>a) urgently develop and implement an Action Plan for each deficiency complying with the requirements established in the Air Navigation Plan FASID and the SARPs, specifying the corrective measures, the completion date, as well as assigning the necessary resources; and</p> <p>b) inform ICAO, through the NACC Office, on the Action Plan referred to in item a) above, no later than 31 December 2002, including any difficulties encountered.</p>	States/ Territories	Superseded by GREPECAS Conclusion 13/61 and 14/60.	Superseded	Take note

AREA	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS/ TARGET DATE	REQUIRED ACTION
GEN	<p><b>CONCLUSION 1/21 HUMAN RESOURCES PLANNING AND TRAINING</b></p> <p>That those States/Territories/International Organizations that do not have a human resources planning process for air navigation services, safety oversight and civil aviation security, consider, on an urgent basis, the need to take the following measures:</p> <p>a) appoint and train personnel in human resources planning within the units responsible for the different aeronautical services;</p> <p>b) develop a human resource plan for the next five years, containing a civil aviation personnel training programme including the implementation and operation of the new CNS/ATM Systems, safety oversight and civil aviation security;</p> <p>c) emphasize to the GREPECAS on the need to follow-up Decision 10/4 to analyze the “impact of automation on human resources” in accordance with the Guidance Manual for the Training of Human Resources on CNS/ATM Systems;</p> <p>d) consider the importance of attending activities sponsored by ICAO (courses, seminars, workshops, etc.) taking into account that such activities are aimed at complementing and updating civil aviation personnel training;</p> <p>e) request the ICAO NACC Regional Office to distribute the form, attached as the Appendix to this part of the Report, to be filled out by the Administrations in order to determine the need for human resources and training in the different aeronautical fields in the CAR States. This form should be sent to the NACC Office, no later than 31 January 2003; and</p> <p>f) use the information obtained in the aforementioned form by Aeronautical Administrations, GREPECAS and by the ICAO NACC Regional Office for coordination with Civil Aviation Training Centres (CATCs) of the CAR Region for human resources planning and training purposes.</p>	States/ Territories	Superseded by Conclusion NACC/DCA/3/11.	Superseded	Take note

AREA	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS/ TARGET DATE	REQUIRED ACTION
GEN	<b>CONCLUSION 1/22 TRAINING STANDARDIZATION – TRAINAIR METHODOLOGY IN THE CAR REGION</b>  a) That, for the development of human resources, States/Territories/International Organizations in the CAR Region, consider the following actions:  b) take the necessary measures to standardize civil aviation training, in accordance with ICAO guidelines taking into consideration international co-operation;  c) that those training centers who have not yet joined the TRAINAIR Programme, do so; and  d) that in the spirit of international co-operation, development of bilateral/multilateral projects to facilitate co-operation and technical assistance for adequately developing human resource planning and training should be considered.	States/ Territories/ International Organizations	Superseded by Conclusion NACC/DCA/3/12.	Superseded/	Take note
AVSEC	<b>CONCLUSION 1/28 AVIATION SECURITY</b> That States and Territories: a) commit towards full implementation of the multilateral conventions on aviation security and the ICAO Standards and Recommended Practices (SARPs) and Procedures for Air Navigation Services (PANS) as well as ICAO Assembly Resolutions and Council Decisions relating to aviation security and safety; b) participate actively in implementation of the ICAO <i>Aviation Security Plan of Action</i> , including the training and audit processes and necessary follow-up; c) endorse the GREPECAS Aviation Security Committee establishment, draft Terms of Reference and draft conclusions and decisions of its first meeting; and d) commit to active support and cooperation in regional aviation security activities.	States/ Territories	Superseded by Conclusion NACC/DCA/3/10.	Superseded	Take note



AREA	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS/ TARGET DATE	REQUIRED ACTION
GEN	<p><b>CONCLUSION 2/1 SUPPORT FOR THE EXECUTION OF RECOMMENDATIONS / CONCLUSIONS OF GLOBAL, REGIONAL AND SUB-REGIONAL MEETINGS</b></p> <p>That NACC States/Territories/International Organizations, with a view to continuing the development of air navigation systems meeting civil aviation needs and increasing the efficiency and safety of air navigation:</p> <p>a) optimize the support and attention to the implementation of Recommendations/ Conclusions of the Global, Regional and Sub-regional Meetings regarding AGA, AIS/MAP, ATM, CNS, MET and MCI/SAR fields;</p> <p>b) consider the issues included in the Appendix to this part of the report as the main working guidelines; and</p> <p>c) establish the appropriate coordination and bilateral or multilateral cooperation agreements for the purposes expressed in the items above.</p>	States/ Territories/ International Organizations	E/CAR: Completed C/CAR: Completed CAP: Completed	Completed	Take note
AIS	<p><b>CONCLUSION 2/2 PROPOSAL FOR THE EXECUTION OF A WGS-84 SPECIAL IMPLEMENTATION PROJECT (SIP) FOR THE CAR REGION</b></p> <p>That the ICAO NACC Office submits to the ICAO Council a proposal for the development of a WGS-84 SIP in the CAR Region.</p>	ICAO NACC Office	E/CAR: Completed C/CAR: Completed CAP: Completed A SIP was provided on aeronautical charts-electronic data and e-TOD in Dominican Republic in November 2007.	Completed	Take note
FS	<p><b>CONCLUSION 2/3 PAN AMERICAN AVIATION SAFETY TEAM (PAAST)</b></p> <p>That States, Territories and International Organizations:</p> <p>a) encourage safety personnel, air carrier, general aviation, and military pilots, airport operators, and air traffic controllers to actively participate in the PAAST programme; and</p> <p>b) consider incorporating safety programmes, such as ALAR and RIPP, as regulatory elements for pilot and controller licensing.</p>	States/ Territories/ International Organizations	With the establishment of the RASG-PA, this conclusion is considered as completed.	Completed	Take note
AVSEC/ AIS	<p><b>CONCLUSION 2/4 WHTI/GEASA ACTIVITIES</b></p> <p>That States/Territories/International Organizations:</p> <p>a) consider the GEASA group as an important means to provide support for regional technical cooperation; and</p> <p>b) participate in GEASA activities as deemed appropriate.</p>	States/ Territories/ International/ Organizations	Superseded by Conclusion NACC/DCA/3/10.	Superseded	Take note

AREA	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS/ TARGET DATE	REQUIRED ACTION
FS	<b>CONCLUSION 2/5 UNIFIED STRATEGY TO RESOLVE SAFETY-RELATED DEFICIENCIES</b> That the Directors of Civil Aviation of States and Territories as well as International Organizations from the CAR Region agree to: a) fully participate in the unified strategy implementation plan for the resolution of safety-related deficiencies, and b) provide, as requested, assistance to States outside of the CAR Region.	States/ Territories/ International/ Organizations	Superseded by GREPECAS Conclusion 14/60.	Superseded	Take note
FS	<b>CONCLUSION 2/6 IASDEX PROGRAMME</b> That States/Territories recognize the importance of safety data sharing initiatives such as the IASDEX programme, and are encouraged to express interest to the FAA in possible future participation in this specific initiative.	States/ Territories	Superseded by GREPECAS Conclusion 14/4.	Superseded	Take note
FS	<b>CONCLUSION 2/7 ENHANCEMENT OF THE AVIATION SAFETY CULTURE</b> The Directors from the NAM/CAR States, Territories and International Organizations, in agreement of the necessity and importance of a safety culture, resolved to: a) comply with ICAO safety requirements as elements for a safety culture, and b) commit to taking other appropriate measures for the enhancement of the aviation safety culture in their respective organizations.	States/ Territories/ International/ Organizations	Superseded by GREPECAS Conclusion 14/4.	Superseded	Take note
FS	<b>CONCLUSION 2/8 COMPLIANCE WITH ICAO LANGUAGE PROFICIENCY REQUIREMENTS</b> That States/Territories and International Organizations of the NAM/CAR Regions begin the preparatory work in order to comply with ICAO language proficiency requirements by <b>5 March 2008</b> , preventing the occurrence of ATS incidents and accidents.	States/ Territories/ International Organizations	Idem: NACC/DCA/Conclusion 1/12. Two seminars on Language Proficiency were held in January and February 2008, respectively, in which a 3 -year implementation plan was prepared for the Annex 1 procedures.	Completed	Take note

AREA	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS/ TARGET DATE	REQUIRED ACTION
<b>CNS/ ATM</b>	<p><b>CONCLUSION 2/9 COORDINATED DEVELOPMENT AND IMPLEMENTATION OF THE CNS/ATM SYSTEMS IN THE NAM/CAR REGIONS</b></p> <p>That aimed at continuing a coordinated development and implementation of the CNS/ATM systems in the NAM/CAR Regions, States/Territories/International Organizations should:</p> <p>a) follow-up the CNS/ATM Matrix presented in Appendix A to this part of the Report;</p> <p>b) develop planning implementation of these CNS systems taking into account, among other aspects, the Matrix referred in paragraph a) above;</p> <p>c) with the ICAO NACC Office support, adjust the mentioned CNS/ATM Matrix, taking into account the second amendment to the Global Air Navigation Plan for the CNS/ATM systems expected to be approved in 2006; and</p> <p>d) through the NACC regional/sub-regional meetings mechanism periodically update the information of the CNS/ATM Matrix on the status of development of the CNS/ATM systems in these Regions.</p>	States/ Territories/ International/ Organizations	The information contained in the mentioned CNS/ATM Matrix has been considered in the NAM/CAR Regional Implementation Plan.	Completed	Take note
<b>CNS/ ATM</b>	<p><b>CONCLUSION 2/10 APPLICATION OF NAM/CAR REGIONAL TECHNOLOGICAL SOLUTIONS FOR AERONAUTICAL SERVICES</b></p> <p>That States/Territories/International Organizations of the NAM/CAR Regions aimed at facilitating and obtaining major benefits in the implementation of the CNS/ATM systems and other aeronautical services:</p> <p>a) look for and implement regional technological solutions that facilitates the integration, harmonization and intra/inter regional cooperation; and</p> <p>b) consider the agreement of regional technical cooperation projects for applying solutions mentioned in paragraph a) above.</p>	States/ Territories/ International/ Organizations	States/Territories/International Organizations took note of this guidance and will be considered in the implementation of the Aeronautical Services.	Completed	Take note

AREA	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS/ TARGET DATE	REQUIRED ACTION
<b>CNS/ ATM</b>	<p><b>CONCLUSION 2/11 INTERFACE AND OPERATIONAL INTEGRATION OF ATM AUTOMATION SYSTEMS OF THE NAM/CAR REGIONS</b></p> <p>That the States/Territories/International Organizations:</p> <p>a) define the ATM automation requirements, in accordance with their operational and technical needs;</p> <p>b) base on the Regional Strategy for the implementation of ADS-B presented as Appendix C to this part of the Report;</p> <p>c) examine other regional requirements for the integration of ATM automation systems;</p> <p>d) establish bilateral or multilateral agreements for the integration of ATM automation systems, with a view to a regional ATM automation in accordance with ICAO guidelines;</p> <p>e) designate a point of contact to participate in the work for the integration of ATM automation systems; and</p> <p>f) coordinate their action plans with the ICAO NACC Regional Office in order to ensure a regional integration of ATM automation systems, in an integral, harmonious, interoperable manner, coherent with the Regional Air Navigation Plan (ANP) of the CAR/SAM Regions.</p>	States/ Territories/ International/ Organizations	This conclusion and its actions are considered under the NAM/CAR Implementation Plan.	Completed	Take note.
<b>CNS</b>	<p><b>CONCLUSION 2/12 DEVELOPMENT OF A MODERNIZATION AND IMPLEMENTATION PLAN OF D-ATIS EQUIPMENT IN THE INTERNATIONAL AIRPORTS OF THE CAR REGION</b></p> <p>That, taking into account the experiences of COCESNA in developing a new D-ATIS equipment, States, Territories of the CAR Region and COCESNA examine and consider adopting in the international airports an equipment modernization plan and implementation of ATIS services, in accordance with ATM requirements.</p>	States/ Territories / COCESNA	States/ Territories and COCESNA are invited to provide information in this respect for consideration as a task force issue through the NACC/WG. It is expected that this task will be incorporated into the NACC/WG.	Valid/ July 2009	Follow-up

AREA	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS/ TARGET DATE	REQUIRED ACTION
CNS	<p><b>CONCLUSION 2/13 SUPPORT OF STATES IN THE NAM/CAR REGIONS TO ICAO'S POSITION FOR THE ITU WRC-2007</b></p> <p>That the Directors of Civil Aviation of the NAM/CAR Regions, if not already done, adopt appropriate measures to support ICAO's position for the ITU WRC-2007:</p> <p>a) designate a focal point or a contact person with the respective national authority of radio-frequency spectrum management, in order to incorporate ICAO's position which is presented as the appendix to State Letter Ref.: E 3/5-05/85, dated 12 August 2005, when developing the State's position for the ITU WRC-2007, as well as with ICAO for the coordination of matters related with the WRC-2007;</p> <p>b) participate in an active manner in the preparatory work for the WRC-2007 in the CITEL meetings of the Organization of American States (OAS);</p> <p>c) participate in an active manner, whenever possible, in meetings of ICAO working groups and other activities convened by ICAO regarding the position for the WRC-2007; and</p> <p>d) ensure that, to the extent possible, representatives from civil aviation administrations be included in the national delegations to the conference ensuring the support of ICAO's position for the ITU WRC-2007 in the civil aviation-related matters.</p>	NAM/CAR DGCAs	The WRC-2007 meeting results are provided under Agenda Item 3.1, Air Navigation Matters, as well as information on the ICAO position for ITU WRC 2011.	Completed	Take note
ATM	<p><b>CONCLUSION 2/14 IMPLEMENTATION OF PERFORMANCE-BASED NAVIGATION</b></p> <p>That States/Territories and International Organizations take into account the information included in Appendix E to this part of the report in their future implementation work of Performance-Based Navigation in their airspace.</p>	States/ Territories/ International/ Organizations	Superseded by GREPECAS, Conclusion 14/46.	Superseded	Take note
ATM	<p><b>CONCLUSION 2/17 SUPPORT FOR THE ATM WORK IN THE NAM/CAR REGIONS</b></p> <p>That Civil Aviation Administrations of the NAM/CAR Regions continue supporting the work of the Working Groups for the regional development and implementation of the ATM elements applicable to the NAM/CAR Regions.</p>	CAAs	ICAO NACC is reorganizing regional working groups in accordance with GREPECAS/14 Conclusion 14/51.	Completed	Take note

AREA	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS/ TARGET DATE	REQUIRED ACTION
ATM	<p><b>CONCLUSION 2/18 IMPLEMENTATION OF AIR TRAFFIC FLOW MANAGEMENT (ATFM) IN THE CENTRAL AMERICAN FIR</b></p> <p>That, considering the important operational and financial benefits for the ATM community, derived from the implementation of an efficient and safe Air Traffic Flow Management (ATFM) system, the States in the Central American FIR and COCESNA:</p> <p>a) initiate, under the coordination of COCESNA, the actions regarding the implementation of a sub-regional ATFM system for the Central American FIR, considering to that end the guidelines of ICAO, as well as the tasks and implementation programme to be agreed upon in the CAR/SAM Regions;</p> <p>b) continue the coordination with States, ICAO NACC Regional Office and other International Organizations, air operators, other ATFM Units and related bodies within a cooperative framework, in order to establish an efficient, safe and highly beneficial ATFM system; and</p> <p>c) present to the NACC/DCA/3 Meeting, through COCESNA, a report on the status of the progress of this project.</p>	States/ COCESNA	<p>States of Central America and COCESNA informed on their progress with ATFM implementation through the NACC/WG mechanism.</p> <p>This task will be included into the NACC/WG work programme.</p>	Valid July 2009	Follow-up
ATM	<p><b>CONCLUSION 2/19 IMPLEMENTATION OF THE ATFM SYSTEM IN THE NAM/CAR REGIONS</b></p> <p>That the States/Territories/International Organizations initiate the corresponding activities to:</p> <p>a) apply the NAM/CAR joint strategy for ATFM development presented in Appendix H to this part of the Report through:</p> <p>i) the establishment of a CAR regional ATFM system;</p> <p>ii) the harmonized establishment of a NAM/CAR ATFM interregional system; and</p> <p>b) coordinate their implementation activities with the ICAO NACC Regional Office to achieve a regional, harmonious and interoperable ATFM implementation.</p>	States/ Territories/ International/ Organizations	Superseded by Conclusion NACC/DCA/3/3. These activities will be included in the Implementation Plan.	Superseded	Take note

AREA	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS/ TARGET DATE	REQUIRED ACTION
ATM	<b>CONCLUSION 2/20 IMPLEMENTATION OF A SAFETY MANAGEMENT SYSTEM</b> That the States/Territories/International Organizations of the NAM/CAR Regions that have not yet done so: a) develop an action plan to implement by 10 November 2006 a safety management system through systemic and appropriate programmes; b) establish the acceptable levels and objectives with regard to safety, within airspaces and aerodromes under their jurisdiction; and c) participate in the activities carried out by ICAO in order to foster the implementation of a regional safety management system.	States/ Territories/ International/ Organizations	Superseded by GREPECAS, Conclusion 14/4.	Superseded	Take note
ATM	<b>CONCLUSION 2/21 IMPLEMENTATION OF PROGRAMMES FOR THE EVALUATION OF ATM PERFORMANCE</b> That States/Territories of the CAR Region and COCESNA implement by <b>30 November 2006</b> an ATM performance assessment programme, in accordance with ICAO guidelines (Annex 11, Doc 4444 and Doc 9854.	CAR States / Territories COCESNA	ICAO organized a world-wide symposium on air navigation system performance in March 2007.	Completed	Take note
MET	<b>CONCLUSION 2/22 COORDINATION OF AGREEMENTS BETWEEN CIVIL AVIATION ADMINISTRATIONS AND MET AUTHORITIES OF CAR STATES / TERRITORIES / INTERNATIONAL ORGANIZATIONS</b> That, aimed at improving the coordination, cooperation and provision of aeronautical MET services, States/Territories/International Organizations of the CAR Region, that have not yet done so, coordinate agreements between civil aviation Administrations and meteorological authorities: a) clearly identifying their respective functions and the coordination between them; and b) that the agreement states the mechanism to ensure the participation of MET personnel in meetings, seminars and workshops organized by ICAO in coordination with the WMO, according to the Modus vivendi between ICAO and the WMO (Doc 7475).	States/ Territories/ International/ Organizations	Superseded by Conclusion NACC/DCA/3/8.	Superseded	Take note

AREA	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS/ TARGET DATE	REQUIRED ACTION
<b>MET</b>	<p><b>CONCLUSION 2/23 CO-OPERATION FOR SIGMET INFORMATION ISSUANCE</b></p> <p>That, with the view of improving the issuance of SIGMET information:</p> <p>a) civil aviation administrations and meteorological authorities of the States/Territories are urged to jointly deal with information issues related with the SIGMET issuance, through a Letter of Agreement among organizations/agencies involved in the re-collection and broadcast of SIGMET taking into account that the procedures used should be reviewed and arranged in accordance with the ICAO SARPs and guidance material; and</p> <p>b) airlines whose aircraft fly through or near meteorological phenomena that could affect flight safety be urged by IATA to provide timely and accurate special pilot reports.</p>	States/ Territories	Superseded by Conclusion NACC/DCA/3/8.	Superseded	Take note
<b>AIS/ MAP</b>	<p><b>CONCLUSION 2/24 STUDY OF THE AERONAUTICAL INFORMATION MANAGEMENT (AIM) CONCEPT</b></p> <p>That States/Territories/International Organizations:</p> <p>a) initiate the corresponding studies for the planning and development of the AIM concept in the AIS/MAP services of the NAM/CAR Regions and, to that end, be included as a task of the work programme of the existing working groups, taking into account, as reference, the Air Navigation Global Plan for the CNS/ATM Systems and the Recommendations of the 11<sup>th</sup> Air Navigation Conference, and</p> <p>b) take the necessary measures and initiate the corresponding actions for the application of the AIM concept in the respective AIS/MAP services of the NAM/CAR Regions.</p>	States/ Territories/ International/ Organizations	Superseded by Conclusion NACC/DCA/3/9.	Superseded	Take note



AREA	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS/ TARGET DATE	REQUIRED ACTION
<b>AIS/ MAP</b>	<p><b>CONCLUSION 2/25 PAIGH/ICAO REGIONAL PROJECT FOR THE PRODUCTION OF AERONAUTICAL CHARTS</b></p> <p>That, taking into consideration the difficulties experienced in general in the CAR Region regarding the production of Aeronautical Charts required in Annex 4, and GEASA initiative to sponsor the preliminary studies to develop a regional cooperation project, CAR/SAM States/Territories/International Organizations:</p> <p>a) consider their integration in the production of aeronautical charts project, that is proposed within the ICAO and PAIGH technical cooperation frame;</p> <p>b) consider the regional Aeronautical Information Management (AIM) within the specifications of the project; and</p> <p>c) support the work of ICAO/PAIGH Aeronautical Charts Working Group, which functions under the GREPECAS mechanism, in order to develop a project under the Terms of Reference and Work Programme that are shown in Appendix M to this part of the report; and</p> <p>d) request support from the IFFAS.</p>	States/ Territories/ International/ Organizations	Superseded by Conclusion NACC/DCA/3/8.	Superseded	Take note
<b>AIS/ MAP</b>	<p><b>CONCLUSION 2/26 ADOPTION OF GUIDANCE MATERIAL FOR THE NOTAM CONTINGENCY PLAN</b></p> <p>That States and Territories of the NAM/CAR Regions and COCESNA consider the contents of the NOTAM Contingency Plan for Havana's FIR as guidance material for the establishment of operational agreements related to NOTAM contingencies.</p>	States/ Territories/ International/ Organizations	Follow-up will be incorporated into the NACC/WG tasks.	Valid July 2009	Follow-up

AREA	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS/ TARGET DATE	REQUIRED ACTION
HRT	<b>CONCLUSION 2/27 HUMAN RESOURCES AND TRAINING PLANNING</b> That those States/Territories/International Organizations that do not have a human resources planning process at the different aeronautical services they provide, consider as an urgent matter the need to take the following measures: a) designate and prepare personnel on human resources planning within the responsible units of the different aeronautical services; b) develop a plan on human resources aimed at covering the needs for the next 5 years, including a training programme for the civil aviation staff involved in the implementation and operation of the new CNS/ATM systems, safety oversight and civil aviation security, and establish 31 March 2006 as deadline to finalize the plan; c) submit to the ICAO NACC Regional Office by 30 January 2006, the form shown in the Appendix O to this part of the report, duly completed by the CAAs.	States/ Territories/ International/ Organizations	Superseded by Conclusion NACC/DCA/3/11.	Superseded	Take note
GEN	<b>CONCLUSION 2/28 PRIORITIZE SOLUTION TO EXISTING AIR NAVIGATION DEFICIENCIES</b> That States/Territories/International Organizations that have not yet done so, with the view to resolve air navigation deficiencies in the NAM/CAR Regions: a) use the GANDD database and provide information to keep the database updated; b) prepare and inform the ICAO NACC Office of their respective action plans for the solution of deficiencies, to be received before 30 December 2005; and c) prioritize and provide the necessary and available resources to resolve as soon as possible the deficiencies.	States/ Territories/ International/ Organizations	Superseded by GREPECAS Conclusion 13/61 and 14/60.	Superseded	Take note
AVSEC	<b>CONCLUSION 2/29 COMPLIANCE OF AVSEC PROGRAMMES</b> The Directors of Civil Aviation agree to review and update national policies to ensure effective oversight of Annex 17, Standards 3.1.1, National Civil Aviation Security Programme, 3.4.4, Quality Control, 3.4.5, Survey, Inspection and Test, 3.1.7 National Training Programme, and 3.3.1 Aircraft Operators Security Programme.	States Territories CAR Region	This issue is covered by USAP.	Completed	Take note

AREA	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS/ TARGET DATE	REQUIRED ACTION
GEN	<b>CONCLUSION 2/30 ECONOMIC CONTRIBUTION OF CIVIL AVIATION</b> That, the Directors of Civil Aviation of the North America, Central America and the Caribbean, recognizing the important impact of civil aviation on their economies, resolve to: a) use ICAO Circular 292, Economic Contribution of Civil Aviation, in support of efforts to define the contribution of civil aviation; and b) use the results in obtaining financing for important civil aviation projects.	NACC DGACs	E/CAR: Completed  C/CAR: Completed  CAP: Completed	Completed	Take note
GEN	<b>CONCLUSION 2/31 ACTIVITIES OF THE TECHNICAL CO-OPERATION PROJECTS IN THE NAM/CAR REGIONS</b> That States/Territories and International Organizations of the NAM and CAR Regions: a) participate and contribute, if not already done so, to the budget of regional projects in their area of responsibility; and b) analyze the importance of using ICAO technical co-operation national projects as a governmental tool to expand and facilitate the achievement of management results.	States/ Territories/ International/ Organizations	E/CAR: Completed  C/CAR: Completed  CAP: Completed	Completed	Take note

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**APPENDIX B**  
**REVIEW OF THE VALID CONCLUSIONS OF THE MEETINGS OF DIRECTORS OF CIVIL AVIATION OF THE EASTERN CARIBBEAN**

AREA	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS /TARGET DATE	REQUIRED ACTION
ATM	<b>CONCLUSION 20/02 COMMON PROCEDURE FOR RPL MANAGEMENT IN THE E/CAR</b> That E/CAR States/Territories/International Organizations accepting the use of RPLs for traffic departing from aerodromes under its jurisdiction: a) implement a common procedure in order to ensure the appropriate dissemination of the RPL data; b) publish relevant procedures in the E/CAR AIPs based on the following principles: i. users shall transmit their list of RPLs to each departing aerodrome; ii. each departing aerodrome AIS office that is accepting the use of RPLs for departing traffic, transmit daily flight plan data to all concerned ATC facilities according to ICAO standards; and, c) the 31 <sup>st</sup> E/CAR/WG follow-up on the present procedure.	E/CAR States/ Territories/ International Organizations	.	Valid/ 31 <sup>st</sup> E/CAR/WG	Follow-up
CNS	<b>CONCLUSION 20/04 PROVISION OF POWER ENERGY AND BACKUP GENERATORS TO EACH NAVIGATION AID</b> That States/Territories consider the provision of sufficient energy and backup generators for extended power outages, based upon the individual commercial demands of each navigation aid in the E/CAR.	E/CAR States/ Territories	This conclusion is to be considered by the E/CAR/WG	Valid/ 31 st E/CAR/WG	Follow-up
AVSEC	<b>CONCLUSION 20/09 FACILITATION POINTS OF CONTACT</b> That each E/CAR State/Territory identify to the ICAO NACC Regional Office their National Facilitation Point-of-Contact in the format included in <b>Appendix A</b> to this part of the Report by <b>31 January 2007</b> .	E/CAR States/ Territories	Superseded by Conclusion NACC/DCA/3/10.	Superseded	Take note
AVSEC	<b>CONCLUSION 20/10 PHASE II ICAO/CANADA AWARENESS TRAINING PROGRAMME</b> That the E/CAR States/Territories support the Phase II ICAO/Canada Awareness Training Programme in hosting workshops, courses, and seminars and having their AVSEC specialists participate in these events.	E/CAR States/ Territories		Valid/ 22nd E/CAR/DCA Meeting	Follow-up

AREA	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS /TARGET DATE	REQUIRED ACTION
AVSEC	<b>CONCLUSION 20/11 IMPLEMENTATION STATUS OF AVSEC/COMM CONCLUSIONS</b> That all E/CAR States/Territories complete the AVSEC survey included in <b>Appendix B</b> to this part of the Report to validate the implementation status of past GREPECAS AVSEC/COMM Conclusions related to the implementation of Annex 17 SARPs by <b>31 January 2007</b> .	E/CAR States/Territories		Completed	Take note
MET TC	<b>CONCLUSION 21/1 IMPROVEMENTS IN EASTERN CARIBBEAN MET SERVICES</b> That ICAO: a) take appropriate actions to develop a regional Technical Cooperation Project to improve MET services of the States/Territories in the Eastern Caribbean covering the following issues: <ul style="list-style-type: none"> <li>• Training programmes for MET personnel</li> <li>• OPMET information exchange in E/CAR States</li> <li>• Follow-up on the implementation of the recommendations formulated in the MET SIP for the CAR Region</li> <li>• Improvements in the operational coordination and the provision of MET services</li> <li>• Participation of MET personnel in ICAO meetings</li> <li>• Establish Agreements between Civil Aviation Administrations and MET Authorities of CAR States / Territories / International Organizations</li> </ul> b) submit the regional Technical Cooperation Project to the NACC/DCA/3 Meeting for review and approval.	ICAO	Superseded by Conclusion NACC/DCA/3/8.	Superseded	Take note
ATM	<b>CONCLUSION 21/2 COMMON TRANSITION ALTITUDE FOR THE E/CAR REGION</b> That the E/CAR ATM Committee: a) develop and send to the E/CAR States/Territories for comments, not later than <b>30 November 2008</b> , a proposal for a common transition altitude among the Piarco FIR; and b) present their recommendations to the Twenty-Second Meeting of Directors of Civil Aviation of the Eastern Caribbean (E/CAR/DCAS/22).	E/CAR ATM Committee	Task to be considered by E/CAR/DCA/22 Meeting.	Valid	Follow-up

AREA	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS /TARGET DATE	REQUIRED ACTION
AIM	<p><b>CONCLUSION 21/3 REGIONAL TECHNICAL COOPERATION PROJECT FOR THE IMPLEMENTATION OF AERONAUTICAL INFORMATION MANAGEMENT (AIM)</b></p> <p>That ICAO:</p> <p>a) take the necessary actions to develop a Regional Technical Cooperation Project for the implementation of Aeronautical Information Services (AIS), taking into account Aeronautical Information Management (AIM), the global ATM operational concept, the corresponding CNS technology support, the necessary AIS, AGA and MET services, as well as the training of personnel in the topics involved; and</p> <p>b) present the aforementioned project to the NACC/DCA/3 Meeting scheduled for 2008.</p>	ICAO	Superseded by Conclusion NACC/DCA/3/9.	Superseded	Take note
SAR	<p><b>CONCLUSION 21/4 ACTIONS TO IMPROVE THE SAR SYSTEM IN THE E/CAR</b></p> <p>That,</p> <p>a) ICAO NACC Office will provide the Eastern Caribbean States and Territories by 14 March 2008, a full description of each fundamental element listed on the State SAR Matrix;</p> <p>b) ICAO NACC Office send an official letter to CDERA and PAHO asking for documentation for the establishment of national mass casualty plans in order to be available to States at the next SAR Meeting scheduled for April 2008;</p> <p>c) United States will extend an invitation to the Trinidad and Tobago representative of the E/CAR SAR Committee to participate in the next Caribbean SAR Workshop tentatively scheduled for June 2008 in Miami, Florida, or Dominican Republic;</p> <p>d) the Rapporteur of the E/CAR SAR Committee coordinate with the members of the E/CAR SAR Committee, including the United States, the Netherlands Antilles and the United Kingdom, for their participation in the abovementioned Caribbean SAR Workshop;</p> <p>e) Eastern Caribbean States and Territories, use the State SAR Matrix and full description of the fundamental elements to gauge the capacity of individual State SAR systems; and</p> <p>f) present the status of the SAR System to the 22<sup>nd</sup> E/CAR DCA Meeting.</p>	ICAO		a), b), c), d) and e): Completed f)Valid/ <sup>d</sup> E/CAR DCA/22 Meeting	Follow-up

AREA	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS /TARGET DATE	REQUIRED ACTION
FS	<p><b>CONCLUSION 21/5 EFFECTIVE SAFETY REPORTING CONTEXT</b></p> <p>That States/Territories of the Eastern Caribbean, for an effective safety reporting environment in the prevention of aviation related accidents adopt the following definition:</p> <p><i><b>“An Effective Safety Reporting Context is one in which front line operators or others are not punished for actions, omissions or decisions taken by them that are commensurate with their experience and training, but where gross negligence, willful violations and destructive acts are not tolerated.”</b></i></p>	E/CAR States/ Territories	<p>Protecting safety information is not intended to interfere with the proper administration of justice in States.</p> <p>The objective is to prevent the inappropriate use of information collected solely for the purpose of improving aviation safety.</p>	Valid/ E/CAR/DCA/22 Meeting	Follow-up
AVSEC	<p><b>CONCLUSION 21/6 ENHANCEMENT OF THE INTERNATIONAL CIVIL AVIATION SECURITY</b></p> <p>The E/CAR States/Territories are urged to:</p> <p>a) continue supporting USAP and ensuring the implementation of their corrective action plans regarding compliance with Annex 17 SARPs;</p> <p>b) provide qualified AVSEC Specialists in the form of Short-Term Experts to contribute to the AVSEC Action Plan through the ICAO Training Schedule for 2008;</p> <p>c) participate in the different courses and workshops on aviation security screener certification organized by ICAO at different States and ASTCs of the CAR/SAM Regions;</p> <p>d) provide ICAO with up-to-date information on their AVSEC and FAL points-of-contact (if they have not already done so);</p> <p>e) implement the recommended guidelines on security controls for screening liquids, gels and aerosols; and</p> <p>f) provide ICAO with timely information on acts of unlawful interference that have occurred within their territories.</p>	E/CAR States/ Territories	Superseded by Conclusion NACC/DCA/3/10.	Superseded	Take note

AREA	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS /TARGET DATE	REQUIRED ACTION
GEN	<p><b>CONCLUSION 21/7 ORGANIZATION AND HOLDING OF E/CAR/WG MEETINGS</b></p> <p>That,</p> <p>a) ICAO:</p> <p>i) develop a rotational list for the E/CAR Working Group Meetings;</p> <p>ii) develop a rotational list for the NACC Working Group Meetings; and,</p> <p>b) the E/CAR States:</p> <p>i) fund expenses for the participation of ICAO NACC Officers at the convened E/CAR/WG Meeting; and</p> <p>ii) support the participation of their specialists in the E/CAR/WG.</p>	ICAO E/CAR States/ Territories		Completed	Take note

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# APPENDIX C

## STATUS OF OUTSTANDING CONCLUSIONS OF THE DIRECTORS OF CIVIL AVIATION OF THE CENTRAL CARIBBEAN MEETINGS

FIELD	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS/ TARGET DATE	REQUIRED ACTION
GEN	<p><b>CONCLUSION 9/1 SOLUTION OF DEFICIENCIES AND LAST RESORT ACTION PREPARATION</b></p> <p>That C/CAR States/Territories that have not yet done so, carry out urgent action to:</p> <p>a) designate a national coordinator to update the GREPECAS Air Navigation Deficiencies Database (GANDD);</p> <p>b) prepare as soon as possible their respective action plans for resolving deficiencies using the form presented in Appendix H to this part of the Report;</p> <p>c) submit their action plans mentioned in item a) above to the ICAO Regional Office;</p> <p>d) resolve "U" deficiencies before 31 December 2007, in accordance with GREPECAS Conclusion 13/92; and</p> <p>e) study and suggest mitigation or alternative solutions as last resort action.</p>	C/CAR States/Territories	Superseded by GREPECAS Conclusions 13/61, 14/59 and 14/60.	Superseded	Take note
AGA	<p><b>CONCLUSION 9/2 FOLLOW-UP AND PRIORISED ATTENTION TO AGA/AOP ISSUES</b></p> <p>That, taking into account the importance of AGA/AOP issues on safety, the numerous existing deficiencies in this field and their negative impact on the results of the USOAP audits, the C/CAR States/Territories:</p> <p>a) follow-up on the development of AGA/AOP issues presented in Appendix I to this part of the Report;</p> <p>b) prioritise the implementation of action plans for AGA/AOP deficiencies; and</p> <p>c) adopt the regulations and other relevant measures in order to improve AGA/AOP safety.</p>	C/CAR States/Territories	<p>A Seminar/Workshop on Emergency Plans and Emergency Operations Centres will be held from 29 September to 3 October 2008 in Tortola, British Virgin Islands.</p> <p>The Sixth International Conference on Bird Hazard will be held from 24-28 November 2008 in Brasilia, Brazil.</p> <p>Will be incorporated as NACC/WG task.</p>	Valid/ July 2009	Take note

FIELD	CONCLUSION	ACTION FOR	COMMENTS AND FOLLOW-UP	STATUS/ TARGET DATE	REQUIRED ACTION
AVSEC	<p><b>CONCLUSION 9/7 SUPPORT FOR THE IMPLEMENTATION OF THE ICAO UNIVERSAL SECURITY AUDIT PROGRAMME (USAP) – 2007 AND 2008 CYCLES</b></p> <p>That C/CAR States/Territories, in order to continue support of the implementation of the Universal Security Audit Programme (USAP) - 2007 and 2008 cycles:</p> <p>a) ensure the implementation of their corrective action plans for compliance with SARPs of Annex 17;</p> <p>b) participate in the various courses and workshops on quality control security organized by ICAO in the States and ASTCs of the CAR/SAM Regions;</p> <p>c) provide qualified human resources through Short Term Experts/Instructors (STE) and other contributions;</p> <p>d) provide ICAO with up-to-date information on their AVSEC and FAL points-of-contact (if they have not already done so);</p> <p>e) implement the recommended guidelines on the security controls for screening liquids, gels and aerosols; and</p> <p>f) provide ICAO with timely information on acts of unlawful interference that have occurred within their territories.</p>	C/CAR States/Territories	Superseded by Conclusion NACC/DCA/3/10.	Superseded	Take note

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# APPENDIX D

(Available in Spanish only)

## ESTADO DE LAS CONCLUSIONES VIGENTES DE LA 92ª Y 93ª REUNIÓN DE DIRECTORES GENERALES DE AVIACIÓN CIVIL DE CENTROAMÉRICA Y PANAMÁ

ÁREA	CONCLUSIÓN	ACCIÓN PARA	COMENTARIOS Y SEGUIMIENTO	ESTADO/ FECHA META:	ACCIÓN REQUERIDA
AGA	<b>CONCLUSIÓN 92/2 REALIZACIÓN DE UN TALLER DE CERTIFICACIÓN DE AERÓDROMOS Y SMS EN INSTALACIONES ICCAE DE COCESNA.</b> Que la OACI en coordinación con COCESNA organice la realización de un Taller de Certificación de Aeródromos y SMS en las instalaciones del ICCAE de COCESNA y se coordine la programación de las fechas que se consideren más adecuadas.	OACI/ COCESNA	Se coordinará con COCESNA la realización del Taller para el Primer Semestre de 2009.	Válida/ Primer Semestre 2009	Dar seguimiento
ATM	<b>CONCLUSIÓN 93/01 IMPLEMENTACIÓN DEL NUEVO FORMATO DE PLAN DE VUELO</b> Que, considerando la importancia de la enmienda 1 al Doc 4444 cuya aplicación se prevé para el año 2012, los Estados Centroamericanos y COCESNA desarrollen un plan de transición e implementación armoniosa del nuevo formato de Plan de Vuelo de la OACI y los mensajes ATS relacionados, en sus sistemas automatizados y lo presenten a la Reunión DGCA/CAP/94	Estados Centroamericanos y COCESNA	Reemplazada por Conclusión NACC/DCA/3/04.	Reemplazada	Tomar nota
AGA/ AIM/ ATM/ CNS/ MET	<b>CONCLUSIÓN 93/02 REVISIÓN DE LOS TÉRMINOS DE REFERENCIA Y PROGRAMA DE TRABAJO DE LOS EXPERTOS DE NAVEGACIÓN AÉREA DE CENTROAMÉRICA</b> Que, reconociendo la necesidad de armonizar los términos de referencia y programas de trabajo para la implementación de los aspectos de los sistemas de navegación aérea (AGA/AIM/ATM/CNS/MET) en Centroamérica: a) la Oficina NACC de la OACI, en coordinación con COCESNA, organice durante el primer trimestre del 2009 la próxima reunión de Expertos Centroamericanos de Navegación Aérea, extendiendo la invitación para la participación de Panamá, México y República Dominicana; y, b) los Estados Centroamericanos, Panamá, México, República Dominicana y COCESNA: i) envíen expertos calificados en el área de navegación aérea para revisar los términos de referencia, programa de trabajo y organización del Grupo de Expertos de Navegación Aérea; y, ii) presenten la propuesta de reorganización de los trabajos del Grupo de Expertos de Navegación Aérea a la próxima Reunión DGCA/CAP/94.	OACI/Estados Centroamericanos / Panamá/México/ República Dominicana y COCESNA	Este tema se describió y considerado con la formación del Grupo de Trabajo NACC/WG y se informara al respecto.	Válida/ DGAC CAP/94	Tomar nota

ÁREA	CONCLUSIÓN	ACCIÓN PARA	COMENTARIOS Y SEGUIMIENTO	ESTADO/ FECHA META:	ACCIÓN REQUERIDA
CNS	<p><b>CONCLUSIÓN 93/03 REGISTRO DE DIRECCIONES DE 24 BITS PARA AERONAVES CON TRANSPONDEDOR MODO S</b></p> <p>Que, tomando en cuenta que la utilización de los sistemas mundiales de comunicaciones, navegación y vigilancia se basan en la asignación a las aeronaves de direcciones exclusivas compuestas de 24 bits para aplicaciones tales como el ACAS, ELT, SSR Modo S y el ATN con funcionalidades como VDL, AMSS, y otras, los Estados Centroamericanos:</p> <p>a) apliquen el procedimiento establecido por la OACI para la identificación de las aeronaves (asignación de direcciones de aeronaves de 24 bits conforme lo indicado en el Anexo 10, Volumen III, Parte I, Apéndice al Capítulo 9 [<i>Plan mundial para la atribución, asignación y aplicación de direcciones de aeronaves</i>]);</p> <p>b) publiquen lo correspondiente para informar y formalizar este procedimiento de registro para aplicación de los usuarios utilizando como referencia el formato presentado en el Apéndice B de la NE/06;</p> <p>c) implementen mecanismos para que esta información de asignación de direcciones de 24 bits este disponible a los usuarios; y</p> <p>d) presenten el avance de las anteriores acciones a la Oficina NACC de la OACI a <b>más tardar el 30 de noviembre de 2009</b>.</p>	Estados Centroamericanos	Reemplazada por Conclusión NACC/DCA/3/5.	Reemplazada	Tomar nota
CNS	<p><b>CONCLUSIÓN 93/04 USO DEL PLAN DE VUELO ACTUALIZADO (CPL) Y REVISIÓN DE LAS CAPACIDADES DE AUTOMATIZACIÓN DE LOS SISTEMAS</b></p> <p>Que, como parte de la implementación de la Automatización ATM, tomando en cuenta la Estrategia regional para la integración de los sistemas automatizados ATM y el Documento de Control de Interfaz (ICD) aprobado por GREPECAS, los Estados Centroamericanos y COCESNA:</p> <p>a) consideren el uso del Plan de vuelo Actualizado (CPL) para el intercambio de datos actualizados de planes de vuelo;</p> <p>b) estudien y revisen las capacidades/funcionalidades instalados en sus Centros de Control correspondientes con vistas a planificar la implementación de los requerimientos de Automatización ATM;</p> <p>c) informen de los resultados de las acciones a) y b) a la Oficina NACC de la OACI a <b>más tardar el 31 de septiembre del 2009</b>; y</p> <p>d) realicen las pruebas con el CPL entre Centros de Control adyacentes, donde se identifiquen beneficios de esta implementación, informando a la Oficina NACC de la OACI de sus resultados a <b>más tardar febrero del 2010</b>.</p>	Estados Centroamericanos y COCESNA	Reemplazada por Conclusión NACC/DCA/3/7.	Reemplazada	Tomar nota

ÁREA	CONCLUSIÓN	ACCIÓN PARA	COMENTARIOS Y SEGUIMIENTO	ESTADO/ FECHA META:	ACCIÓN REQUERIDA
AIS	<b>CONCLUSIÓN 93/05 TRANSICIÓN DE AIS/MAP AL NUEVO CONCEPTO AIM</b> Que los Estados Centroamericanos y COCESNA: a) den prioridad a las recomendaciones 6, 7 y 8 emitidas por el Congreso Mundial AIM del 2006 ( <b>Apéndice X</b> –ver Apéndice A de la NE/08); b) revisen la primera versión del “Proyecto Estratégico para la Transición hacia el AIM” como una guía para asegurar la ejecución de las acciones apropiadas para la transición de AIS a AIM ( <b>Apéndice X</b> – ver Apéndice C de la NE/08); c) se asigne personal calificado para el desarrollo las nuevas tareas y las acciones apropiadas para la transición de AIS a AIM; y d) se considere al proceso de transición AIS – AIM como un objetivo a ser tratado dentro el Proyecto de Cooperación Técnica Regional NAM-CAR.	Estados Centroamericanos y COCESNA	Reemplazada por Conclusión NACC/DCA/3/9.	Reemplazada	Tomar nota
AGA	<b>CONCLUSIÓN 93/06 CERTIFICACIÓN DE AERODROMOS / SISTEMAS DE GESTIÓN DE LA SEGURIDAD OPERACIONAL/PLANES DE EMERGENCIA Y CENTROS DE OPERACIÓN DE EMERGENCIA</b> Que, los Estados Centroamericanos actualicen la información sobre los aeropuertos internacionales contenidos en la Tabla AOP 1 del Plan de Navegación Aérea, Vol. II - FASID de acuerdo a los <b>Apéndices X</b> , Implantación de Certificación de Aeródromos; <b>Apéndice X</b> , Implementación de los Sistemas de Gestión de la Seguridad Operacional (SMS) en los aeródromos; y <b>Apéndice X</b> , Encuesta a los Estados / Territorios sobre Planes de Emergencia y Centros de Operaciones de Emergencia a esta parte del Informe. (Apéndices A, B, y C de la NE/09,) <b>a más tardar el 15 de agosto de 2008</b> ).	Estados Centroamericanos	A la fecha no se recibió respuesta alguna por parte de los Estados respecto a la actualización de esta información.  La NACC/DCA/03 propuso la fecha del 10 de octubre del 2008 como plazo limite para esta información.	Válida/ 10 de octubre 2008	Dar seguimiento
MET	<b>CONCLUSION 93/07 SEMINARIO SOBRE EL SERVICIO DE METEOROLOGÍA AERONÁUTICA</b> Que: a) la Oficina NACC de la OACI, en coordinación con Nicaragua, organice durante el primer trimestre del 2009 un Seminario sobre el Servicio de Meteorología Aeronáutica con duración de una semana; y, b) los Estados Centroamericanos efectúen los arreglos y gestiones necesarios para que representantes meteorólogos de la aviación participen en el Seminario sobre el Servicios de Meteorología Aeronáutica auspiciado por Nicaragua.	OACI/ Estados Centroamericanos	Se espera que los Estados/Territorios anfitriones comuniquen a la OACI antes del <b>15 de octubre de 2008</b> las fechas en las que se celebrarán los seminarios.	Válida/ primer trimestre 2009	Dar seguimiento

ÁREA	CONCLUSIÓN	ACCIÓN PARA	COMENTARIOS Y SEGUIMIENTO	ESTADO/ FECHA META:	ACCIÓN REQUERIDA
FS	<b>CONCLUSIÓN 93/08 INFORME DE LA SITUACIÓN SOBRE LAS ACTIVIDADES DE AUDITORÍA DE LA OACI (USOAP)</b> Que los Estados de Centroamericanos completen las listas de Verificaciones de Cumplimiento para el <b>30 de noviembre del 2008</b> y la introduzcan en la página web de auditoría del SOA.	Estados Centroamericanos	Se espera que los estados Centro Americanos completen las Listas de Cumplimiento en las pagina web del SOA para esta fecha.	Válida/ 30 noviembre 2008	Dar seguimiento
FS	<b>CONCLUSIÓN 93/09 RESULTADOS DE LA REUNIÓN DE LA HOJA DE RUTA PARA LA SEGURIDAD OPERACIONAL DE LA AVIACIÓN</b> Que los Estados Centroamericanos y COCESNA aseguren la participación de especialistas en seguridad operacional a la Primera Reunión del Grupo Regional de la Seguridad Operacional de la Aviación Civil – Panamericano del 10 al 14 de noviembre en la Ciudad de San José, Costa Rica y presten la máxima cooperación de las acciones resultantes.	Estados Centroamericanos y COCESNA	Se espera la participación y la máxima cooperación de los Estados NACC a los proyectos del RASG-PA.  En la NACC/DCA/03 se requirió a los Estados/Territorios/ Organizaciones Internacionales que para mas tardar <b>el 15 de octubre del 2008</b> informen de estas nominaciones.	Válida / noviembre 2008	Dar seguimiento

ÁREA	CONCLUSIÓN	ACCIÓN PARA	COMENTARIOS Y SEGUIMIENTO	ESTADO/ FECHA META:	ACCIÓN REQUERIDA
AVSEC	<p><b>CONCLUSIÓN 93/10 DESARROLLOS PARA EL MEJORAMIENTO DE LA SEGURIDAD DE LA AVIACIÓN</b></p> <p>Que los Estados Centroamericanos:</p> <p>a) aseguren el respaldo y soporte necesario a sus entidades AVSEC dentro de su administración para la elaboración, aprobación e implementación efectiva de sus Programas Nacionales de Seguridad de la Aviación Civil (AVSEC), y el funcionamiento de sus Comités Nacionales de seguridad de la aviación o entidades similares;</p> <p>b) aseguren la participación del personal AVSEC en las actividades de instrucción auspiciadas por la OACI y otras organizaciones internacionales;</p> <p>c) se aseguren de comunicar a la OACI la información de sus Puntos de Contacto tanto de Facilitación (FAL), como de Seguridad de la aviación (AVSEC) dentro de la administración del Estado;</p> <p>d) implanten las directrices de la OACI respecto de los controles de seguridad para la inspección de líquidos, geles y aerosoles;</p> <p>e) cumplan con la notificación a la OACI en caso de que su Estado haya sido afectado por el intento de un acto o por un acto de interferencia ilícita;</p> <p>f) se aseguren de completar la implementación efectiva de su Plan de acción correctivo respecto a las recomendaciones del informe de auditoría USAP antes de la visita de seguimiento y en caso extremo antes de la auditoría USAP del segundo ciclo, notificando el avance de sus planes de acción a la OACI;</p> <p>g) en virtud del Artículo 38 del Convenio sobre Aviación Civil Internacional, recuerden su obligación de notificar oficialmente las diferencias a la OACI, en caso de que algunas diferencias detectadas durante la auditoría USAP aún no hubieran sido corregidas; e incluyan los temas de Seguridad de la aviación (AVSEC) del Anexo 17 y los temas de Facilitación (FAL) del Anexo 9 al Convenio de Aviación Civil Internacional dentro del Grupo Regional de seguridad operacional de la Aviación Civil - Panamericano y aseguren la participación de sus expertos para el funcionamiento eficaz del citado Grupo.</p>	Estados Centroamericanos	Las acciones b), c), d), e) y f) se han incluido en la Conclusión NACC/DCA/03/10. Las acciones a) y g) se deben informar para la DGAC CAP/94.	Válida/ DGAC/CAP/94	Dar seguimiento

ÁREA	CONCLUSIÓN	ACCIÓN PARA	COMENTARIOS Y SEGUIMIENTO	ESTADO/ FECHA META:	ACCIÓN REQUERIDA
HRT	<b>CONCLUSIÓN 93/11 ESTRATEGIA REGIONAL DE CAPACITACIÓN PARA CENTROAMERICA</b> Que la OACI, en coordinación con los Estados Centroamericanos y COCESNA elaboren una estrategia regional de capacitación que incluya: a) un plan de trabajo para la formulación de la estrategia regional; b) la participación del personal de la OACI en las áreas involucradas; e se considere invitar a Estados Unidos, México, Panamá, Republica Dominicana, ACI-LAC para que participen en la estrategia regional de capacitación en coordinación con las autoridades de aviación civil de Centroamérica.	OACI/ Estados Centroamericanos y COCESNA	Al realizarse estas acciones se recomienda tomar en cuenta la conclusión NACC/DCA/03/12 en cuanto a la estrategia regional de capacitación a desarrollarse.	Válida/ DGAC/CAP/94	Dar seguimiento
HRT	<b>CONCLUSIÓN 92/12 ELABORACION DE MANUAL DE CAPACITACION Y PLANIFICACION DE PROGRAMA DE ENTRENAMIENTO REGIONAL</b> Que COCESNA conjuntamente con Autoridades de Aviación Civil Centroamericana elabore una propuesta de Manual de capacitación Regional durante el 2009 y se presente un borrador preliminar de dicho Manual a la próxima 94ª Reunión de Directores Generales de Centroamérica.	Estados Centroamericanos y COCESNA	Al realizarse esta acción se recomienda tomar en cuenta la conclusión NACC/DCA/03/12 en cuanto a la estrategia regional de capacitación a desarrollarse.	Válida/ DGAC/CAP/94	Dar seguimiento
HRT	<b>CONCLUSIÓN 93/13 PROGRAMA DE FORMACION DE INSTRUCTORES REGIONALES</b> Que COCESNA y sus Estados Miembros: a) apoyen la iniciativa de formación de Instructores Regionales, que contribuyan a través de su experiencia profesional, a la capacitación del personal técnico aeronáutico y administrativo de las Administraciones de Aeronáutica/Aviación Civil de Centroamérica; b) establezcan acuerdos de cooperación, entre el ICCAE y sus Administraciones, para facilitar la participación de los Instructores en las etapas de formación que sean propuestas y la colaboración para desarrollar el plan de entrenamiento regional que se llevara a cabo durante el primer trimestre del 2009; y c) que el ICCAE Informe en la próxima Reunión de Directores Generales de Centroamérica, los avances sobre este asunto.	Estados Centroamericanos y COCESNA	Al realizarse estas acciones se recomienda tomar en cuenta la conclusión NACC/DCA/03/12 en cuanto a la estrategia regional de capacitación a desarrollarse.	Válida/ DGAC/CAP/94	Dar seguimiento



ÁREA	CONCLUSIÓN	ACCIÓN PARA	COMENTARIOS Y SEGUIMIENTO	ESTADO/ FECHA META:	ACCIÓN REQUERIDA
HRT	<b>CONCLUSIÓN 93/14 ACREDITACION CONJUNTA DEL ICCAE COMO CENTRO REGIONAL DE INSTRUCCION</b> Que los Estados Miembros de COCESNA: a) consideren la posibilidad de aplicar las regulaciones que sean necesarias en sus Administraciones, para la certificación del ICCAE, como Centro Regional de Instrucción Aeronáutica; b) tomen en cuenta como referencia, la experiencia de lo establecido en la Legislación y regulaciones aplicadas como normativa por la Autoridad de Aviación Civil de El Salvador; y c) definan el proceso a seguir para la certificación del ICCAE como Centro Regional de Instrucción.	Estados Centroamericanos y COCESNA		Válida	Dar seguimiento

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## **Agenda Item 2                      Regional Technical Cooperation Activities**

2.1                      This agenda item was reviewed using as reference the presentation made on the CAR Regional Technical Cooperation Project presented as the **Appendix** to this part of the Report.

2.2                      Taking into consideration the many challenges faced by States/Territories/International Organizations of the CAR Region, the application of the ICAO Strategic Objectives and Global Plan Initiatives become paramount. The Meeting noted that it is necessary to take actions that facilitate the implementation of such objectives and initiatives in a cooperative and harmonized manner. Improvements must advance homogeneously with other regions based on the growth of air traffic operations in the Region. However, these should be comprehensive due to the universal scope of the Global Air Navigation Plan (GANP).

2.3                      The Meeting agreed that among actions to be taken, consideration should be given to the list of the numerous civil aviation deficiencies identified in the GREPECAS Air Navigation Deficiencies Database (GANDD) and reported by the ICAO Universal Safety Oversight Audit Programme (USOAP) audits that require corrective actions, which should be part of any regional project to be prepared.

2.4                      The Meeting took note that before any actions can be performed, and in order to meet the challenges that change and implementation of new technologies represent, the First and Second Meeting of North American, Central American and Caribbean Directors of Civil Aviation (NACC/DCA/1 and NACC/DCA/2) adopted Conclusions 1/24, 1/25 and 2/31, where it was considered that technical cooperation projects were the *“instruments for the effective implementation of new civil aviation systems,”* urging *“States to develop regional technical cooperation projects and give the financial support to them.”*

2.5                      Under this consideration, the Meeting analyzed the proposal for developing an ICAO regional technical cooperation project aimed at establishing a tool for States/Territories/International Organizations in the CAR Region to implement Global Air Navigation Plan Initiatives (GPIs) in compliance with ICAO SARPs and Strategic Objectives.

2.6                      Based on deliberations, the Meeting agreed on the need for a regional technical cooperation project to address the above, and that prior to initiating such a project, that a steering committee be established with participation of States/Territories/International Organizations to identify priorities. The Meeting agreed that industry and users should participate as involved parties as they constitute civil aviation stakeholders and will benefit from the achievements and scope of the project.

2.7 Likewise, the Meeting agreed that the steering committee should be formed by a limited number of members, but be representative of all CAR Region sub-regions (C/CAR, E/CAR and CA). In this regard, the Secretariat invited meeting participants to become members of this committee and preliminary members were identified. However, since several NACC DCA Meeting participants were unable to attend the meeting, ICAO NACC Office will inform other States/Territories/International Organizations in this regard. It was also agreed that the first Steering Committee Meeting would be held at the ICAO NACC Regional Office in January 2009.

2.8 Based on the above-mentioned, the Meeting agreed to adopt the following Conclusion:

**CONCLUSION NACC/DCA/3/1      TECHNICAL CO-OPERATION PROJECT FOR THE  
CAR REGION (RLA/08/000)**

That, based on the need to establish an effective instrument to achieve efficient, cost effective and harmonized implementation of new systems for international civil aviation, the Meeting approved:

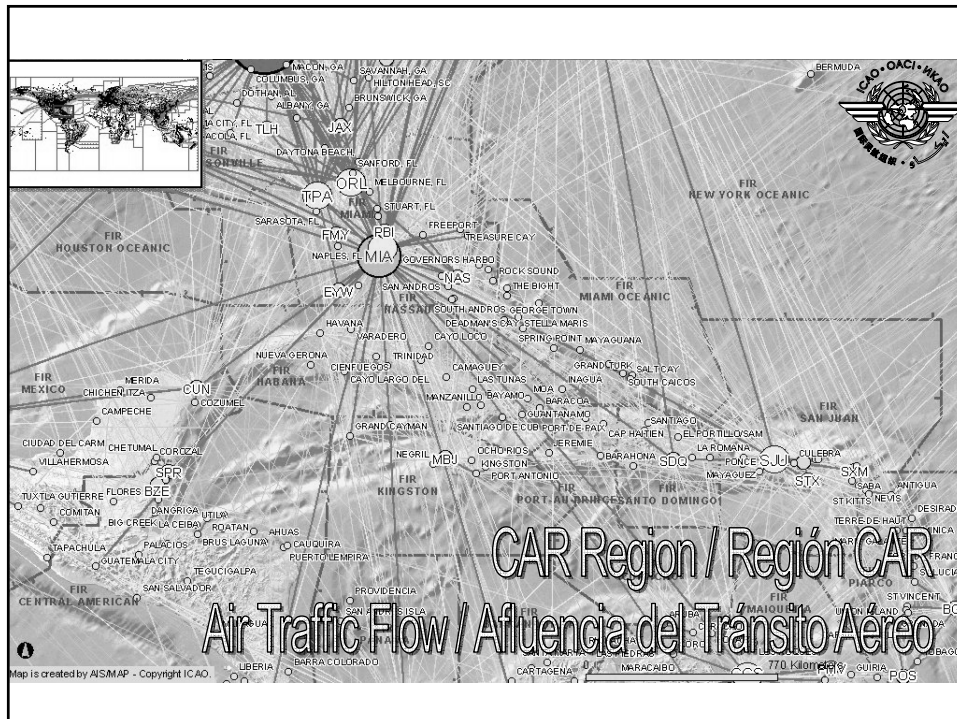
- a) a CAR Regional Project be developed through the ICAO Technical Co-operation Programme;
- b) the establishment of a CAR Region Steering Committee to develop the first phase of the project, which will determine the requirements and priorities for each CAR Region State/Territory/International Organization; and
- c) a meeting of the CAR Regional Project Steering Committee\* to be held at the ICAO NACC Office in Mexico City in January 2009.

*\* Dominican Republic, United States, COCESNA, RASOS/CASSOS have committed representatives to the Steering Committee.*

2.9 As follow-up to this Conclusion, the Meeting agreed that the NACC Office will send a letter to all States / Territories / International Organizations and appropriate industry partners by **10 October 2008**, describing project goals, identifying the role of the Steering Committee and its membership, and requesting the participation of States / Territories / International Organizations and industry.

APPENDIX A





## Technical Co-operation Project for the CAR Region / Proyecto de Cooperación Técnica para la Región CAR

### ✈ Introduction

- ✈ To promote safety and efficiency of international civil aviation and to foster the principles of the Chicago Convention
- ✈ Strategic Objectives 2005-2010 for the harmonious development of the modern systems of civil aviation: *Safety, Efficiency, Continuity, Rule of Law, Environmental Protection*

### ✈ Introducción

- ✈ Promover la seguridad operacional y eficiencia de la Aviación Civil Internacional y fomentar los principios comprendidos en el Convenio de Chicago
- ✈ Objetivos Estratégicos 2005-2010, para desarrollo armonioso de los sistemas modernos de la aviación civil: *Seguridad Operacional, Eficiencia, Continuidad, Imperio de la Ley, Protección al Medio ambiente*

## Technical Co-operation Project for the CAR Region / Proyecto de Cooperación Técnica para la Región CAR

- ✈ Global Air Navigation Plan - strategic tool, provides a planning methodology for a uniform transition to the air navigation modern systems - through its Global Plan Initiatives (GPIs)
- ✈ Homogeneous development and implementation of the civil aviation modern systems at national, regional and global level
- ✈ Acquisition of techniques and technologies for the infrastructure and implementation of the new systems

- ✈ Plan Mundial de Navegación Aérea-Instrumento estratégico, proporciona una metodología de planificación para una transición uniforme a los sistemas modernos de navegación aérea a través de las Iniciativas del Plan Mundial (GPIs)
- ✈ Desarrollo homogéneo de los sistemas modernos de aviación civil a nivel nacional, regional y mundial
- ✈ Adquisición de técnicas y tecnologías para la infraestructura y puesta en operación de los nuevos sistemas

# Introduction / Introducción

Lack of government policies



Implementation imbalance

Ausencia de políticas gubernamentales



Desequilibrio en la implementación

## Background / Antecedentes

- ✈ Individual efforts of some States - Collective through GREPECAS - Development of technical Cooperation Projects:  
RLA/98/003, RLA/99/901, RLA/00/009, RLA/03/901, RLA/03/902, RLA/06/901.
- ✈ Regional NACC/DCA meetings, several CAAs Subregional meetings (C/CAR/DCA, E/CAR/DCA y CAP/DGAC) and Working Groups of CAR experts, have adopted conclusions requesting ICAO to develop technical co-operation projects in order to fulfill the implementation

- ✈ Esfuerzos individuales de algunos Estados - Colectivos por medio de GREPECAS - Desarrollo de Proyectos de Cooperación Técnica:  
RLA/98/003, RLA/99/901, RLA/00/009, RLA/03/901, RLA/03/902, RLA/06/901.
- ✈ Reuniones regionales NACC/DCA, varias reuniones de CAAs subregionales (C/CAR/DCA, E/CAR/DCA y CAP/DGAC), reuniones de Grupos de Trabajo de expertos de CAR, han adoptado conclusiones en la que acuerdan solicitar a la OACI desarrollar proyectos de cooperación técnica para cumplir con la implementación.

## Background / Antecedentes

### ✧ Summary of NACC/DCA

Conclusions 1/24, 1/25, 2/31:

- ✧ Technical Co-operation  
Projects are excellent tools for the effective implementation of new civil aviation systems - and urge States to develop regional technical cooperation projects and give them the relevant financial support

### ✧ Síntesis Conclusiones NACC/DCA 1/24, 1/25, 2/31 :

- ✧ Los proyectos de cooperación técnica son instrumentos para la efectiva implementación de los nuevos sistemas de la aviación civil- y se insta a los Estados a desarrollar proyectos de cooperación técnica regionales y a dar el soporte económico necesario a los mismos

## Background / Antecedentes

### ✧ Others

- ✧ The ICAO Council and Assembly has urged States in many opportunities to fulfill the implementation of the civil aviation systems through the ICAO Technical Co-operation Programme
- ✧ The CAR/SAM/3 RAN Meeting invited States to take the appropriate measures in order to facilitate the implementation of the air navigation modern systems, including the development of technical cooperation projects of ICAO to meet goals

### ✧ Otras instancias:

- ✧ El Consejo y la Asamblea de la OACI ha instado en múltiples ocasiones a los Estados a que realicen la implementación de los sistemas de aviación civil por medio del Programa de Cooperación Técnica de la OACI
- ✧ Reunión RAN CAR/SAM/3 alentó a los Estados a que tomaran las medidas apropiadas para facilitar la implementación de los sistemas de navegación aérea modernos, incluyendo el desarrollo de proyectos de cooperación técnica de la OACI para lograr las metas



## Background / Antecedentes

✈ The Second Meeting of North American, Central American and Caribbean Working Group (NACC/WG/2) Jamaica, May 2008, is the most recent forum that stressed out the importance and the need to develop a regional Technical Co-operation Project

✈ La Segunda Reunión del Grupo de Trabajo de Norteamérica, Centroamérica y Caribe (NACC/WG/2) Jamaica, mayo 2008, es el foro más reciente que insistió en la importancia y necesidad de desarrollar un proyecto de cooperación técnica regional.

## Justification and Need for the Project / Justificación y necesidad del Proyecto

✈ Identification of the problem, current situation, joint actions for integrated solutions → (Strategic Objectives, GANP Initiatives)

✈ GANDD Deficiencies - USOAP Discrepancies - Difficulties to solve them (Regional implementation imbalance- CAR backwardness)

✈ Satellite and automation systems cost demands an important investment from CAAs - Lack of economic resources - Sufficient funds are necessary

✈ Identificación del problema, situación actual, soluciones conjuntas e integrales → (Objetivos Estratégicos, Iniciativas GANP)

✈ Deficiencias GANDD - Discrepancias USOAP - Dificultades para corregirlas (Desequilibrio Regional - rezago en CAR)

✈ Costos de los sistemas satelitales y automáticos para la aviación civil implican una inversión importante para las Administraciones - Falta de dedicación de recursos económicos

### Justification and Need for the Project / Justificación y necesidad del Proyecto

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>✧ Acquisition of modern technologies for the facilities and services</li> <li>✧ The significant increase of air traffic in the region - safety, efficiency, continuity</li> <li>✧ The global reaching of the modern systems requires:             <ul style="list-style-type: none"> <li>✧ Regional and worldwide homogeneity of the systems</li> <li>✧ Harmonious implementation of the systems infrastructure and services</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>✧ Adquisición de tecnologías modernas para la infraestructura y puesta en operación de los nuevos sistemas</li> <li>✧ El incremento significativo del tránsito aéreo en la región - seguridad operacional, la eficiencia, continuidad en las operaciones</li> <li>✧ Característica de alcance mundial de los sistemas modernos requieren:             <ul style="list-style-type: none"> <li>✧ Exista una homogeneidad de los sistemas en las regiones y en todo el mundo</li> <li>✧ Implementación armonizada de la infraestructura y servicios</li> </ul> </li> </ul> |
|--|--|

### Justification and Need for the Project / Justificación y necesidad del Proyecto

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>✧ Universal scope of the GANP → Need to move into the Global ATM Operational Concept → inter-functional, continuous and seamless, flexible, interoperable</li> <li>✧ Join cooperative actions among States/Territories/Organization             <ul style="list-style-type: none"> <li>✧ Establishment of a suitable tool - To avoid efforts duplication -</li> <li>✧ Study of the real specific requirements by entity - Better option by entity -</li> <li>✧ Cost-reduction - Decision-making policies definition</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>✧ Universalidad del Plan Mundial → Necesidad de avanzar hacia el Concepto Operacional ATM Mundial del ANGP → interfuncional, continuo y sin costuras, flexible , interoperable</li> <li>✧ Acciones conjuntas y cooperativas entre los Estados / Territorios / Organización             <ul style="list-style-type: none"> <li>✧ Establecimiento de un instrumento adecuado - Evitar duplicación de esfuerzos</li> <li>✧ Estudio detallado de requerimientos reales por entidad - Mejor opción por entidad</li> <li>✧ Reducción de costos - Definición de políticas</li> </ul> </li> </ul> |
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### Justification and Need for the Project / Justificación y necesidad del Proyecto

✈ Development of action plans, improvement execution, sound platform  
→ Implementation - compliance with SARPs

✈ Desarrollo de planes de acción, ejecución de mejoras, plataforma sólida  
→ Implementación - cumplimiento con los SARPS

### Scope / Alcance

✈ The project is addressed to all Region CAR States, Territories and Organization - All of them as participants and members of the project

✈ The project includes the air navigation field and the aerodrome and safety fields as well → (Strategic Objectives, GANP Initiatives)

✈ The project also aims to: Review of the legislation in force, AN and AD charges financial system, organizational structure, training programme

✈ El proyecto está dirigido a todos los Estados, Territorios y Organización de la Región CAR - todos como participantes y miembros del proyecto

✈ El proyecto cubrirá además de la navegación aérea los ámbitos de aeródromos y de seguridad operacional → (Objetivos Estratégicos, Iniciativas GANP)

✈ El proyecto también persigue: Revisión de la legislación vigente, sistemas financieros de los derechos de NA Y AD, estructuras orgánicas, programa de capacitación

## Contents of the PRODOC / Contenido del PRODOC

- |  |   |
|--|---|
| <p>✧ The front page includes the executing organizations and summary of the main objectives, list of the participant States / Territories / Organizations with the corresponding space for the signatures of the Government Authorities and the ICAO Secretary General</p> | <p>✧ Portada con los organismos que ejecutan y resumen del objetivo principal, listas de los Estados / Territorios / Organizaciones participantes con el espacio correspondiente para la firma de las Autoridades gubernamentales y del Secretario General de la OACI</p> |
|--|---|

## Contents of the PRODOC / Contenido del PRODOC

- |   |  |
|---|--|
| <p>✧ A.- The context, includes:</p> <ul style="list-style-type: none"><li>✧ Description of the subsector of air transport</li><li>✧ Institutional framework for the subsector in the region</li></ul> <p>✧ B.- Project justification:</p> <ul style="list-style-type: none"><li>✧ Problems to discuss, current situation</li><li>✧ Need of the project: Frame of reference, agreements, background</li><li>✧ Expected outcome by the end of the project: Benefits</li></ul> <p>✧ C.-Development Objective:</p> <ul style="list-style-type: none"><li>✧ To support the social and economic development of the region through a safety and efficient air transport system</li></ul> | <p>✧ A.- El contexto, que incluye:</p> <ul style="list-style-type: none"><li>✧ Descripción del subsector del transporte aéreo</li><li>✧ Marco institucional para el subsector en la Región</li></ul> <p>✧ B.- Justificación del proyecto:</p> <ul style="list-style-type: none"><li>✧ Problemas que se han de abordar, situación actual,</li><li>✧ Necesidad del proyecto: Marcos de referencia, acuerdos, antecedentes,</li><li>✧ Situación prevista al finalizar el proyecto: Beneficios</li></ul> <p>✧ C.-Objetivo de desarrollo:</p> <ul style="list-style-type: none"><li>✧ Sistema de transporte aéreo más seguro, y eficiente mediante el apoyo al desarrollo social y económico de la región</li></ul> |
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## Contents of the PRODOC / Contenido del PRODOC

- |   |   |
|---|---|
| ✈ D.- Immediate Objectives, results and activities            | ✈ D.- Objetivos inmediatos, resultados y actividades                  |
| ✈ E.- Supplies: From participants and from the project        | ✈ E.- Insumos: De los Estados y del proyecto                          |
| ✈ F.- Risks: Factor that could affect the project development | ✈ F.- Riesgos: Factores que inciden en el desarrollo del proyecto     |
| ✈ G.- Prior obligations and prerequisites                     | ✈ G.- Obligaciones y requisitos previos                               |
| ✈ H.- Project reviews, reporting and evaluation               | ✈ H.- Supervisión, presentación de informes y revisiones del proyecto |
| ✈ I.- Budget  | ✈ I.- Presupuesto   |

## Project Description / Descripción del Proyecto (B21-B32)

- |  |  |
|--|--|
| ✈ The project is based on the Strategic Objectives, GANP's GPIs, GREPECAS Conclusions, ANP requirements, USOAP recommendations, GANDD. | ✈ El Proyecto se basa en los Objetivos Estratégicos, las GPI del GANP, las conclusiones de GREPECAS, los requisitos de ANP, las recomendaciones de las Auditorías USOAP y en la GANDD. |
| ✈ Study to determine the systems elements required to implement on a national and regional basis - PLANNING                            | ✈ Planea realizar un estudio que determine los elementos de los sistemas necesarios a implementar en cada Estado y los sistemas que hay que implementar integralmente - PLANIFICACIÓN  |

Project Description / Descripción del Proyecto (B21-B32)

- |   |   |
|---|---|
| ✈ Review and development of actions plans in the following areas of civil aviation included in the PRODOC : AGA, AIM, ATM, CNS, MAP, MET, SAR, SO | ✈ Planea revisar y desarrollar los planes de acción a nivel nacional y regional en cada una de las áreas de la aviación civil incluidas en el PRODOC: AGA, AIM, ATM, CNS, MAP, MET, SAR, SO |
| ✈ Discussion with the national implementation committees  | ✈ Discusión con los comités nacionales para la implementación   |

Project Description / Descripción del Proyecto (B21-B32)

- |   |   |
|---|---|
| ✈ Establishment of costs and contribution by country, based on the real requirements  | ✈ Establecimiento de costos y contribuciones de cada país, según sus requerimientos reales  |
| ✈ Coordination with the TRAINAIR Centres in the region in order to develop a training programme for the personnel in charge of planning, implementation and operation of systems and services | ✈ Planea coordinar con los centros de capacitación regional TRAINAIR para desarrollar un programa de formación para el personal que estará a cargo de la planificación de la implementación y de la operación de sistemas y servicios |

### Project Description / Descripción del Proyecto (B21-B32)

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|---|--|
| <ul style="list-style-type: none"> <li>✧ Experts from the participant countries</li> <li>✧ Update the civil aviation legislation and regulations</li> <li>✧ Study to set up a financial system of the AN and AD services charges in each country</li> <li>✧ The project will be carry out in two phases: <ul style="list-style-type: none"> <li>✧ Phase I: Studies, gathering information, preparation and development of actions plans and programmes</li> <li>✧ Phase II: Systems and services implementation</li> </ul> </li> <li>✧ Contribution by each State / Territory / Organization: \$ 45,000,00 USD for the first phase</li> </ul> | <ul style="list-style-type: none"> <li>✧ Planea considerar la asignación de Expertos de los países participantes</li> <li>✧ Planea contribuir a la actualización de la Legislación y las regulaciones de aviación civil</li> <li>✧ Planea realizar un estudio para establecer un sistema financiero de los derechos de los servicios de NA y ADs en cada Estado</li> <li>✧ El proyecto se realizará en dos fases: <ul style="list-style-type: none"> <li>✧ Fase I: Estudios, recolección de información, elaboración y desarrollo de planes de acción y programas</li> <li>✧ Fase II: Implantación de sistemas y servicios</li> </ul> </li> <li>✧ Contribución por cada Estado / Territorio / Organización: \$ 45,000,00 USD - Fase I</li> </ul> |
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### Project Description / Descripción del Proyecto (B21-B32)

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>✧ IMMEDIATE OBJECTIVE No.1 <ul style="list-style-type: none"> <li>✧ Develop an air navigation systems implementation plan in accordance with the Global Air Navigation Plan and the ICAO Strategic Objectives</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>✧ OBJETIVO INMEDIATO No. 1 <ul style="list-style-type: none"> <li>✧ Desarrollar un plan de implementación de los sistemas de navegación aérea de acuerdo con las Iniciativas del Plan Mundial de Navegación Aérea y con los Objetivos Estratégicos de la OACI</li> </ul> </li> </ul> |
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Project Description / Descripción del Proyecto (B21-B32)

✈ IMMEDIATE OBJECTIVE No.2

- ✈ Develop an aerodrome design and management implementation plan in accordance with the Global Air Navigation Plan initiatives to improve the use of the movement areas and operational security

✈ OBJETIVO INMEDIATO No. 2

- ✈ Desarrollar un plan de implementación de estrategias de gestión y diseño de aeródromos de acuerdo con las Iniciativas del Plan Mundial de Navegación Aérea para mejorar la utilización del área de movimiento y la seguridad operacional

Project Description / Descripción del Proyecto (B21-B32)

✈ IMMEDIATE OBJECTIVE No.3

- ✈ To contribute with the States on the implementation of the Safety Oversight System for use by aircraft operators, maintenance entities, air navigation service providers and aerodrome administrations

✈ OBJETIVO INMEDIATO No. 3

- ✈ Coadyuvar con las Administraciones de Aviación Civil en la implementación del Sistema de Seguridad Operacional que deben aplicar los explotadores/operadores de aeronaves, entidades de mantenimiento, proveedores de servicios de navegación aérea y las administraciones de aeródromos



## Benefits / Beneficios

### ✧ The Global Plan:

- ✧ Greater safety - more system capacity
- ✧ Optimum use of airport capacity - Less delays
- ✧ Reduction in flight exploitation costs
- ✧ Greater efficiency in the use of the airspace - more flexibility
- ✧ More dynamic planning and optimum flights profiles
- ✧ Element provision for the use of concepts, procedures and processes established by the Global ATM Operational Concept

### ✧ El Plan Mundial requiere:

- ✧ Mayor seguridad operacional - Mayor capacidad de los sistema
- ✧ Utilización más óptima de la capacidad de aeropuertos - Menos retrasos
- ✧ Reducción de los costos de explotación de vuelos
- ✧ Mayor eficiencia en la utilización del espacio aéreo - más flexibilidad
- ✧ Planificación más dinámica y perfiles de los vuelos óptimos
- ✧ Proveer los elementos para el uso de los conceptos, procedimientos y procesos que establece el Concepto Operacional ATM Mundial

## Conclusion / Conclusión

- ✧ The establishment of continuous, consistent and homogeneous systems for global interoperability ↔ air navigation safety, regularity and efficiency

- ✧ The ICAO Technical Co-operation Programme has proven to be a useful tool to facilitate the development of different civil aviation areas in different Regions of ICAO

- ✧ El establecimiento de sistemas que sean continuos, consistentes y homogéneos, para la interoperabilidad mundial ↔ seguridad operacional, regularidad y eficiencia de la navegación aérea

- ✧ El Programa de Cooperación Técnica de la OACI ha demostrado que es una herramienta útil que facilita el desarrollo de las diferentes áreas de la aviación civil, en las distintas regiones de la OACI

**Agenda Item 3:        Air Navigation Services**

**3.1                    Air Navigation Matters**

***General Matters on Air Navigation***

3.1.1            The Meeting was informed of several relevant air navigation events held since the Second Meeting of North American, Central American and Caribbean Directors of Civil Aviation (NACC/DCA/2) held in 2005. The most noteworthy issues were:

- actions for increasing the efficiency of Regional Planning and Implementation Groups (PIRGs) with conclusions adopted by GREPECAS and States/Territories;
- Business Case Model for the Implementation of CNS/ATM Systems including the CNS/ATM Database and Financial Analysis Computer System (DFACS) model and the new secure website - Civil Aviation Forecasts and Economic Analyses (CAFEA);
- ICAO Plan of Activities/Business Plan for the triennium 2008-2009-2010, which is accessible at the following website: <http://www.icao.int/icaonet>;
- activities for the Implementation of Performance-Based Navigation (PBN);
- progress on inter-regional coordination meetings, including the Second Meeting of the Trans-Regional Airspace and Supporting ATM Systems Steering Group (TRASAS/2) (participants: APAC, EUR/NAT and NAM Regions) and the Fourteenth Inter-Regional Coordination Meeting (SAT/14) (participants: AFI, CAR, EUR and SAM Regions);
- progress on the implementation of recommendations made by the Directors General of Civil Aviation Conference on a Global Strategy for Aviation Safety (DGCA/06); and
- NextGen and SESAR Programmes Integration and Harmonization Forum.

***Update of the Air Navigation Plan***

3.1.2            The Meeting took note that to facilitate the coordination and implementation of regional air navigation plans and support the Global Air Navigation Plan, ICAO has foreseen an electronic version of the Air Navigation Plan (eANP). This will contribute to air navigation planning development through a framework for the efficient domestic, regional, inter-regional and global implementation of new systems and air navigation services. This framework will support the work of the PIRGs who monitor, plan and analyze the status of implementation of facilities and services that are planned for inclusion into the regional air navigation plans, while recommending ways to accelerate the plans in accordance with ICAO priorities. Online availability of this information will greatly facilitate updating and accessing the latest information for States, ICAO Regional Offices and users.

3.1.3 In the description of this update / transition to eANP, the Meeting took note that the eANP has two primary objectives: a) at the global level, to reconcile the Regional Air Navigation Plan with the ATM operational concept, the new Global ANP provisions and the new ICAO business planning processes; and b) at the regional level, to expedite regional planning and coordination through simplifying and freeing core planning from a long and cumbersome formal approval process whilst maintaining the planning and coordination process requirements within the ICAO regional machinery.

3.1.4 In this regard, the Meeting was informed of activities undertaken by the ICAO NACC Regional Office to update information of the ANP. Therefore, the Meeting agreed that States / Territories / International Organizations should take note of ANP tables and update the NDB Progressive Deactivation Plan, which is available on the ICAO NACC website, for completion by **30 September 2008**.

#### ***NACC/WG Outcome and Development***

3.1.5 The Meeting was informed that at the NAM/CAR Directors' request, in order to harmonize work programmes for air navigation services infrastructure implementation in the NAM and CAR Regions, the North American, Central America and Caribbean Working Group (NACC/WG) was established.

3.1.6 The Meeting analyzed the summary of activities being carried out in the NAM/CAR Regions as part of the work and actions of the NACC/WG during its two meetings regarding the implementation of air navigation systems, the approval of its terms of reference and work programme, and conclusions reached. In view of the above, the Meeting formulated the following Decision:

#### **DECISION NACC/DCA/3/2**

#### **APPROVAL OF THE NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN WORKING GROUP (NACC/WG)**

The North American, Central American and Caribbean Directors approved the NACC/WG Terms of Reference and Work Programme included in **Appendix A** to this part of the Report.

3.1.7 In this regard, the Meeting agreed that not later than **July 2009**, each subregional working group (C/CAR/WG, CA/ANE/WG, E/CAR/WG, CAN/MEX/USA) should present their updated Work Programmes and Terms of Reference in accordance with the NACC/WG.

3.1.8 The Meeting considered the need for harmonizing the work programmes into a single NAM/CAR Regional Implementation Plan for Air Navigation Services (ANS). Likewise, it was recalled that the term "ATM" refers to all elements of the air navigation system, given due consideration to facilitate and harmonize the implementation process. It was agreed that, considering the ATM Operational Concept, ATM implementation had to be viewed as a system requiring the support of all the fields that traditionally are considered in the air navigation system. The initiative will ensure close coordination between all ANS fields, such as ATM, CNS, AGA, AIM and MET, towards a seamless ATM system in line with the operational initiatives of the Global Air Navigation Plan.

3.1.9 The Meeting decided that the main tasks should be carried out under the project development concept, if applicable, in order to obtain short-term regional enhancements that may be required by the ATM community.

3.1.10 The Meeting took note that a common harmonized regional planning approach will allow all working groups of North America, Central America and the Caribbean (NACC) to continue their own implementation tasks in line with the particular needs of the involved FIRs. The establishment of implementation projects in line with ICAO guidelines will allow the dynamic identification of requirements, periodic follow-up of attained implementation results and the optimum assignment of resources by States/Territories.

3.1.11 In this regard, the Meeting formulated the following Decision:

**DECISION NACC/DCA/3/3**

**APPROVAL OF THE NAM/CAR IMPLEMENTATION PLAN**

The North American, Central American and Caribbean Directors approved:

- a) the NAM/CAR Implementation Plan, included in **Appendix B** to this part of the Report;
- b) that NAM/CAR States, Territories and International Organizations develop their national action plans based on the air navigation system implementation plan included in the Appendix to achieve harmonized interregional implementation; and
- c) that ICAO take appropriate measures to monitor the implementation of the NAM/CAR Implementation Plan and submit NACC/WG progress reports to the NACC/DCA Meetings.

3.1.12 The Meeting agreed, as follow-up to this decision, that national plans should be implemented not later than **August 2009**, and that ICAO should monitor implementation of these plans. The deadline for the first report is **July 2009**.

3.1.13 Among the issues addressed by the NACC/WG, the Meeting took note of the importance and special attention needed by States regarding the new flight plan format that was circulated to States/Territories/International Organizations and to the 2012 implementation date. In this regard, the harmonious transition and implementation of this new flight plan format should be planned, and those States/Territories/International Organizations who are either updating or are planning to modernize their Flight Plan Processing Systems need to take this new format into account. In this regard, the Meeting formulated the following Conclusion:

## **CONCLUSION NACC/DCA/3/4      IMPLEMENTATION OF THE NEW FLIGHT PLAN FORMAT**

That, considering the importance of Amendment 1 to Doc 4444 applicable in 2012, States/Territories/International Organizations develop a harmonized transition and implementation plan to the new ICAO Flight Plan format and ATS related messages in their automated systems, and present the results of this implementation no later than the NACC/DCA/4 Meeting.

### ***Air Traffic Management (ATM)***

3.1.14            The United States informed the Meeting of the 5 June 2008, implementation of the West Atlantic Route System Plus (WATRS Plus) Route Structure Redesign and Separation Reduction Project and provided an overview of lessons learned, emphasizing that the valuable experience gained in the WATRS Plus Project could be used to pursue the expansion of area navigation (RNAV) route systems into other areas in the Caribbean (CAR) and South America (SAM) Regions.

3.1.15            COCESNA informed the Meeting of progress achieved with Safety Management System (SMS) implementation, and its incorporation into other systems (Quality Management System (QMS), Environmental Management System (EMS), and Occupational Health and Safety Management Systems (OHSMS).

3.1.16            The Dominican Republic informed the Meeting of their recent investments to enhance infrastructure, such as the new buildings for the Air Navigation and Flight Control Center, the Higher Aeronautical Science Academy, AIS/ATS/MET services automation platform, GNSS procedures development. These investments were carried out through the *Instituto Dominicano de Aviación Civil* (IDAC) for ATM/CNS systems implementation in the Dominican Republic.

### ***Aerodromes (AGA)***

3.1.17            The Secretariat informed of surveys carried out and presented at previous Meetings of the AGA/AOP/SG where progress with basic legislation and implementation of aerodrome certification made by States/Territories was indicated. States/Territories were requested to objectively provide the status of certification for each of their aerodromes in order to identify possible specialized training needs or other aspects needed in order to comply with related ICAO SARPs. The same initiative was undertaken regarding safety management systems, which occurred after the preparation of the Safety Management Manual (Doc 9859).

3.1.18            Problems with minimum requirements compliance for both emergency plans as well as the implementation of emergency operations centres (EOCs) were recognized. In this regard, problems observed during regular missions and State/Territory survey results identify the lack of awareness regarding the effects of emergency plans and EOCs to aircraft/aerodrome safety, the absence of emergency plans or lack of updates, the absence of full-scale or partial aerodrome emergency exercises, the lack of partial exercises one year after a full-scale exercise in order to correct observed deficiencies, the lack of implementation of an EOC and the lack of exercises at these centres. The results of the survey sent to States/Territories is presented in **Appendix C** to this part of the Report.

3.1.19 In this regard, the Meeting agreed to:

- send delegates to the Airport Emergency Plans and Emergency Operations Centre Seminar/Workshop for the North American, Central American and Caribbean Regions (NAM/CAR) to be held from 29 September to 3 October 2008, in Tortola, British Virgin Islands;
- send delegates to the Aerodromes Certification Seminar/Workshop that will be conducted in Spanish at the COCESNA ICCAE facilities in El Salvador the first semester of 2009; and
- complete the AGA surveys on aerodrome certification, implementation of SMS and emergency operations centres (EOCs) that have been posted for download in the eDocuments section of the ICAO NACC website no later than **10 October 2008**. If no reply is received by this date, it will be assumed that States/Territories are not in compliance with the associated standards.

3.1.20 The Meeting took note that aerodrome capacity is carried out to determine two important aspects. One is to objectively measure the capacity of the different components of an aerodrome system to handle estimated growth and traffic flow, and the other is to estimate delays in the system in relation to different levels of demand.

3.1.21 In this regard, surveys carried out and presented at the AGA/AOP/SG/6 Meeting indicated that there are several conflicts among various parties at the aerodrome who operate on the aprons. Based on this new scenario, the Meeting conducted an exhaustive discussion regarding the way to address apron demand and capacity to contribute to improved apron management. The result of the survey is attached as **Appendix D** to this part of the Report with a summary of the responses received from some States/Territories and airport operators in the CAR Region.

3.1.22 Due to the minimal responses to date, the Meeting urged States and Territories to complete the *State Questionnaire regarding the use of Aeronautical Studies to Deal with Aerodrome Deficiencies* presented as Appendix A to WP/22, and submit it to the NACC Regional Office not later than **15 October 2008**.

3.1.23 The United States informed the Meeting of efforts undertaken to implement Safety Management Systems (SMS) in certified airports within the United States as well as Safety Risk Management (SRM) with its regulatory and oversight framework and the overview of the FAA's philosophy regarding SMS, SRM and rulemaking processes.

***Communications, Navigation and Surveillance (CNS)***

3.1.24 Considering the guidelines on the preliminary elements for a consolidated regional strategy for the implementation of surveillance systems, and in order to help CAR/SAM States, Territories and International Organizations standardize 24-bit address assignment registration information for the identification of aircraft with Mode S transponders, the Meeting took note that to this effect the procedure established by ICAO for aircraft identification [Assignment of 24-bit aircraft addresses as stipulated in Annex 10, Volume III, Part I, Appendix to Chapter 9 (*Global Plan for the allocation, assignment and application of aircraft addresses*)] should be applied.

3.1.25 In this regard, the Meeting took note that Mode S transponders with 24-bit addresses are oriented towards the application of ACAS, ELT, SSR Mode S, and ATN with VDL, AMSS, and other functions. Likewise, recommendations provided for this registry were considered, which are detailed in **Appendix E** to this part of the Report. Therefore, the Meeting formulated the following Conclusion.

**CONCLUSION NACC/DCA/3/5      REGISTRATION OF 24-BIT AIRCRAFT ADDRESSES  
WITH MODE S TRANSPONDERS**

That, taking into account that the use of global communications, navigation and surveillance systems is based on assigning exclusive aircraft addresses composed of 24-bit for ACAS, ELT, SSR Mode S, and ATN with VDL, AMSS and other functionality, States and Territories:

- a) apply the procedure established by ICAO to identify aircraft assigned 24-bit aircraft addresses in accordance with Annex 10, Volume III, Part I, Chapter 9, *Global plan for the allocation, assignment and application of aircraft addresses*;
- b) publish information on this registration procedure for user application;
- c) implement mechanisms to make this 24-bit aircraft address information available to users; and
- d) present progress on the above actions to the ICAO NACC Office not later than **30 November 2009**.

3.1.26 The Meeting was informed that results of the World Radiocommunication Conference (2007) (WRC-2007) were consistent with the ICAO position and indicated that in preparation for this conference, a significant element of ICAO activities involved the early awareness and participation of Contracting States in the development of the ICAO position. Taking into account that aviation is facing rising competition for the available limited spectrum, in particular, due to non-aviation commercial telecommunications services constant growth and spectrum demand and the goal to achieve good results at the next World Radiocommunication Conference to be held in 2011 (WRC-11), the Meeting formulated the following Conclusion:

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**CONCLUSION NACC/DCA/3/6      NAM/CAR STATES SUPPORT TO THE ICAO POSITION  
FOR THE ITU WRC-11**

That NAM/CAR States, Territories and International Organizations, in order to prepare and support the ICAO position for the ITU World Radiocommunication Conference – 2011 (WRC-11):

- a) support and follow-up on the work of ICAO to prepare and update its position for WRC-11;
- b) appoint a point-of-contact to serve as liaison with ICAO and with the national radio frequency spectrum management authority to coordinate matters concerning WRC-11 (February 2009);
- c) participate actively in Organization of American States (OAS) CITEL meetings in preparation for WRC-11;
- d) participate in any meetings and seminars convened by ICAO, which explain and analyze the WRC-11 position; and
- e) actively participate in WRC-11 in support of the ICAO position.

3.1.27      The Meeting was informed of ATM automation implementation activities carried out in the CAR and NAM Regions, taking into account present automated system(s) capacities available, communications networks and valid agreements for data exchange, as well as considerations and aspects taken into account by the NAM/CAR Regions regarding implementation of ATM automation interfaces for Current Flight Plan (CPL) use. In **Appendix F** to this part of the Report, the description of these activities is presented. In this regard, the Meeting agreed to formulate the following Conclusion.

**CONCLUSION NACC/DCA/3/7      USE OF THE CURRENT FLIGHT PLAN (CPL) AND  
REVIEW OF AUTOMATED SYSTEM(S) CAPACITIES**

That, as part of ATM automation implementation, taking into account the regional strategy for integrating ATM automated systems and the Interface Control Document (ICD) approved by GREPECAS, States/Territories and International Organizations:

- a) consider the use of the Current Flight Plan (CPL) for the exchange of updated flight plan data;
- b) study and review the ATM automation capacities/functionalities of their corresponding area control centres to meet future implementation requirements;
- c) inform results of actions in a) and b) to the ICAO NACC Office **not later than 31 September 2009**; and



- d) conduct CPL tests between adjacent area control centres where benefits related to this implementation could result, informing results to the ICAO NACC Office **not later than February 2010.**

3.1.28 Cuba informed the Meeting of problems experienced in their direct links between Miami and Havana ACCs through the VSAT-MEVA station and the difficulty with resolution. Therefore, the Meeting agreed that these issues be considered by the MEVA Technical Management Group; the United States representative agreed to follow-up on this issue with FAA.

3.1.29 The Meeting was informed by the United States regarding their participation with MEVA II telecommunications programmes, the MEVA II/REDDIG interconnection, the AMHS System environment activities and the AFTN interconnection with Trinidad and Tobago.

3.1.30 COCESNA described their advances with their AMHS system and the agreements achieved for exchange and radar data sharing within Central America, with Mexico and with the Caribbean (Jamaica, Cayman Islands and Cuba).

#### ***Aeronautical Meteorology (MET)***

3.1.31 The Meeting recognized that aviation meteorological (MET) service in the Caribbean (CAR) Region is of crucial importance for the safety of air transport operations, particularly with the noted frequency of regional convective thunderstorm clouds, reduced visibility, tropical cyclones and active volcanoes. It was noted with concern that MET deficiencies have persisted over a long period of time in the CAR States/Territories. In recent years, frequent reports have been received from the users (IATA) regarding shortfalls, errors and discrepancies related to operational meteorological (OPMET) data from the CAR States/Territories, which is to say, METAR meteorological reports and terminal aerodrome forecasts (TAF) have created safety issues for the users.

3.1.32 In this regard, the Meeting took note of the main objectives of the NACC Office Special Implementation Project (SIP) that will provide assistance to MET authorities of CAR States/Territories in order to eliminate deficiencies with the provision of meteorological services used for international air navigation and enhance the level of implementation of Annex 3 Standards and Recommended Practices (SARPs) in the regional facilities and services specified in the CAR/SAM ANP.

3.1.33 Special attention will be given to standardization of the formats of meteorological messages and bulletins by strictly following the formats set up by ICAO and the World Meteorological Organization (WMO). Deficiencies related to the use of World Area Forecast System (WAFS) products, the provision of SIGMET services on tropical cyclones, convective activity and volcanic ash cloud advisories, and the content and quality of flight documentation were also addressed. Likewise, the possibility to implement a tsunami warning system for aerodromes in the CAR Region will be analyzed. The SIP consists of:

- a) visits by the ICAO NACC Aeronautical Meteorology Regional Officer to Antigua, Bahamas, Belize, Guatemala, Nicaragua and Trinidad and Tobago;

- b) two one-week seminars on Aeronautical Meteorology Services, one in English and one in Spanish, to be held during the first quarter of 2009 (hosted by a Spanish-speaking Central American State (Nicaragua), and an English-speaking Caribbean State/Territory (Jamaica); and
- c) attention to aeronautical meteorology service matters, mainly those concerning OPMET data exchange, dissemination of SIGMET messages and use of WAFS products.

3.1.34 Therefore, the Meeting formulated the following Conclusion:

**CONCLUSION NACC/DCA/3/8 IMPROVEMENTS IN MET SERVICES AND AERONAUTICAL CHART PRODUCTION**

That the following be included in the Regional Technical Co-operation Project to improve MET and AIS services of the States/Territories:

- a) training programmes for MET personnel;
- b) OPMET information exchange in CAR States;
- c) follow-up on the implementation of the recommendations formulated in the 2008 MET SIP for the CAR Region;
- d) improved operational coordination and provision of MET services;
- e) participation of MET personnel in ICAO meetings;
- f) establishment of agreements between Civil Aviation Administrations and MET Authorities of CAR States / Territories / International Organizations; and
- g) aeronautical chart production.

Note: Information to be included in the CAR Regional Project and presented to the CAR Regional Project Steering Committee Meeting in **January 2009**.

***Aeronautical Information Services (AIS)***

3.1.35 The Secretariat informed the Meeting of the Global AIS Congress that was held in Madrid, Spain, in June 2006. The event was facilitated by the European Organization for Safety of Air Navigation (EUROCONTROL) in partnership with ICAO, and the essential role of AIS in the global evolution of ATM was analyzed. The key drivers for change were identified, the complex issues associated with the evolution were reviewed, and the next steps were examined. The Congress supported Recommendation 1/8 of the AN-Conf/11 and began to define a future high-level view as to the shape, nature and content of a strategy for the evolution from AIS to AIM. These recommendations are attached as **Appendix G** to this part of the Report.

3.1.36 The Meeting took note that the current ATM system is based on subsystems and military, AIS, MET and ATFM data. This implies a series of transaction points where aeronautical information integrity is potentially reduced as the same information is manually re-entered a number of times in discrete systems. AIM will ensure the integrity of aeronautical information throughout the ATM/CNS system.

3.1.37 In view of the complexity of the issues involved in the transition from AIS to AIM, ICAO is planning several tasks that could provide States with guidelines and specific activities to assist with the transition. Those guidelines and activities will be prepared by an international group (AIS-AIM/SG) composed of experts in the field. The principal outputs are contained in **Appendix H** to this part of the Report. The migration from AIS to AIM will examine all interrelated aspects including information architecture, safety and new SARPs. Therefore, the Meeting adopted the following Conclusion:

**CONCLUSION NACC/DCA/3/9      TRANSITION FROM AIS/MAP TO THE NEW AIM CONCEPT**

That States/Territories /International Organizations of the CAR Region:

- a) give priority to recommendations 6, 7 and 8 issued by the 2006 AIM Global Congress (Appendix G to this part of the Report);
- b) review the first version of the “*Strategic Project for the Transition to AIM*” to ensure implementation of appropriate actions for the transition from AIS to AIM (Appendix H to this part of the Report) and provide comments by **August 2009**;
- c) assign qualified personnel for development of new tasks and appropriate actions for transition from AIS to AIM; and
- d) include the AIS – AIM transition process in the CAR Regional Project.

3.1.38 The Meeting recalled that through GREPECAS Conclusion 14/38, CAR/SAM States, Territories and International Organizations were requested to carry out an AIP Audit using the AIP Audit Assistant (AAA) tool developed by EUROCONTROL. This audit tool consists of a set of checklists for each AIP item (COM, ATM, MET, AGA, SAR, MIL, etc.) that can determine any undetectable AIP discrepancies without performing a systematic search procedure.

3.1.39 Some problems that could be identified through the AAA tool are:

- poor management of information systems;
- minimum control with duplication of information in different systems;
- lack of information standardization;
- lack of integrated information;
- fragmentation of data sharing could result in legal, institutional, organizational, operational and technical conflicts; and
- poor interaction with information/aeronautical data providers.

3.1.40 COCESNA informed the Meeting on AIS/MET System implementation progress and improvements in Honduras and Panama.

3.1.41 The Meeting noted the successful implementation of the Contingency Plan NOTAM between Cuba and COCESNA during the 2008 hurricane season, as well as the recently signed contingency plan NOTAMs between COCESNA and Cayman Islands. The implementation of contingency plan NOTAM will be incorporated into the NACC/WG tasks.

### **3.2 Air Navigation Deficiencies**

3.2.1 The Meeting was informed of the current status of States/Territories priority “A”, “B” and “U” air navigation deficiencies in each of the air navigation fields, together with actions reported by States/Territories for resolving the aforementioned deficiencies and improvements to the GREPECAS Air Navigation Deficiencies Database (GANDD).

3.2.2 The Meeting identified and commented on various problems when using the GANDD and agreed on the following actions by States/Territories/International Organizations:

- verify their points-of-contact to access the GANDD and inform the NACC Office of changes by **26 September 2008**; and
- identify problems with updating and/or using the GANDD by contacting Gabriel Meneses, NACC Office Focal Point ([gmeneses@mexico.icao.int](mailto:gmeneses@mexico.icao.int)) and copy: [icao\\_nacc@mexico.icao.int](mailto:icao_nacc@mexico.icao.int)

3.2.3 In this regard, the Secretariat provided the Meeting with a demonstration on the GANDD, performing files display, introduction of corrective actions and other possible actions using the GANDD.

3.2.4 The Meeting was briefed on the consultation process to be followed by GANDD points-of-contact and agreed that the following actions be taken on recommendations by States/Territories and/or International Organizations:

- a) download and use documentation available in the public section of the GANDD webpage for use in the classification and management of air navigation deficiencies;
- b) instruct points-of-contact to act as air navigation field coordinators within their offices to report/propose amendments to the GANDD; and
- c) States/Territories that have not made use of the GANDD use it to report updates/amendments to air navigation deficiencies.

3.2.5 The Meeting took note that according to the Aviation Safety Board Conclusion ASB 8/2, States were requested to carry out a risk assessment for each of their “U” deficiencies (State letter EMX0719 dated 23 June 2008 refers), with a target date of 15 August 2008. Therefore, the Meeting agreed to urge States/Territories/International Organizations to carry out a risk evaluation for each State/Territory “U” deficiency in accordance with Draft Conclusion ASB 8/2, submitting their results not later than **26 September 2008**, for GREPECAS/15. The ICAO NACC Office will have all deficiency updates on the GANDD no later than **28 September 2008**. The application of “last resort action,” as stated in GREPECAS Conclusion 13/92 will be reviewed by GREPECAS/15.

## **APPENDIX A**

### **TERMS OF REFERENCE OF THE NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN WORKING GROUP (NACC/WG)**

#### **1. Terms of Reference**

- a) promote development of the CAR/SAM and NAM Air Navigation Plans and other relevant regional documentation, in compliance with ICAO SARPs, as required;
- b) facilitate the implementation of air navigation systems and services as identified in the CAR/SAM and NAM Air Navigation Plans;
- c) address emerging aviation issues focusing on continued improvements to operational efficiency through enhanced coordination, harmonised procedures, interoperability of networks and implementation of new technologies;
- d) promote implementation initiatives and associated technologies to improve safety, increase operational and economic efficiency and/or capacity of regional Air Navigation Services (ANS);
- e) harmonise implementation of performance objectives related to ANS with regard to the GPIs of Doc 9750;
- f) enhance airspace organisation and management (AOM) structure through the improvement of ATS/RNAV routes and/or tracks with entry/exit points on Flight Information Region (FIR) boundaries;
- g) develop air traffic flow management (ATFM) procedures designed to improve efficiency and economy, increase capacity, and overcome existing limitations;
- h) share information on implementation initiatives for enhancing compatibility of air traffic operations;
- i) support the implementation initiatives associated with ICAO's strategic objectives; and
- j) recommend to the NAM/CAR Directors General initiatives to the NAM/CAR Regional Implementation Plan and any necessary steps for implementation.

#### **2. Work Programme**

- a) review and recommend deadlines for implementation of facilities, services and procedures to improve ANS in the CAR/NAM Regions;
- b) develop guidelines and make recommendations for States/Territories/International Organizations to implement their ANS national plans;

- c) make recommendations to prepare proposal for amendments to the Doc 7030 and Doc 8733 to satisfy ANS expectations and requirements;
- d) monitor the implementation of air navigation facilities and services to ensure interregional harmonization, taking due account of performance measurements, environmental benefits and operational issues;
- e) provide recommendations to improve human resources planning and development in line with ICAO guidelines;
- f) promote close cooperation between States, Territories and International Organizations and users to optimize the use of available expertise and resources;
- g) conduct activities in the most efficient manner with a minimum of formality and documentation, using electronic tools and telephone conferences to ensure complete exchange of information, when required;
- h) associate in a logical manner the implementation of initiatives with the seven components of Doc 9854, (AOM, DCB, AO, TS, CM, AUO ATMSDM) as appropriate;
- i) avoid duplication of work; and
- j) quantify cost/benefit analysis in terms of performance measures, deadlines, responsible body for implementation and results as well as human factors performance;

### 3. **Membership**

All ICAO Contracting States, Territories and International Organizations which are accredited to the ICAO NACC Regional Office and Colombia shall be members of the NACC/WG. Other States adjacent to the CAR and NAM Regions may be invited to participate in the NACC WG.

### 4. **Working Methods**

- a) the Chairperson of the NACC/WG will be a representative from the host State/Territory/International Organization for the duration of the Meeting;
- b) at the beginning of each Meeting, a Vice-Chairperson will be elected for the duration of the Meeting; and
- c) the Members of the NACC/WG will conduct coordination of works as follows:
  - via written correspondence, i.e. e-mail, fax, etc.
  - via phone and teleconference calls;
- d) meetings will be convened every three years or when necessary;

**5. Meeting Sites**

- a) the ICAO NACC Regional Office will convene the NACC/WG Meeting at least six months before holding it;
- b) the NACC/WG will meet in accordance with the following rotational scheme: Central America, North America, Eastern Caribbean (E/CAR) and Central Caribbean (C/CAR); and
- c) any member States/Territory/International Organizations may, at any time, offer to host a NACC/WG meeting.

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**APPENDIX B**



**INTERNATIONAL CIVIL AVIATION ORGANIZATION**

**NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN  
REGIONAL OFFICE**

**AIR NAVIGATION IMPLEMENTATION PLAN**

**FOR THE CAR/NAM REGIONS**

1. **Background**

1.1 The Global Plan describes a strategy aimed at achieving near and medium term ATM benefits on the basis of available and foreseen aircraft capabilities and ATM infrastructure. It contains guidance on ATM improvements necessary to support a uniform transition to the ATM system envisioned in the global ATM operational concept (Doc 9854). The operational concept presents the ICAO vision of an integrated, harmonized and globally interoperable ATM system.

1.2 The Strategic Vision is *“To foster implementation of a seamless, global air traffic management system that will enable aircraft operators to meet their planned times of departure and arrival and adhere to their preferred flight profiles with minimum constraints and without compromising agreed levels of safety.”*

1.3 This vision is refined in the Mission of Implementation as follows:

*To develop a seamless, globally coordinated system of air navigation services that will cope with worldwide growth in air traffic demand while:*

- *improving upon the present levels of safety;*
- *improving upon the present levels of regularity;*
- *improving upon the overall efficiency and capacity of airspace and airports;*
- *improving operations allowing for capacity increase while minimizing fuel consumption and aircraft engine emissions;*
- *increasing the availability of user-preferred flight schedules and profiles; and*
- *minimizing differing equipment carriage requirements between regions.*

1.4 Having a very strategic geographical location at the confluence of ATS routes connecting the major destinations, the airspace has become a vital link to the smooth flow of traffic between major airspace in NAM and CAR Regions.

1.5 The complexities of Caribbean airspace are unique in nature. Based on the topography, various types of aircraft from Helicopter to bigger type of jet aircraft are being operated in various sectors. Restricted airspace for Military flying and the mixed type of aircraft with unmatched capabilities occupy the airspace and their conflicting demands need to be accommodated.

1.6 Civil commercial, Military, general Aviation, Space research, hobby and adventure flying, flying training, helicopter flying have been constantly increasing and thereby the airspace has been getting congested day by day. Technological innovations provide more simple and flexible solutions not only for transportation needs but also for national security and economic development.

1.7 Entry of Low Cost carriers with attractive flying schemes has boosted the traffic in the recent past and the air transport industry is in the upswing with more and more air operations. These carriers have not only become a potential competitors to the currently established airlines but also a potential challengers to the ATM system as the airspace/ airports are getting more and more congested and leading to delay and holding resulting in burning of extra fuel.

1.8 Military flying activities with frequent airspace and airport closures implies additional civil flight operations and workload on the capacity and air traffic management point of view.

1.9 Recently the rate of traffic growth at an average of 3.3% with the advent of new routes and airlines commencing operations as Caribbean destinations have become more popular for international tourist and commercial interest. The total of operations of the main airports of the CAR Region in the period 2002 to 2005 reflected a positive trend of 1.92%, the global trend is 6%. The main rates of traffic growing are:

Cuba	6.41%
Dominican Republic	5.74%
Belize	4.77%
El Salvador	3.06%
México	2.57%
U. S. (P. R) (V. I)	2.51%
Guatemala	2.51%
Costa Rica	2.42%

1.10 More challenges are in the horizon for ATM seamless system in CAR and NAM Regions. It is expected more and more air operations among CAR and NAM Regions which will require gradual operational developments of ATM system to ensure an optimum air traffic flow towards among certain areas or through them, during periods in which the demand exceeds or is foreseen to exceed the available capacity.

1.11 New aircraft are capable of extremely accurate navigation during all phases of flight and many are equipped with satellite based communication. Aircraft operations growth also has resulted in a relatively young airline fleet, most equipped with some or all of enhanced capabilities.

1.12 Implementation programmes are required to be addressed with a performance-based approach, in order to achieve improvements to the air navigation system and environmental benefits, thus preventing costly implementation processes.

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## **NAM/CAR IMPLEMENTATION PLAN**

### **SEAMLESS ATM SYSTEM**

#### **REGIONAL PLANNING PROCESS**

The regional planning process should be conducted in accordance with the global plan initiatives (GPIs) of the Global Plan (Doc 9750) and the ICAO vision for an integrated ATM system, harmonized and interoperable, as established in the Global ATM Operational Concept (Doc 9854).

The objective is to achieve the maximum level of inter-operability and harmonization among sub-systems for a seamless and interoperable regional ATM system for all users during all phases of flight, complying with agreed levels of safety, providing optimum economic operations, to be environmentally sustainable and to fulfil national aviation security requirements.

The planning should be developed based on clearly defined performance objectives. The planning horizon should be focused on the strategies of development, activities or main tasks for two periods – that of less than 5 years (short-term) and 6 to 10 years (medium-term). Some already identified tasks to be analyzed beyond this period may be included if they conform to ICAO ATM requirements.

#### **ATM PERFORMANCE OBJECTIVES**

The performance objectives for regional ATM work programmes should be developed using a performance approach so as to reflect the necessary activities needed to support regional ATM system implementation.

During its life cycle, the performance objectives may change in a dynamic manner depending on the ATM system's evolution; therefore, these should be coordinated with and available to all interested parties within the ATM Community in order to achieve timely communication throughout the implementation process. The establishment of collaborative decision making processes (CDM) ensures that all stakeholders are involved in and concur with the requirements, tasks and timelines.

The following sections describe aspects pertaining to the performance objectives and required changes, and how these changes foster harmonized improvements throughout the regional ATM system.

##### ***Benefits***

The ATM implementation strategies should provide a group of common benefits for all stakeholders and be achieved through the operational and technical activities planned in each performance objective. These benefits should be in accordance with the ICAO strategic objectives.

##### ***Identification of work***

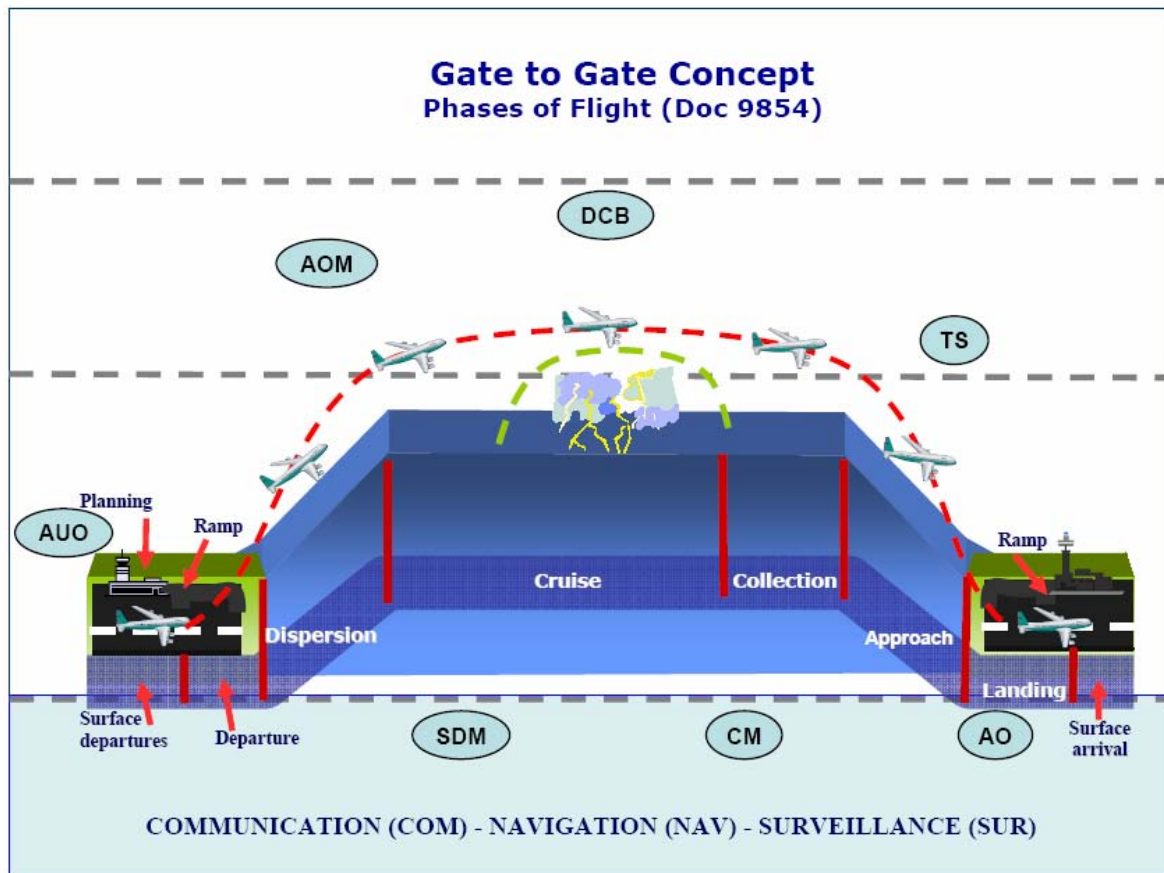
Each task should be identified firstly by the activity associated with components of the ATM system when describing the tasks. According to the Doc 9854, the designators for ATM components are as follows:

- **AOM** — Airspace organization and management
- **DCB** — Demand and capacity balancing
- **AO** — Aerodrome operations

- **TS** — Traffic synchronization
- **CM** — Conflict management
- **AUO** — Airspace user operations
- **ATM SDM** — ATM service delivery management

Each designator looks to link ATM system component pertains to tasks and activities related to phases of air operations, ATC en-route, terminal and airport, capacity management, airspace management including its flexible use and aeronautical information management.

The infrastructure includes the ground technical systems and capacity required to support operations such as communications, navigation and surveillance, data processing, inter-operability of systems, information management system and spectrum management, including both civil and military systems. The following diagram shows the ATM components in relation to the phases of flight:



This means the need to develop short and medium term work programmes, focusing on the necessary changes to the system in which a clear work commitment will be carried out by the parties involved.

The regional work programmes should define additional tasks and activities, maintaining a direct relation with ATM system components such as airspace organization, civil-military coordination, human factors, aeronautical regulations, operational safety management systems and environmental protection, among others.

The framework for regional activities should also include the coordination of activities with military authorities who play an important role in helping to ensure that the best use is made of the available airspace resources by all airspace users while still safeguarding national security.

The following principles should be considered when developing work programmes:

- The work should be organized using project management techniques and performance-based objectives in alignment with the Global Plan and the strategic objectives of ICAO. The work programmes should be in accordance with the progress, characteristics and regional implementation needs.
- All activities involved in accomplishing the performance objectives should be designed following strategies, concepts, action plans and roadmaps which can be shared among States to align the regional work with the fundamental objective of achieving interoperability and seamlessness to the highest level.
- The planning of all activities should include optimizing human resources, as well as encouraging dynamic use of electronic communication between States such as the Internet, videoconferences, teleconferences, e-mail, telephone and facsimile. It should be ensured that all resources will be efficiently used, avoiding any duplication or unnecessary work.
- The new work process and methods should ensure that performance objectives can be measured against timelines and the regional progress achieved can be easily reported to the Air Navigation Commission and to the ICAO Council.

#### *Status*

The status is mainly focused on monitoring the progress of the implementation activity as it progresses toward a specific completion date. The status of the activity is defined as follows:

- |                   |   |
|-------------------|---|
| <b>■Valid</b>     | the feasibility and benefits of an activity has been confirmed, work has been initiated but the activity itself has not been finalized. |
| <b>■Completed</b> | implementation of the activity has been finalized by the involved parties.  |
| <b>■Tentative</b> | the feasibility and benefits of an activity investigated or to be developed.  |

A tentative status indicates a potential activity; normally this activity will not be included in the regional planning documents unless it is an ICAO defined requirement.

#### *Relationship between Performance Objectives and Global Plan Initiatives*

The 23 GPIs provide a global strategic framework and are designed to contribute to achieving the regional performance objectives and to support the logical progression of regional implementation work programmes.

Each performance objective should be referenced to the pertinent GPIs. The goal is to ensure that the work process will be integrated into the global planning framework

#### **NATIONAL ACTION PLANS**

States should develop their own national action plans reflecting the specific activities or tasks along with the expected benefits to be obtained and the date by which each should be completed according to the national needs and based on the regionally-agreed performance objectives.

The activities should include the necessary detailed actions to successfully achieve the national performance objectives, relating these activities with the short and medium term regionally-agreed performance objectives.

National plans should identify the individuals or teamwork responsible for achieving the objectives as well as a means for monitoring and eventually reporting progress on the actions to ICAO. The responsibilities and time-tables should be clearly defined so that the involved parties are aware of their commitments throughout the planning process.

Additionally, national action plans should include adequate means to provide information on implementation progress achieved such as through a periodic reporting process. This facilitates senior management levels' efforts to prioritize the actions and resources required. The same information provided to ICAO will allow feedback and assistance to be provided specific for each Region as they work to achieve a Global ATM system.

### CAR/SAM REGIONS PERFORMANCE OBJECTIVES

OPTIMIZE THE ATS ROUTE STRUCTURE EN-ROUTE AIRSPACE			
Benefits			
Environment	<ul style="list-style-type: none"><li>• reductions in fuel consumption;</li><li>• ability of aircraft to conduct flight more closely to preferred trajectories;</li><li>• increase in airspace capacity;</li><li>• facilitate the utilization of advanced technologies (e.g., FMS based arrivals) and ATC decision support tools (e.g., metering and sequencing), thereby increasing efficiency.</li></ul>		
Efficiency			
Strategy (2008 - 2015)			
TASK	DESCRIPTION	START- END	STATUS
AOM	En-route airspace		
	Develop regional action plan.		
	Develop Airspace Concept based in CAR /SAM PBN Roadmap, in order to design and implement a trunk route network, connecting major city pairs in the upper airspace and for transit to/from aerodromes, on the basis of PBN and, in particular, RNAV/5, taking into account interregional harmonization.		
	Develop performance measurement plan.		
	Formulate safety plan.		
	Establish collaborative decision making (CDM) process.		
	Publish national regulations for aircraft and operators approval using PBN manual as guidance material.		
	Identify training needs and develop corresponding guidelines.		
	Formulate system performance monitoring plan.		
	Monitor implementation progress in accordance with CAR/SAM PBN implementation roadmap and State implementation plan.		
References	GPI/5: performance-based navigation, GPI/7: dynamic and flexible ATS route management, GPI/8: collaborative airspace design and management, GPI/10: terminal area design and management, GPI/11: RNP and RNAV SIDs and STARs and GPI/12: FMS-based arrival procedures.		



OPTIMIZE THE ATS ROUTE STRUCTURE IN TERMINAL AIRSPACE			
Benefits			
Environment	<ul style="list-style-type: none"><li>• reductions in fuel consumption;</li><li>• ability of aircraft to conduct flight more closely to preferred trajectories;</li><li>• increase in airspace capacity;</li><li>• facilitate utilization of advanced technologies (e.g., FMS based arrivals) and ATC decision support tools (e.g., metering and sequencing), thereby increasing efficiency.</li></ul>		
Efficiency			
Strategy (2008 - 2015)			
TASK	DESCRIPTION	START- END	STATUS
AOM	<i>In terminal airspace</i>		
	Develop State PBN implementation plan.		
	Develop Airspace Concept based in CAR /SAM PBN Roadmap, in order to design and implement optimized standard instrument departures (SIDs), standard instrument arrivals (STARs), instrument flight procedures, holding, approach and associated procedures, on the basis of PBN and, in particular RNAV/1 and Basic-RNP12.		
	Develop performance measurement plan.		
	Formulate safety plan.		
	Establish collaborative decision making (CDM) process.		
	Publish national regulations for aircraft and operators approval using PBN manual as guidance material.		
	Identify training needs and develop corresponding guidelines.		
	Formulate system performance monitoring plan.		
	Develop a regional strategy and work programme for implementation.		
	Monitor implementation progress in accordance with CAR/SAM PBN implementation roadmap and State implementation plan.		
References	GPI/5: performance-based navigation, GPI/7: dynamic and flexible ATS route management, GPI/8: collaborative airspace design and management, GPI/10: terminal area design and management, GPI/11: RNP and RNAV SIDs and STARs and GPI/12: FMS-based arrival procedures.		

IMPLEMENT RNP APPROACHES			
Benefits			
Efficiency	• Improvements in capacity and efficiency at aerodromes.		
Safety	• Improvements in safety at aerodromes.		
Strategy (2008-2015)			
TASK	DESCRIPTION	START- END	STATUS
	Develop State PBN implementation plan.		
	Develop Airspace Concept based in CAR /SAM PBN Roadmap, in order to design and implement RNP APCH with Baro-VNAV in accordance with assembly resolution A36-23, and RNP AR APCH where beneficial.		
	Develop performance measurement plan.		
	Formulate safety plan.		
	Establish collaborative decision making (CDM) process.		
	Publish national regulations for aircraft and operators approval using PBN manual as guidance material.		
	Identify training needs and develop corresponding guidelines.		
	Formulate system performance monitoring plan.		
	Monitor implementation progress in accordance with CAR/SAM PBN implementation roadmap and State implementation plan.		
References	GPI/5: performance-based navigation, GPI/7: dynamic and flexible ATS route management, GPI/8: collaborative airspace design and management, GPI/10: terminal area design and management, GPI/11: RNP and RNAV SIDs and STARs and GPI/12: FMS-based arrival procedures.		

ENHANCE CIVIL/MILITARY COORDINATION AND CO-OPERATION			
Benefits			
Efficiency	<ul style="list-style-type: none"><li>• increase airspace capacity;</li></ul>		
Continuity	<ul style="list-style-type: none"><li>• allow a more efficient ATS route structure</li><li>• ensure safe and efficient action in the event of unlawful interference;</li><li>• make available military restricted airspace more hours of the day so that aircraft can fly on their preferred trajectories; and</li><li>• improve search and rescue services.</li></ul>		
Strategy (2008-2012)			
TASK	DESCRIPTION	START- END	STATUS
AOM	Develop guidance material on civil/military coordination and co-operation to be used by States/Territories to develop national policies, procedures and rules.		
	Establish civil/military coordination bodies.		
	Arrange for permanent liaison and close cooperation between civil ATS units and appropriate air defence units.		
	Conduct a regional review of special use airspace.		
	Develop a regional strategy and work programme for implementation of flexible use of airspace in a phased approach beginning with more dynamic sharing of restricted airspace while working towards full integration of civil and military aviation activities by <b>2012</b> .		
	Monitor implementation progress.		
References	GPI/1: flexible use of airspace.		

ALIGN UPPER AIRSPACE CLASSIFICATION			
Benefits			
Efficiency	<ul style="list-style-type: none"><li>• better utilization of data link communication;</li><li>• optimize use of flight plan data processing systems;</li><li>• enhance airspace management coordination, message exchange capabilities and utilization of flexible and dynamic airspace management techniques;</li><li>• harmonization of interregional coordination processes;</li></ul>		
Continuity	<ul style="list-style-type: none"><li>• improvement of airspace interoperability and seamlessness; and</li><li>• ensure the provision of positive air traffic control services to all aircraft operations.</li></ul>		
Strategy (Target: 2008)			
TASK	DESCRIPTION	START- END	STATUS
AOM	Develop a regional implementation strategy and work programme for the implementation of ICAO Annex 11 airspace Class A above FL 195.		
	Identify key stakeholders, ATCOs, pilots, and relevant international organisations for coordination and cooperation on changes for new airspace organization, using a CDM process.		
	Develop new national airspace organization in accordance with ICAO provisions, as needed.		
	Coordinate changes for regional and national documents; <ul style="list-style-type: none"><li>▪ Doc 8733, CAR/SAM ANP;</li><li>▪ AIP; and,</li><li>▪ ATS letters of agreement.</li></ul>		
	Carry out improvements in ground systems to support new airspace organization configurations, as necessary.		
	Publish national regulatory material for implementation of new rules and procedures to reflect airspace organizational changes.		
	Train ATCOs and pilots in new procedures, including all civil and military airspace users, as required;		
	Monitor implementation progress.		
	References		

IMPROVE DEMAND AND CAPACITY BALANCING			
Benefits			
Environment	<ul style="list-style-type: none"><li>• reduction in weather- and traffic-induced holding, leading to reduced fuel consumption and emissions;</li><li>• improved and smoother traffic flows;</li><li>• improved predictability;</li><li>• improved management of excess demand for service in ATC sectors and aerodromes;</li><li>• improved operational efficiency;</li><li>• enhanced airport capacity;</li><li>• enhanced airspace capacity; and</li><li>• improved safety management.</li></ul>		
Efficiency			
Safety			
Strategy Near term (2008)			
TASK	DESCRIPTION	START- END	STATUS
DCB	Identify key stakeholders (ATC service providers and users, military authorities, airport authorities, aircraft operators and relevant international organisations) for purposes of coordination and cooperation, using a CDM process.		
	Identify and analyse traffic flow problems and develop methods for improving efficiencies on a gradual basis, as needed, through enhancements in current: <ul style="list-style-type: none"><li>○ airspace organization and management (AOM) and ATS routes structure (unidirectional routes) and SID and STARS;</li><li>○ communication, navigation and surveillance systems;</li><li>○ aerodrome capacity;</li><li>○ ATS capacity;</li><li>○ training for pilots and Controllers; and</li><li>○ ATS letters of agreement.</li></ul>		
	Define common elements of situational awareness between FMUs; <ul style="list-style-type: none"><li>○ common traffic displays,</li><li>○ common weather displays (Internet),</li><li>○ communications (teleconferences, web), and</li><li>○ daily teleconference/messages methodology advisories.</li></ul>		
	Develop methods to establish demand/capacity forecasting;		
	Develop a regional strategy and work programme for harmonized implementation of ATFM service.		

Medium term (2010)			
	Develop a regional strategy for the implementation of flexible use of airspace (FUA); <ul style="list-style-type: none"> <li>o assess use of airspace management processes;</li> <li>o improve current national airspace management to adjust dynamic changes in tactical stage to traffic flows;</li> <li>o introduce improvements in ground support systems and associated procedures for the extension of FUA with dynamic airspace management processes;</li> <li>o implement dynamic ATC sectorization in order to provide the best balance between demand and capacity to respond in real-time to changing situations in traffic flows, and to accommodate in short-term the preferred routes of users.</li> </ul>		
	Define common electronic information and minimum databases required for decision support and alerting systems for interoperable situational awareness between Centralized ATFM units.		
	Develop regional procedures for efficient and optimum use of aerodrome and runway capacity.		
	Develop a regional ATFM procedural manual to manage demand/capacity balancing.		
	Develop a regional strategy and framework for the implementation of a Centralized ATFM unit.		
	Develop operational agreements between Centralized ATFM units for interregional demand/capacity balancing.		
	Monitor implementation progress.		
References	GPI/1: flexible use of airspace; GPI/6: air traffic flow management; GPI/7: dynamic and flexible ATS route management; GPI/9: Situational awareness; GPI/13: aerodrome design and management; GPI/14: runway operations; and GPI/16: decision support and alerting systems.		

IMPROVE ATM SITUATIONAL AWARENESS			
Benefits			
Efficiency	<ul style="list-style-type: none"><li>enhanced traffic surveillance;</li><li>enhanced collaboration between flight crew and the ATM system;</li><li>improved collaborative decision-making through sharing electronic aeronautical data information;</li><li>reduced of workload for both pilots and controllers;</li><li>improved operational efficiency;</li><li>enhanced airspace capacity;</li><li>improved implementation on a cost-effective basis;</li></ul>		
Safety	<ul style="list-style-type: none"><li>improved available electronic terrain and obstacle data in the cockpit;</li><li>reduced of the number of controlled flight into terrain related accidents; and</li><li>improved safety management.</li></ul>		
Strategy Near term (2010)			
TASK	DESCRIPTION	START- END	STATUS
SDM	Identify parties concerned. Identify the automation level required according to the ATM service provided in airspace and international aerodromes, assessing <ul style="list-style-type: none"><li>operational architecture design,</li><li>characteristics and attributes for interoperability,</li><li>data bases and software, and</li><li>technical requirements.</li></ul>		
	Improve ATS interfacility communication.		
	Implement flight plan data processing system and electronic transmission tools.		
	Implement radar data sharing programs where benefits can be obtained.		
	Develop situational awareness training programmes for pilots and controllers.		
	Implement ATM surveillance systems for situational traffic information and associated procedures.		
	Implement ATS automated message exchanges, as required <ul style="list-style-type: none"><li>FPL, CPL, CNL, DLA, etc.</li></ul>		
	Implement automated radar handovers, where able.		
	Implement ground and air electronic warnings, as needed <ul style="list-style-type: none"><li>Conflict prediction</li><li>Terrain proximity</li><li>MSAW</li><li>DAIW</li><li>Surveillance system for surface movement.</li></ul>		
	Implement data link surveillance technologies and applications: ADS, CPDLC, AIDC, as required.		

<i>Medium term (2015)</i>			
	Implement additional/advanced automation support tools to increase sharing of aeronautical information <ul style="list-style-type: none"><li>○ ETMS or similar</li><li>○ MET information</li><li>○ AIS/NOTAM dissemination</li><li>○ Surveillance tools to identify airspace sector constraints</li><li>○ A-SMGC in specific aerodromes, as required.</li></ul>		
	Implement teleconferences with ATM stakeholders.		
	Monitor implementation progress		
<b>References</b>	GPI/1: flexible use of airspace; GPI/6: air traffic flow management; and GPI/7: dynamic and flexible ATS route management; GPI/9: Situational awareness; GPI/13: aerodrome design and management; GPI/14: runway operations; and GPI/16: decision support and alerting systems; GPI/17: implementation of data link applications; GPI/18: aeronautical Information; GPI/19: meteorological systems.		



# APPENDIX C

## RESULTS OF THE EMERGENCY PLAN AND EMERGENCY OPERATION CENTRES (EOC) SURVEY TO STATES/TERRITORIES

### AERODROMES INCLUDED IN THE AIR NAVIGATION REGIONAL PLAN (ANP)

**Table 01 – Survey Results CAR Region**

STATE / TERRITORY	Number of AERODROMES	EMERGENCY PLANS				EOC		
		How many		Updated exercises		How many	Updated (1)	Planned
		Have	Updated (1)	Full (2)	Partials (3)			
Anguilla	1	1	1	1	1	1	1	
Antigua and Barbuda	1							
Aruba	1							
Bahamas	11							
Barbados	1	1	1	1	1	1	1	
Belize	1	1	1	1	1	1	1	
Bermuda	3							
British Virgin Islands	2	2	2	2	2	2	2	
Cayman Islands	2							
Costa Rica	4	4	4	4	4	4	4	
Cuba	7	7	7	7	7	7	7	
Dominican Republic	7							
El Salvador	2							
French Antilles	4	4	4			4	4	
Grenada	2							
Guatemala	4							
Haiti	2							
Honduras	4	4	4	4	4	4	4	
Jamaica	2	2	2	2	2	2	2	
Mexico	42	33	33	33	33	33	33	
Montserrat	1	1	1	1	1	1	1	
Netherlands	5	3	3	3	3	3	3	

STATE / TERRITORY	Number of AERODROMES	EMERGENCY PLANS				EOC		
		How many		Updated exercises		How many	Updated (1)	Planned
		Have	Updated (1)	Full (2)	Partials (3)			
Antilles								
Nicaragua	2							
Saint Kitts and Nevis	2	2	2			2	2	
Saint Lucia	2	1	1			1	1	
Saint Vincent and the Grenadines	5							
Trinidad and Tobago	2	2	2			2	2	
Turks and Caicos Islands	3	3	3			3	3	
United States	7	7	7	7	7	7	7	
Dominica	2	1	1			1	1	
TOTAL	134	79	79	66	66	79	79	0
TOTAL (2007)								
Increase (%) respect to 2006								

(1) Have not been updated for more than 5 years (before 2001)

(2) Every two years

(3) In the year subsequent to the complete exercise (confusion on behalf of States and Territories)

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**APPENDIX D**

**STATE QUESTIONNAIRE REGARDING THE USE OF AERONAUTICAL STUDIES TO DEAL  
WITH AERODROME DEFICIENCIES**

The objective of this questionnaire is to help establish criteria for use of aeronautical studies in the aerodromes and ground aids (AGA) field to support SARPs compliance by States/Territories.

- 1) In your State, does your aerodrome legislation allow an AGA aeronautical study to be presented when physical or operational restrictions prevent compliance of rules and standards?
- 2) In your State, does your aerodrome legislation consider AGA aeronautical studies as an alternative for the case mentioned in number 1 above?
- 3) If you answered yes to the previous question, does your State's aerodrome legislation mention any orientation on applicability (specific cases), focus, and minimal content the AGA aeronautical studies must have to be accepted by the ruling authority?
- 4) If your answer to questions 2 and 3 was affirmative, are there any cases of AGA aeronautical studies validated by the ruling authority in your State?
- 5) If you answered yes to question 4, would your State be willing to share its experience in that field?
- 6) In case your answer to question 2 was negative, would your State consider including the concepts mentioned in questions 2 and 3 in your legislation useful?
- 7) If your State generated legislation on AGA aeronautical studies, what technical criteria would you consider using as a basis for it?
- 8) An AGA aeronautical study is meant to mitigate risk due to non-conformity with a ruling disposition; if there is a standard-related accident whose compliance was supported by the study, this generates liabilities for the author of the study and the authority who validated it. What is the opinion of your State regarding this issue?
- 9) Do you consider that aeronautical studies, as long as they are validated by the State aerodrome authority, to be useful in the aerodrome certification process?
- 10) Is there any comment your State would like to contribute regarding AGA aeronautical studies?

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**Part I**

**Annex 10 — Aeronautical Communications**

**Table 9-1. Allocation of aircraft addresses to States**

*Note.— The left-hand column of the 24-bit address patterns represents the most significant bit (MSB) of the address.*

State	Number of addresses in block					Allocation of blocks of addresses (a dash represents a bit value equal to 0 or 1)					
	1 024	4 096	32 768	262 144	1 048 576						
Afghanistan		*				0 1 1 1	0 0	0 0 0	0 0 0	--	-----
Albania	*					0 1 0 1	0 0	0 0 0	0 0 1	0 0	-----
Algeria			*			0 0 0 0	1 0	1 0 0	---	--	-----
Angola		*				0 0 0 0	1 0	0 1 0	0 0 0	--	-----
Antigua and Barbuda	*					0 0 0 0	1 1	0 0 1	0 1 0	0 0	-----
Argentina				*		1 1 1 0	0 0	---	---	--	-----
Armenia	*					0 1 1 0	0 0	0 0 0	0 0 0	0 0	-----
Australia				*		0 1 1 1	1 1	---	---	--	-----
Austria			*			0 1 0 0	0 1	0 0 0	---	--	-----
Azerbaijan	*					0 1 1 0	0 0	0 0 0	0 0 0	1 0	-----
Bahamas		*				0 0 0 0	1 0	1 0 1	0 0 0	--	-----
Bahrain		*				1 0 0 0	1 0	0 1 0	1 0 0	--	-----
Bangladesh		*				0 1 1 1	0 0	0 0 0	0 1 0	--	-----
Barbados	*					0 0 0 0	1 0	1 0 1	0 1 0	0 0	-----
Belarus	*					0 1 0 1	0 0	0 1 0	0 0 0	0 0	-----
Belgium			*			0 1 0 0	0 1	0 0 1	---	--	-----
Belize	*					0 0 0 0	1 0	1 0 1	0 1 1	0 0	-----
Benin	*					0 0 0 0	1 0	0 1 0	1 0 0	0 0	-----
Bhutan	*					0 1 1 0	1 0	0 0 0	0 0 0	0 0	-----
Bolivia		*				1 1 1 0	1 0	0 1 0	1 0 0	--	-----
Bosnia and Herzegovina	*					0 1 0 1	0 0	0 1 0	0 1 1	0 0	-----
Botswana	*					0 0 0 0	0 0	1 1 0	0 0 0	0 0	-----
Brazil				*		1 1 1 0	0 1	---	---	--	-----
Brunei Darussalam	*					1 0 0 0	1 0	0 1 0	1 0 1	0 0	-----
Bulgaria			*			0 1 0 0	0 1	0 1 0	---	--	-----
Burkina Faso		*				0 0 0 0	1 0	0 1 1	1 0 0	--	-----
Burundi		*				0 0 0 0	0 0	1 1 0	0 1 0	--	-----
Cambodia		*				0 1 1 1	0 0	0 0 1	1 1 0	--	-----
Cameroon		*				0 0 0 0	0 0	1 1 0	1 0 0	--	-----
Canada				*		1 1 0 0	0 0	---	---	--	-----
Cape Verde	*					0 0 0 0	1 0	0 1 0	1 1 0	0 0	-----
Central African Republic		*				0 0 0 0	0 1	1 0 1	1 0 0	--	-----
Chad		*				0 0 0 0	1 0	0 0 0	1 0 0	--	-----
Chile		*				1 1 1 0	1 0	0 0 0	0 0 0	--	-----
China				*		0 1 1 1	1 0	---	---	--	-----
Colombia		*				0 0 0 0	1 0	1 0 1	1 0 0	--	-----
Comoros	*					0 0 0 0	0 0	1 1 0	1 0 1	0 0	-----
Congo		*				0 0 0 0	0 0	1 1 0	1 1 0	--	-----
Cook Islands	*					1 0 0 1	0 0	0 0 0	0 0 1	0 0	-----
Costa Rica		*				0 0 0 0	1 0	1 0 1	1 1 0	--	-----
Côte d'Ivoire		*				0 0 0 0	0 0	1 1 1	0 0 0	--	-----
Croatia	*					0 1 0 1	0 0	0 0 0	0 0 1	1 1	-----
Cuba		*				0 0 0 0	1 0	1 1 0	0 0 0	--	-----
Cyprus	*					0 1 0 0	1 1	0 0 1	0 0 0	0 0	-----
Czech Republic			*			0 1 0 0	1 0	0 1 1	---	--	-----

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State	Number of addresses in block					Allocation of blocks of addresses (a dash represents a bit value equal to 0 or 1)					
	1 024	4 096	32 768	262 144	1 048 576						
Democratic People's Republic of Korea			*			0 1 1 1	0 0	1 0 0	---	--	-----
Democratic Republic of the Congo		*				0 0 0 0	1 0	0 0 1	1 0 0	--	-----
Denmark			*			0 1 0 0	0 1	0 1 1	---	--	-----
Djibouti	*					0 0 0 0	1 0	0 1 1	0 0 0	0 0	-----
Dominican Republic		*				0 0 0 0	1 1	0 0 0	1 0 0	--	-----
Ecuador		*				1 1 1 0	1 0	0 0 0	1 0 0	--	-----
Egypt			*			0 0 0 0	0 0	0 1 0	---	--	-----
El Salvador		*				0 0 0 0	1 0	1 1 0	0 1 0	--	-----
Equatorial Guinea		*				0 0 0 0	0 1	0 0 0	0 1 0	--	-----
Eritrea	*					0 0 1 0	0 0	0 0 0	0 1 0	0 0	-----
Estonia	*					0 1 0 1	0 0	0 1 0	0 0 1	0 0	-----
Ethiopia		*				0 0 0 0	0 1	0 0 0	0 0 0	--	-----
Fiji		*				1 1 0 0	1 0	0 0 1	0 0 0	--	-----
Finland			*			0 1 0 0	0 1	1 0 0	---	--	-----
France				*		0 0 1 1	1 0	---	---	--	-----
Gabon		*				0 0 0 0	0 0	1 1 1	1 1 0	--	-----
Gambia		*				0 0 0 0	1 0	0 1 1	0 1 0	--	-----
Georgia	*					0 1 0 1	0 0	0 1 0	1 0 0	0 0	-----
Germany				*		0 0 1 1	1 1	---	---	--	-----
Ghana		*				0 0 0 0	0 1	0 0 0	1 0 0	--	-----
Greece			*			0 1 0 0	0 1	1 0 1	---	--	-----
Grenada	*					0 0 0 0	1 1	0 0 1	1 0 0	0 0	-----
Guatemala		*				0 0 0 0	1 0	1 1 0	1 0 0	--	-----
Guinea		*				0 0 0 0	0 1	0 0 0	1 1 0	--	-----
Guinea-Bissau	*					0 0 0 0	0 1	0 0 1	0 0 0	0 0	-----
Guyana		*				0 0 0 0	1 0	1 1 0	1 1 0	--	-----
Haiti		*				0 0 0 0	1 0	1 1 1	0 0 0	--	-----
Honduras		*				0 0 0 0	1 0	1 1 1	0 1 0	--	-----
Hungary			*			0 1 0 0	0 1	1 1 0	---	--	-----
Iceland		*				0 1 0 0	1 1	0 0 1	1 0 0	--	-----
India				*		1 0 0 0	0 0	---	---	--	-----
Indonesia			*			1 0 0 0	1 0	1 0 0	---	--	-----
Iran, Islamic Republic of			*			0 1 1 1	0 0	1 1 0	---	--	-----
Iraq			*			0 1 1 1	0 0	1 0 1	---	--	-----
Ireland		*				0 1 0 0	1 1	0 0 1	0 1 0	--	-----
Israel			*			0 1 1 1	0 0	1 1 1	---	--	-----
Italy				*		0 0 1 1	0 0	---	---	--	-----
Jamaica		*				0 0 0 0	1 0	1 1 1	1 1 0	--	-----
Japan				*		1 0 0 0	0 1	---	---	--	-----
Jordan			*			0 1 1 1	0 1	0 0 0	---	--	-----
Kazakhstan	*					0 1 1 0	1 0	0 0 0	0 1 1	0 0	-----
Kenya		*				0 0 0 0	0 1	0 0 1	1 0 0	--	-----
Kiribati	*					1 1 0 0	1 0	0 0 1	1 1 0	0 0	-----
Kuwait		*				0 1 1 1	0 0	0 0 0	1 1 0	--	-----
Kyrgyzstan	*					0 1 1 0	0 0	0 0 0	0 0 1	0 0	-----
Lao People's Democratic Republic		*				0 1 1 1	0 0	0 0 1	0 0 0	--	-----
Latvia	*					0 1 0 1	0 0	0 0 0	0 1 0	1 1	-----

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**Annex 10 — Aeronautical Communications**

State	Number of addresses in block					Allocation of blocks of addresses (a dash represents a bit value equal to 0 or 1)					
	1 024	4 096	32 768	262 144	1 048 576						
Lebanon			*			0 1 1 1	0 1	0 0 1	---	--	-----
Lesotho	*					0 0 0 0	0 1	0 0 1	0 1 0	0 0	-----
Liberia		*				0 0 0 0	0 1	0 1 0	0 0 0	--	-----
Libyan Arab Jamahiriya			*			0 0 0 0	0 0	0 1 1	---	--	-----
Lithuania	*					0 1 0 1	0 0	0 0 0	0 1 1	1 1	-----
Luxembourg	*					0 1 0 0	1 1	0 1 0	0 0 0	0 0	-----
Madagascar		*				0 0 0 0	0 1	0 1 0	1 0 0	--	-----
Malawi		*				0 0 0 0	0 1	0 1 1	0 0 0	--	-----
Malaysia			*			0 1 1 1	0 1	0 1 0	---	--	-----
Maldives	*					0 0 0 0	0 1	0 1 1	0 1 0	0 0	-----
Mali		*				0 0 0 0	0 1	0 1 1	1 0 0	--	-----
Malta	*					0 1 0 0	1 1	0 1 0	0 1 0	0 0	-----
Marshall Islands	*					1 0 0 1	0 0	0 0 0	0 0 0	0 0	-----
Mauritania	*					0 0 0 0	0 1	0 1 1	1 1 0	0 0	-----
Mauritius	*					0 0 0 0	0 1	1 0 0	0 0 0	0 0	-----
Mexico			*			0 0 0 0	1 1	0 1 0	---	--	-----
Micronesia, Federated States of	*					0 1 1 0	1 0	0 0 0	0 0 1	0 0	-----
Monaco	*					0 1 0 0	1 1	0 1 0	1 0 0	0 0	-----
Mongolia	*					0 1 1 0	1 0	0 0 0	0 1 0	0 0	-----
Morocco			*			0 0 0 0	0 0	1 0 0	---	--	-----
Mozambique		*				0 0 0 0	0 0	0 0 0	1 1 0	--	-----
Myanmar		*				0 1 1 1	0 0	0 0 0	1 0 0	--	-----
Namibia	*					0 0 1 0	0 0	0 0 0	0 0 1	0 0	-----
Nauru	*					1 1 0 0	1 0	0 0 1	0 1 0	0 0	-----
Nepal		*				0 1 1 1	0 0	0 0 1	0 1 0	--	-----
Netherlands, Kingdom of the			*			0 1 0 0	1 0	0 0 0	---	--	-----
New Zealand			*			1 1 0 0	1 0	0 0 0	---	--	-----
Nicaragua		*				0 0 0 0	1 1	0 0 0	0 0 0	--	-----
Niger		*				0 0 0 0	0 1	1 0 0	0 1 0	--	-----
Nigeria		*				0 0 0 0	0 1	1 0 0	1 0 0	--	-----
Norway			*			0 1 0 0	0 1	1 1 1	---	--	-----
Oman	*					0 1 1 1	0 0	0 0 1	1 0 0	0 0	-----
Pakistan			*			0 1 1 1	0 1	1 0 0	---	--	-----
Palau	*					0 1 1 0	1 0	0 0 0	1 0 0	0 0	-----
Panama		*				0 0 0 0	1 1	0 0 0	0 1 0	--	-----
Papua New Guinea		*				1 0 0 0	1 0	0 1 1	0 0 0	--	-----
Paraguay		*				1 1 1 0	1 0	0 0 1	0 0 0	--	-----
Peru		*				1 1 1 0	1 0	0 0 1	1 0 0	--	-----
Philippines			*			0 1 1 1	0 1	0 1 1	---	--	-----
Poland			*			0 1 0 0	1 0	0 0 1	---	--	-----
Portugal			*			0 1 0 0	1 0	0 1 0	---	--	-----
Qatar	*					0 0 0 0	0 1	1 0 1	0 1 0	0 0	-----
Republic of Korea			*			0 1 1 1	0 0	0 1 1	---	--	-----
Republic of Moldova	*					0 1 0 1	0 0	0 0 0	1 0 0	1 1	-----
Romania			*			0 1 0 0	1 0	1 0 0	---	--	-----
Russian Federation					*	0 0 0 1	--	---	---	--	-----
Rwanda		*				0 0 0 0	0 1	1 0 1	1 1 0	--	-----
Saint Lucia	*					1 1 0 0	1 0	0 0 1	1 0 0	0 0	-----

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State	Number of addresses in block					Allocation of blocks of addresses (a dash represents a bit value equal to 0 or 1)					
	1 024	4 096	32 768	262 144	1 048 576						
Saint Vincent and the Grenadines	*					0 0 0 0	1 0	1 1 1	1 0 0	0 0	-----
Samoa	*					1 0 0 1	0 0	0 0 0	0 1 0	0 0	-----
San Marino	*					0 1 0 1	0 0	0 0 0	0 0 0	0 0	-----
Sao Tome and Principe	*					0 0 0 0	1 0	0 1 1	1 1 0	0 0	-----
Saudi Arabia			*			0 1 1 1	0 0	0 1 0	---	--	-----
Senegal		*				0 0 0 0	0 1	1 1 0	0 0 0	--	-----
Seychelles	*					0 0 0 0	0 1	1 1 0	1 0 0	0 0	-----
Sierra Leone	*					0 0 0 0	0 1	1 1 0	1 1 0	0 0	-----
Singapore			*			0 1 1 1	0 1	1 0 1	---	--	-----
Slovakia	*					0 1 0 1	0 0	0 0 0	1 0 1	1 1	-----
Slovenia	*					0 1 0 1	0 0	0 0 0	1 1 0	1 1	-----
Solomon Islands	*					1 0 0 0	1 0	0 1 0	1 1 1	0 0	-----
Somalia		*				0 0 0 0	0 1	1 1 1	0 0 0	--	-----
South Africa			*			0 0 0 0	0 0	0 0 1	---	--	-----
Spain				*		0 0 1 1	0 1	---	---	--	-----
Sri Lanka			*			0 1 1 1	0 1	1 1 0	---	--	-----
Sudan		*				0 0 0 0	0 1	1 1 1	1 0 0	--	-----
Suriname		*				0 0 0 0	1 1	0 0 1	0 0 0	--	-----
Swaziland	*					0 0 0 0	0 1	1 1 1	0 1 0	0 0	-----
Sweden			*			0 1 0 0	1 0	1 0 1	---	--	-----
Switzerland			*			0 1 0 0	1 0	1 1 0	---	--	-----
Syrian Arab Republic			*			0 1 1 1	0 1	1 1 1	---	--	-----
Tajikistan	*					0 1 0 1	0 0	0 1 0	1 0 1	0 0	-----
Thailand			*			1 0 0 0	1 0	0 0 0	---	--	-----
The former Yugoslav Republic of Macedonia	*					0 1 0 1	0 0	0 1 0	0 1 0	0 0	-----
Togo		*				0 0 0 0	1 0	0 0 1	0 0 0	--	-----
Tonga	*					1 1 0 0	1 0	0 0 1	1 0 1	0 0	-----
Trinidad and Tobago		*				0 0 0 0	1 1	0 0 0	1 1 0	--	-----
Tunisia			*			0 0 0 0	0 0	1 0 1	---	--	-----
Turkey			*			0 1 0 0	1 0	1 1 1	---	--	-----
Turkmenistan	*					0 1 1 0	0 0	0 0 0	0 0 1	1 0	-----
Uganda		*				0 0 0 0	0 1	1 0 1	0 0 0	--	-----
Ukraine			*			0 1 0 1	0 0	0 0 1	---	--	-----
United Arab Emirates		*				1 0 0 0	1 0	0 1 0	1 1 0	--	-----
United Kingdom				*		0 1 0 0	0 0	---	---	--	-----
United Republic of Tanzania		*				0 0 0 0	1 0	0 0 0	0 0 0	--	-----
United States					*	1 0 1 0	--	---	---	--	-----
Uruguay		*				1 1 1 0	1 0	0 1 0	0 0 0	--	-----
Uzbekistan	*					0 1 0 1	0 0	0 0 0	1 1 1	1 1	-----
Vanuatu	*					1 1 0 0	1 0	0 1 0	0 0 0	0 0	-----
Venezuela			*			0 0 0 0	1 1	0 1 1	---	--	-----
Viet Nam			*			1 0 0 0	1 0	0 0 1	---	--	-----
Yemen		*				1 0 0 0	1 0	0 1 0	0 0 0	--	-----
Yugoslavia			*			0 1 0 0	1 1	0 0 0	---	--	-----
Zambia		*				0 0 0 0	1 0	0 0 1	0 1 0	--	-----
Zimbabwe	*					0 0 0 0	0 0	0 0 0	1 0 0	0 0	-----

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**Annex 10 — Aeronautical Communications**

State	Number of addresses in block					Allocation of blocks of addresses (a dash represents a bit value equal to 0 or 1)					
	1 024	4 096	32 768	262 144	1 048 576						
Other allocations											
ICAO <sup>1</sup>			*			1 1 1 1	0 0	0 0 0	---	--	-----
ICAO <sup>2</sup>	*					1 0 0 0	1 0	0 1 1	0 0 1	0 0	-----
ICAO <sup>2</sup>	*					1 1 1 1	0 0	0 0 1	0 0 1	0 0	-----
<sup>1.</sup> ICAO administers this block for assigning temporary aircraft addresses as described in section 7.											
<sup>2.</sup> Block allocated for special use in the interest of flight safety.											



## APPENDIX F

States should develop automation architecture requirements according to the level of service required for each ATS airspace classification and international aerodrome as follows:

<b>ATS Operational requirements for automated systems (ATC, FIS, SAR)</b>							
<b>APPLICABLE /NEED ATS REQUIREMENTS</b>	<b>ATS Airspace Classification</b>						
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>
Identification of aircraft							
Separation							
Navigation guidance							
Surveillance							
Transfer							
Coordination							
Information of flight plans in real time							
Visualization of the geographical position of the aircraft (latitude, longitude, history)							
Statistical data of flight plans (past, current and future information).							
Surveillance data processing system (i.e. RDPS or ADS) a. considering future expansion capability; and b. considering format compatibility							
Flight data processing system (FDPS)							
ATS inter-facility data communications (AIDC)							
Controller-pilot data link communications (CPDLC)							
Flight track profile information (altitude, vertical speed, offset speed, predictive vector, turn angle, etc.)							
Alerting systems (STCA, MSAW, DIAW, emergency, communication failure, unlawful interference, etc.)							
Aeronautical Information Services (AIS) Interface							
Meteorological information							

- a) successively determine the different operational applications from the functional level or lowest interface to the upper interface;
- b) define current and future operational applications needs; and
- c) determine short-term and future operational requirements.

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## APPENDIX G

### GLOBAL AIS CONGRESS Madrid, Spain, 27–29 June 2006

#### RECOMMENDATIONS

**Recommendation 1:** ICAO adopt the AICM/AIXM as the standard aeronautical information conceptual model and the standard aeronautical information exchange model, and

- develop appropriate means of compliance, and
- global mechanisms to manage and develop the AICM/AIXM.

**Recommendation 2:** ICAO should evolve the AIM Concept and associated performance requirements and develop a road map to plan, manage and facilitate on a world-wide basis the transition from AIS to AIM.

**Recommendation 3:** ICAO instigate an urgent review of Annex 4 and Annex 15 in accordance with the recommendation of the 11th Air Navigation Conference.

**Recommendation 4:** ICAO should incorporate transition activities into the Global Air Navigation Plan in order to ensure broad-based development of AIS/AIM capabilities across all ICAO Regions

**Recommendation 5:** ICAO should, as a matter of urgency address legal and institutional issues including those associated with an expansion of service from AIS to AIM that could constrain the adoption and implementation of AIM.

**Recommendation 6:** States working in close coordination with international organizations should support ICAO in any activity to accommodate the transition from AIS to AIM.

**Recommendation 7:** Recognising the critical nature of aeronautical information in the present and future ATM systems, States should give high priority to the implementation of existing Standards such as WGS-84 and Quality Management Systems and should, if necessary, request assistance from ICAO or if appropriate international organisations to do so.

**Recommendation 8:** Recognising the social dimension associated with change, ICAO working with States and international organisations determine the required Staff Profile(s) for AIM and determine appropriate skills and competencies and amend existing guidance material and develop new guidance and training material, under the TRAINAIR programme perhaps, to assist States and other AIS organisations in the transition process.

**Recommendation 9:** ICAO should promote open access to information.

**Recommendation 10:** That ICAO consider as a matter of priority how a Global Forum could be established.

## **ATTACHMENT H**

### **DRAFT STRATEGY FOR THE TRANSITION TO AERONAUTICAL INFORMATION MANAGEMENT IN THE CAR/SAM REGIONS**



## **INTERNATIONAL CIVIL AVIATION ORGANIZATION**

### **DRAFT STRATEGY FOR THE TRANSITION TO AERONAUTICAL INFORMATION MANAGEMENT (AIM) IN THE CAR/SAM REGIONS**



**CAR/SAM REGIONAL PLANNING AND IMPLEMENTATION GROUP  
(GREPECAS)**

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## **DRAFT STRATEGY FOR AERONAUTICAL INFORMATION MANAGEMENT (AIM) IN THE CAR/SAM REGIONS**

### **1. Introduction**

The Regional Plans for transition to CNS/ATM clearly define how ATM information is automatically exchanged through the use of a huge, precise and safe aeronautical database that is updated in real time and that serves as the support for the entire air navigation service. This new form of display, distribution and exchange of aeronautical information should implicitly lead to a substantial and profound change in the entire AIS/MAP of the Regions.

Thus far, AIS/MAP has evolved successfully and has adapted to meet changes imposed by the technological development of civil aeronautics. New, much more serious challenges have arisen, not only with regard to resources and working methods, but also to the culture and behaviour of human resources. The introduction of computerised air-ground systems and confidence in the accuracy, availability, safety, and quality of aeronautical information are generating new and significant demands in the provision of AIS/MAP services.

As a result, aeronautical information has become a crucial and critical component of the present and future ATM system and must be developed to meet AIS/MAP service needs, covering all flight phases.

This strategy for gradual AIM implementation in the Regions has been developed with a view toward identifying the important requirements and components of an Aeronautical Information Management system that is able and sufficient to support CNS/ATM navigation demands, by establishing stages for gradual compliance starting in 2008 and up until 2015, including the issues of human resources and investment planning.

### **2. Status of AIS/MAP in the CAR/SAM Regions**

The AIS/MAP function can be defined as the preparation, storage and distribution of AIS Integrated Documentation. This is a broad process that covers various publications, both printed and digital, in a semi-automated environment that still requires considerable manual intervention. These publications help keep the main document, the AIP, up to date, changes to which are made known through printed or digital amendments or supplements posted in web pages or NOTAMs distributed through the AFTN network and which are generally published, stored, and disseminated automatically by NOTAM data banks.

Despite harmonious AIS operation, the current situation requires long, inflexible periods of time to produce and distribute permanent information and the NOTAMs, which perform the function of enacting temporary short-term changes, require a maximum period of time as of the moment originators request their publication until the time they are transmitted through the AFTN network. Once in effect, the information is supplied mainly during the pre-flight phase, leaving other flight phases at a disadvantage insofar as the provision of up-to-date aeronautical information is concerned.

The flexibility and updateness of and ease of access to aeronautical information in real time are crucial CNS/ATM requirements and it is clear that the current AIS structure and operation will be incapable of fulfilling such requirements unless its operating concepts evolve toward AIM establishment.

## **2.1 Current limitations**

It is a known fact that the AIS Integrated Documentation Packet is a complete product. The “static” permanent information in the AIP is consulted, and “dynamic” variations can be introduced over a relevant period of time and communicated *via* NOTAMs and Supplements. Although the NOTAM format allows for some degree of information filtering tailored to individual requirements, the retrieval of information from an integrated packet as a whole involves a considerable amount of manual selection. The “production unit” of the future must consist of individual data elements, facts that are available through highly automated means for retrieval by users in any combination for individual information.

Users are informed of short-term changes *via* NOTAMs. These do not permit the transmission of extensive information or graphic data because of limitations in rules, application, flexibility, and message size. As a result, printed AIP Supplements are used to report extensive changes in text or graphic data. Despite the progressive introduction of automated aeronautical information processes, such as the NOTAM data banks, there are transaction points in the production and use of integrated aeronautical information that require different forms of manual action. Such actions inevitably entail the risk of human error in transcription, which means that data integrity is more easily susceptible to violation. Improvement of both data quality and the automated systems is vitally important to meet aeronautical information integrity requirements, an essential prerequisite for navigation strategy.

## **3. AIS Projection**

ATMs will continue to develop, implement and use new technologies and techniques that will allow for more flexible airspace use. Such systems are and will continue to be dependant upon aeronautical data. Immediate access to high-quality aeronautical information will be an essential element of ATM systems.

The development of systems that will allow for on-line global access in real time to aeronautical information of the required quality will provide the necessary support for the future ATM system. Traditional aeronautical information will necessarily have to be provided temporarily in parallel as automated systems are developed and the text and graphic domains, now separate, are combined.

There is an obvious need for other categories of information to be available. The information to be supplied by this complex system of databases will require the progressive merging of traditional AIS, MET, FIS, and AFTM information to provide for a data flow in the ATM system.

Users have a declared need to transition to an environment in which the management of aeronautical information is wide-based, and where civil - military information is harmonised.

Broad global aeronautical information exchange is an AIM prerequisite, making it important to establish global standards and recommended practices for originating, storing, exchanging and distributing information during all flight phases.

Eight strategic objectives have been designed on the basis of this vision and have, in turn, given rise to 13 actions for developing this AIM transition strategy.

#### **4. AIM Transition Strategy**

##### **4.1 Scope**

This strategy will extend to the boundaries of the FIR in each particular State.

This document and its subsequent development will cover all AIS/MAP areas, namely: AIS Publications, NOTAM Office, and AIS AD and Aeronautical Chart Units and, indirectly, will also involve other AIS-related units, such as: ATS units in general and Air Navigation Top Management.

The present AIM strategy covers all flight phases:

1. Flight planning
2. Pre-flight
3. Departure
4. In flight
5. Arrival
6. Post-flight.

##### **4.2 Strategic objectives**

The following strategic objectives must be fulfilled in order to achieve efficient and uniform aeronautical information management and a broad information management system that would cover all flight phases:

###### **4.2.1 Establish AIM as the core ATM process**

The AIM concept must be fully understood and accepted by all as the essential and basic step toward ATM, and actions must be taken to extend to other neighbouring regions this concept, including the proposal to develop new ICAO procedures (SARPS).

###### **4.2.2 Ensure the supply of updated and quality aeronautical information for all flight phases**

New specifications will be established for originating, maintaining, and exchanging electronic aeronautical information, including data on the terrain and obstacles, with the necessary precision, integrity, safety and confidentiality, given their importance for flight safety.

###### **4.2.3 Ensure access to aeronautical information during all flight phases**

Although a large volume of aeronautical information is available today, most of it is pre-flight information, making it necessary to have flexible access to such information during any flight phase.



#### **4.2.4 Evolve from the publication of aeronautical information products to the supply in electronic format of individual data on each of the aeronautical information elements**

At present, the supply of aeronautical information is based on a group of elements of the integrated AIS documentation, from which users manually extract the aspects they are interested in. In the AIM strategy, users will be able to extract their own parameters, independently of the element in which the data is published, and to accede by automated means to material that is relevant for their purposes. The main reference information, together with temporary changes, will be kept electronically and updated within the particular element in which it is published, thereby minimising the chance of error. Even when information is kept in digital form, printed information can be provided upon request.

#### **4.2.5 Adopt database procedures, structures and contents that have been globally harmonised in a fully digitalised aeronautical information environment**

In order to accomplish this, ICAO must adopt standard database models that will guarantee the exchange of information worldwide.

#### **4.2.6 Define the human resource activities needed to ensure the future AIM environment**

Operating AIS/MAP personnel should be given the necessary training to guarantee the exchange of electronic aeronautical information of the required quality.

#### **4.2.7 Resolve issues concerning intellectual property, and financial, legal, organisational and institutional aspects connected with AIM**

#### **4.2.8 Harmonise and integrate all civil-military aeronautical information**

### **4.3 Strategic actions**

In order to achieve the aforementioned strategic objectives, it is necessary to take actions like the following:

#### **4.3.1 Maintain and improve the Quality Management System implemented and certified in the AIS/MAP service**

This AIM strategy aims to guarantee the integrity levels of critical, essential and regular flight data, as specified in ICAO Annex 15, which will require the implementation and certification of a total quality management system.

#### **4.3.2 Plan and develop the electronic AIP**

Transition to an electronic AIP must be planned and achieved within an appropriate time frame. Even so, the replacement should replicate the existing format and aeronautical information should be updated on that basis.

#### **4.3.3 Revise the existing NOTAM concept since AIM will permit automatic database access**

The future of the NOTAM must be considered for the following reasons:

- The existing format does not allow for the exchange of digital data.
- The time needed today in the AIS to publish and distribute NOTAMs does not meet AIM information immediacy requirements.
- The new system will allow for data management within the document in which they are published and their updating in real time, on-line.

#### **4.3.4 Study, plan and arrange for terrain and obstacle data, electronic aeronautical charts and mapping databases to be available in digital format**

Terrain and vertical obstacle data should be available and support all flight phases, especially the landing and post-flight phases, since the only publication of obstacles near the RWY that is available today is insufficient for the growing needs of the industry, according to ICAO recommendations.

#### **4.3.5 Define the scope and nature of and methods used to display aeronautical information, bearing in mind modifications and new requirements**

The modified display methods include the consideration of how aeronautical charts could be incorporated into digital data, together with text information. Developments in hardware, software and telecommunications have produced tools that increase the speed and accuracy of geospatial data input, performance, and output. The growing use being made of graphic information display should be noted. Virtually all information on board will be electronically supported, using graphic monitors. The automated exchange of aeronautical information during the flight and the necessary specifications for its development will be an important new aspect.

These activities will be based on geographic information systems (GIS) and spatial data banks, with associated benefits of accuracy, reliability, uptodateness and quality systems.

#### **4.3.6 Diversify and expand the means of access to aeronautical information auto-briefing**

Aeronautical information is accessed mainly from AIS AD units and consists of an aeronautical information packet printed expressly for each flight. This situation is not conducive to flexibility of access to information and does not provide for its updating in real time. The crew must be given options, such as creating auto-briefing stations at airports that will allow for on-site access to information in any flight phase.

#### **4.3.7 Plan and carry out training for transition to AIM and, at the same time, provide training in traditional AIS services, so long as the two exist in parallel.**

#### **4.3.8 Promote the licensing of AIS personnel and study and apply requirements for the hiring of new personnel**

AIS transition to AIM will take place over a period during which present and future working styles, operations and procedures will exist in parallel, until such a time as personnel in the future cease to be involved in providing a detailed daily information product in the traditional way. Over the next few years, it will be necessary for AIS/MAP to train existing personnel and to adopt these new requirements for skills to be considered when hiring new personnel. A draft AIS profile must be developed to provide

trained personnel and to apply this methodology to future skill requirements for hiring purposes. Efforts will accordingly be made to accomplish the following:

- Quality assurance and specialisation in the traditional AIS service while both are provided in parallel.
- Plan training in the introduction and transition to AIM.
- Study and implement new hiring requirements for AIS/MAP personnel.
- Promote licensing or other formal means of assessing and accepting AIS personnel.

**4.3.9 Plan a harmonious AIS/MAP service structure in an AIM environment, as well as its linkage with other specialised ATM areas**

It is necessary to study, plan and gradually implement the change in mentality and working methods that must necessarily take place in AIM service, even during the period when AIS and AIM operate in parallel.

**4.3.10 Identify and resolve the legal and financial aspects involved in the origination, exchange and management of data**

Problems such as the following will need to be resolved:

- Legal (ownership of the information, its control and obligations in an environment of shared information);
- Institutional (regulatory aspects of shared information);
- Business (information on the cost of the associated effectiveness, the recovery cost and profit and loss in general);
- Organisational (regulatory mechanisms, documents and responsibilities of all persons who handle the information).

**4.3.11 Undertake the expanded development of AIXM and AICM for the adoption of a global database**

Aeronautical information will be obtained from many originators and kept in a network of distributed global data banks. A standard aeronautical information model is a requirement for the development of the data banks and other aeronautical information systems. An initial version of an aeronautical information conceptual model (AICM) exists and, as a result, an aeronautical information exchange model (AIXM) has been developed. Both of these are needed to have information available in any data bank, regardless of structure or language, in order to communicate with other banks.

**4.3.10 Identify the need to amend ICAO SARPs as a requirement for accomplishing the objectives and moving through the ICAO machinery**

The specification, maintenance and progressive improvement of the AICM/AIXM models is critically important for AIS-to-AIM transition and thus it is essential to make the necessary efforts to secure the adoption by ICAO of a model for the exchange of common data. This undertaking must also take into account the additional identified categories of information that are needed for the future ATM system.

#### 4.3.11 Plan civil-military harmonisation

The flexible use of airspace requires the availability of aeronautical information for all airspace users and the use of common and compatible exchange systems. Military aspects will continue to be a sovereign issue for each of the States, but actions must be defined to guarantee the interoperability of both means and automatic systems.

#### 4.4 Contribution of the actions to the accomplishment of the strategic objectives

The following table shows the contribution of the strategic actions to each strategic objective.

Strategic actions	Strategic objectives							
	1	2	3	4	5	6	7	8
1- Maintain and improve the implemented and certified Quality Management System in the AIS/MAP service.	x	x		x	x			
2- Plan and develop the electronic AIP.	x	x	x	x	x			
3- Revise the existing NOTAM concept because AIM will permit automatic database access.	x	x	x	x	x			
4- Study, plan and arrange for terrain and obstacle data, electronic aeronautical charts and mapping databases to be available in digital format.	x	x	x	x	x			
5- Define the scope and nature of and methods used for displaying aeronautical information, bearing in mind modifications and new requirements.	x	x	x	x	x			
6- Diversify and expand the means of access to aeronautical information auto-briefing.	x	x	x	x				
7- Plan and carry out training for transition to AIM and, at the same time, provide training in traditional AIS services, so long as the two exist in parallel.	x					x		
8- Promote the licensing of AIS personnel and study and apply new personnel hiring requirements.	x					x		
9- Plan a harmonious AIS/MAP service structure in an AIM environment and its linkage with other specialised ATM areas.	x						x	
10- Identify and resolve the legal and financial aspects of data origination, exchange and management.	x						x	
11- Undertake the expanded development of AIXM and AICM for the adoption of a global database.	x	x	x	x				
12- Identify the need to amend ICAO SARPs as a requirement for accomplishing the objectives and moving through the ICAO machinery.	x		x	x				
13- Plan civil-military harmonisation	x	x	x					x

#### Strategic objectives:

- 1- Establish AIM as the core ATM process.
- 2- Ensure the provision of updated and quality aeronautical information for all flight phases.
- 3- Ensure access to aeronautical information during all flight phases.

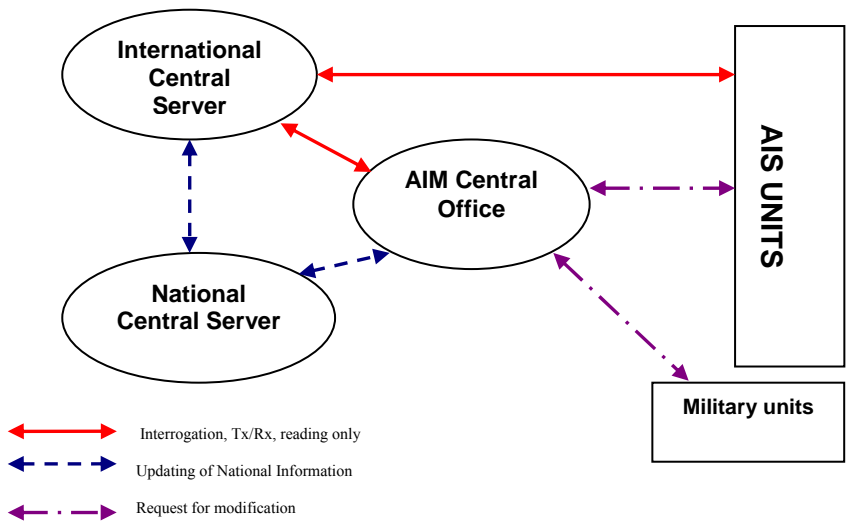
- 4- Evolve from the publication of aeronautical information products to the supply in electronic format of individual data for each of the aeronautical information elements.
- 5- Adopt database procedures, structures and contents that have been globally harmonised in a fully-digitalised aeronautical information environment.
- 6- Define the human resource activities needed to ensure the future AIM environment.
- 7- Resolve issues concerning intellectual property, and financial, legal, organisational and institutional aspects connected with AIM.
- 8- Harmonise and integrate all civil-military aeronautical information.

#### 4.5 Timetable for AIM implementation in the Regions

The following table describes the timetable of the strategic actions for AIM implementation in the Regions.

Strategic actions	2008	2009	2010	2011	2012	2013	2014	2015
1- Maintain and improve the Quality Management System implemented and certified in the AIS/MAP service.								
2- Plan and develop the electronic Cuba/AIP.								
3- Revise the existing NOTAM concept because AIM will permit automatic database access.								
4- Study, plan and arrange for terrain and obstacle data, electronic aeronautical charts and mapping databases to be available in digital format								
5- Define the scope and nature of and methods used for displaying aeronautical information, bearing in mind modifications and new requirements.								
6- Diversify and expand the means of access to aeronautical information auto-briefing.								
7- Plan and carry out training for transition to AIM and, at the same time, provide training in traditional AIS services, so long as the two exist in parallel.								
8- Promote the licensing of AIS personnel and study and apply new personnel hiring requirements.								
9- Plan a harmonious AIS/MAP service structure in an AIM environment and its linkage with other specialised ATM areas.								
10- Identify and resolve the legal and financial aspects concerning data origination, exchange and management.								
11- Undertake the expanded development of AIXM and AICM for the adoption of a global database.								
12- Identify the need to amend ICAO SARPs as a requirement for accomplishing the objectives and moving through the ICAO machinery.								
13- Plan civil-military harmonisation.								

4.6 Aeronautical information exchange network



**Agenda Item 4:        Safety Oversight**

**4.1        Universal Safety Oversight Audit Programme (USOAP)**

4.1.1        The Meeting took note that the ICAO Universal Safety Oversight Audit Programme (USOAP) and the Universal Security Audit Programme (USAP) were integrated administratively in August 2006, into a single audit entity, the Safety and Security Audits Branch (SSA), within the Office of the Secretary General. Progress reports on the activities of the USOAP and USAP are presented to the Council every other session and were most recently presented during the 36th Session of the ICAO Assembly. This report identified that relevant strategic objectives and expected outputs from the Organization's Business Plan are aligned with the implementation summary for each programme.

4.1.2        The Meeting was informed that the ICAO NACC Regional Office conducted a workshop on the preparation, execution and reporting of Comprehensive System Audits (CSA) in Mexico City in July 2007, to assist the States in their preparation for the 2007, 2008, and 2009 scheduled audits.

4.1.3        The Secretariat informed that the USOAP audits conducted in Central America and the Caribbean showed certain similarities in their results. **Appendix A** to this part of the Report contains a graph representing the global average and the relationship between the global average and the results from the Central American and Caribbean Regions, considering the residual deficiencies from the areas of personnel licensing, aircraft operations and airworthiness from previous audits.

4.1.4        Pursuant to Assembly Resolution A35-6, final audit reports are made available in their entirety to contracting States on the ICAO SOA secure website together with relevant information from the Audit Findings and Differences Database (AFDD). **Appendix B** to this part of the Report contains information on the status of audit reports yet to be published. Safety Oversight Audit (SOA) schedule of activities for 2007 and 2008 has been forwarded to States and can be accessed on the ICAO-Net. Overall, the USOAP is being implemented on target, on budget and consistent with Assembly and Council direction.

4.1.5        The Meeting was informed on efforts at ICAO Headquarters with respect to the coordinated work between the findings detected in the USOAP audits and the deficiencies identified during Regional Officer missions.

4.1.6        Cuba commented that the valuable experience obtained through preparation for the USOAP audit allowed them to identify several deficiencies and improvements to the system. Likewise, Jamaica informed of their experiences during the USOAP audit and indicated the possibility of developing business cases on issues identified during the USOAP audits that could be included in the CAR Regional Project.

## 4.2 Regional Safety Oversight Developments

4.2.1 The Secretariat informed about the development and results of the Global Aviation Safety Roadmap (GASR) Workshop held in Bogotá, Colombia, from 19 to 23 May 2008.

4.2.2 In reference to this Workshop, the following actions to be performed by States/Territories were reiterated:

- that States/Territories respond to the questionnaire on the present status of legislation, regulations and safety programmes related to GSI/3 -*Effective Error and Incident Reporting*, the protection of operational safety risk data, sent through letter Ref. N 1/17, EMX0890 dated 19 August 2008, before **15 September 2008**; and
- nominate aviation legal experts to conduct a study on aviation legislation, regulations and safety programmes to support GSI/3 before **15 September 2008**.

4.2.3 The Meeting took note that among the agreements and results of the GASR Workshop, the Regional Aviation Safety Group – Pan America (RASG - PA) was established. The background information and draft terms of reference were provided to the Global Aviation Safety Roadmap (GASR) Workshop participants and later forwarded to all States/Territories/International Organizations for their information.

4.2.4 The Meeting was informed that at the RASG-PA Interim Steering Committee Meeting held in Mexico City, Mexico, from 4 to 5 of August 2008, results of the GASR Workshop were reviewed and future work related to the successful implementation of the GASR Global Safety Initiatives (GSI) – GSI/2; GSI/3; GSI/5; GSI/12 was agreed upon.

4.2.5 Due to the importance of the work being conducted by RASG-PA, the Meeting agreed to emphasize the need to provide the ICAO NACC Office with the nominations of high-level safety personnel to serve as States / Territories / International Organizations representatives to the First Meeting of the RASG-PA to be held in Puntarenas, Costa Rica, from 10 to 14 November 2008, no later than **15 October 2008**.

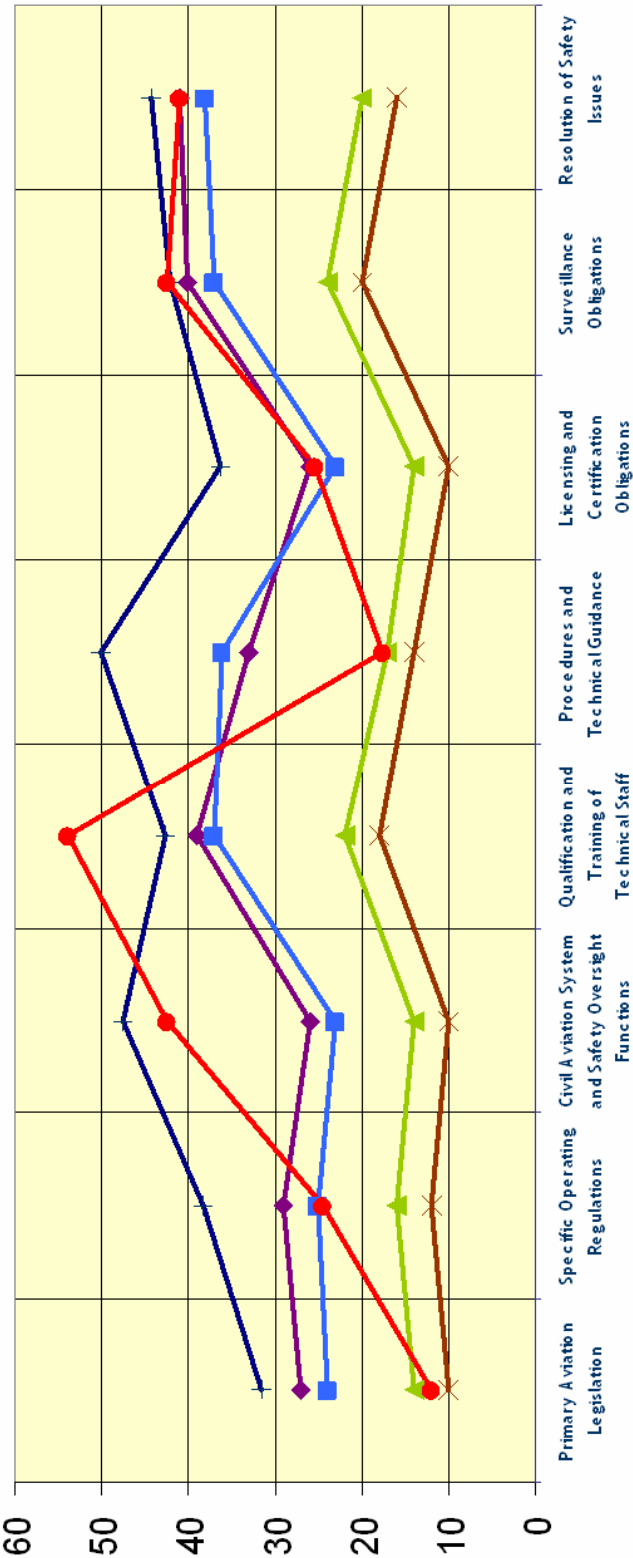
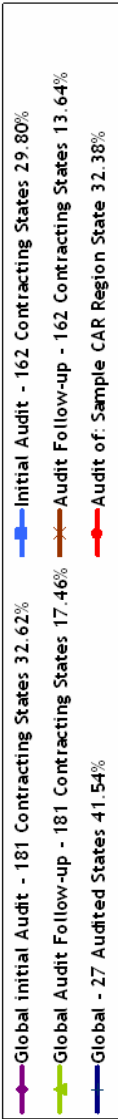
4.2.6 The Meeting was informed of progress achieved by the Central American States, with the assistance of COCESNA/ACSA, on issues related to air operations, airworthiness, aerodromes, security (AVSEC), air traffic management (ATM) and the implementation of safety management systems (SMS).



# Critical Elements of a Safety Oversight System

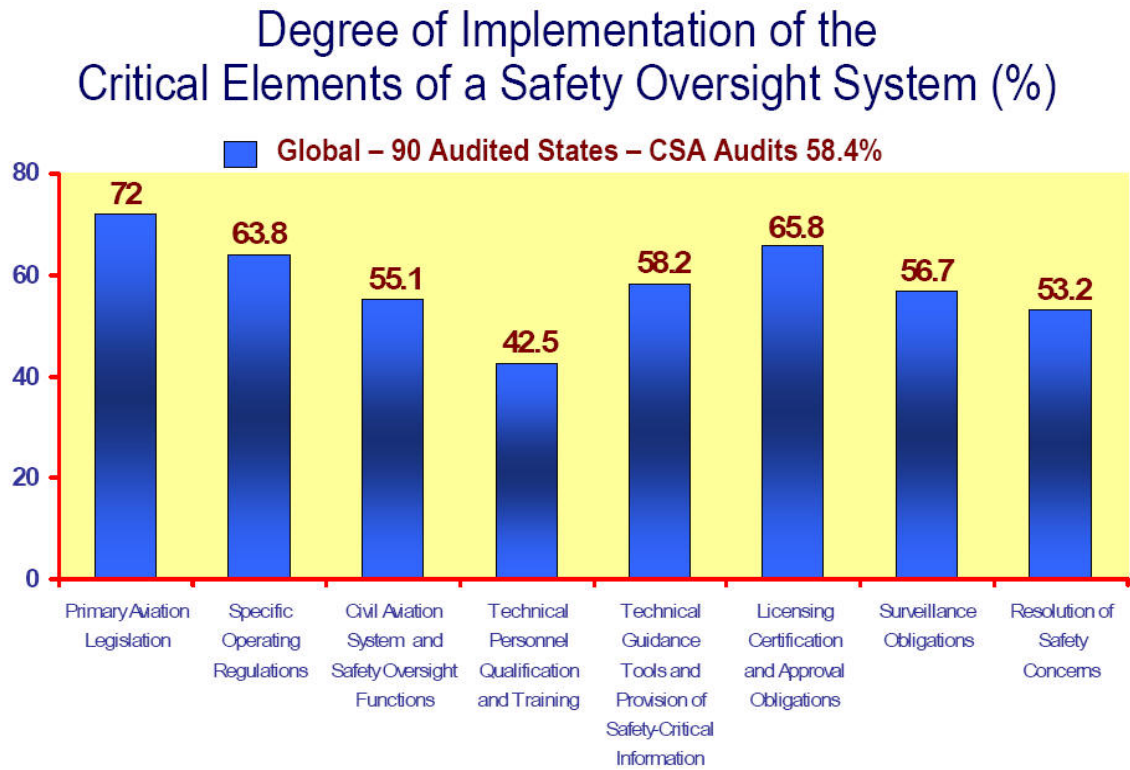
(Applied to all Safety related Annexes)

## Lack of Effective Implementation (%)



APPENDIX A

## APPENDIX B



**Agenda Item 5: Aviation Security (AVSEC)**

**5.1 ICAO Universal Security Audit Programme**

5.1.1 The Secretariat presented the Meeting with information on the activities and general results from the Universal Security Audit Programme (USAP) and State progress with implementation of corrective action plans in compliance with the AVSEC Standards and Recommended Practices (SARPs) in Annex 17.

5.1.2 The Meeting noted that problems exist with progress of implementation and compliance with corrective action plans with respect to the recommendations from the first AVSEC audit report, as follows:

a) **National Civil Aviation Security Programme (NCASP)  
(Standard 3.1.1, Annex 17)**

The NCASP has been established in all States of the Region; however, in many cases this programme is still in draft form or in the process of approval by government executive branches or the appropriate authority thereby indicating shortcomings in their legal framework. In situations where the NCASP was approved, it has not been disseminated and implemented in most cases.

b) **National Civil Aviation Security Training Programme (NCSTP)  
(Standard 3.1.6, Annex 17)**

For the most part, this program is still in the development phase or draft form and in the process of approval by the appropriate authority; therefore, shortcomings are indicated with the legal framework with respect to AVSEC training of stakeholders and personnel involved in security inspections. In cases where the NCSTP has been approved, it has not been disseminated or implemented. Likewise, it does not contain clear and specific objectives for AVSEC personnel training, on-the-job training (OJT) or the criteria for certifying AVSEC personnel and instructors.

c) **National Civil Aviation Security Quality Control Programme (NQCP) (Standard 3.4.4, Annex 17)**

Like the other national programs, the NQCP is also, for the most part, in the development or approval phase. Generally, this document does not include procedures on how the civil aviation authority will perform effective surveillance through effective application of security measures and inspection procedures applied by airport administrators, private companies hired by the State, or State entities assigned to these tasks. In most cases, the entities in charge of conducting security oversight tasks have insufficient materials or qualified personnel to conduct surveillance on behalf of the State. In many cases, personnel do not have the legal empowerment to conduct surveillance or, in some cases, the legal authority to impose sanctions on those entities that do not comply with national AVSEC laws and regulations.

d) **Contingency Plan (Standard 5.1.4, Annex 17)**

Even though many States developed contingency plans, these plans were not coordinated with the entities involved, mainly State entities that respond to acts of unlawful interference. This reflects lack of knowledge of the procedures that each involved entity must implement in such cases. Additionally, even though there is no requirement to establish a national contingency plan, it is important to ensure that involved entities are familiar with State criteria regarding the management and procedures to be implemented in case of an act of unlawful interference.

e) **National Civil Aviation Security Committee (NCASC) (Standard 3.1.5, Annex 17)**

Even though States have established laws for the creation of a National Civil Aviation Security Committee or similar arrangement, in many States such committee has not convened since its creation. In general, these laws require an update in regard to committee member composition.

f) **Airport Security Program (ASP) (Standard 3.2.1, Annex 17)**

All airports have established an Airport Security Program, generally approved; however, the ASP must still be adjusted to the local needs and resources of each airport. The great majority require additional procedures to ensure that national regulations will be applied for the effective application of security measures.

g) **Aircraft Operator Security Programme (AOSP) (Standard 3.3.1, Annex 17)**

Not all States receive AOSPs for review and approval by the civil aviation authority. In some cases, even though criteria has been incorporated to present the AOSP at the same time the aircraft operation certificate is requested, there is no coordination within the civil aviation authority to make sure the AOSP is reviewed by the appropriate AVSEC authority. Additionally, the AOSP of foreign aircraft operators reflect general information from their company headquarters and have not been adapted to the conditions, means and resources of the airports of States where they operate.

5.1.3 The Meeting was informed that in order to assist States with respect to their AVSEC deficiencies, ICAO has developed training programs grouping neighbour States together in order to benefit from this training and, therefore, to progress with their corrective action plans. However, not all States take advantage of this training and some activities must be cancelled due to lack of participants, as was the case with the USAP Second Cycle Audit Seminars.

5.1.4 The Meeting agreed that States/Territories must ensure the effective implementation of State corrective action plans in response to the recommendations of the USAP audit report before the follow-up visit of the First Cycle Audit, notifying ICAO of the progress of their action plans.

## **5.2 Regional AVSEC Activities**

5.2.1 The Meeting took note of several of the workshops conducted by ICAO in 2008, for the development of a National Screeners Certification Programme and AVSEC Instructor Courses to increase the number of available instructors in States, as well as courses on National Aviation Security Training Programme (NCASTP) and Cargo Security Programme planned in 2009.

5.2.2 Similarly, the Meeting was informed that in addition to the aforementioned training activities, ICAO continues with the regular training programme based on the Standard Aviation Security Training Packages (ASTPs) through the Regional Aviation Security Training Centres (ASTC), e.g., National Inspectors Course and ICAO Instructors Certification Course. In **Appendix A** to this part of the Report, the training schedule for courses and workshops planned until the end of 2008 and for the first trimester of 2009 is included.

5.2.3 The Secretariat reminded the Meeting that ICAO can assist States with information on developing technical cooperation projects for AVSEC matters.

5.2.4 The Meeting was also reminded of States' obligations to contribute to the ICAO AVSEC Plan of Action and furnish qualified personnel from the States as short-term-experts (STE); States are urged to continue their support in training and assistance for the improvement of civil aviation security.

5.2.5 The Meeting was also informed that the ICAO Council agreed to maintain the terms of reference of the Planning and Implementation Regional Groups, except for Africa (AFI) and the CAR/SAM Regions (GREPECAS), whose terms were amended to exclude aviation security issues. The reason for separating the AVSEC/COMM from GREPECAS is that the Air Navigation Commission (ANC) is not the appropriate entity for managing security issues. It should be clarified that ICAO is not abandoning aviation security issues, and the AVSEC/COMM will continue to function as the NAM/CAR/SAM AVSEC-FAL Group, an independent and multi-regional forum to harmonize and efficiently unify the efforts of smaller AVSEC regional and sub-regional groups in order to avoid duplication of efforts and reducing expenditure of limited State resources.

5.2.6 Taking into account the need to implement the corrective actions detected during the USAP Audits, the importance for Points-of-Contact to expedite these solutions and improvements, and other necessary activities to implement security improvement in States/Territories, the Meeting formulated the following Conclusion.

**CONCLUSION NACC/DCA/3/10      ENHANCEMENT OF INTERNATIONAL CIVIL  
AVIATION SECURITY**

That NAM/CAR States/Territories:

- a) continue supporting USAP and ensure implementation of their respective corrective action plans in compliance with Annex 17 SARPs;
- b) provide qualified AVSEC specialists in the form of Short-Term-Experts (STE) to provide training for the 2009 ICAO Training Schedule;
- c) contribute to the AVSEC Plan of Action;
- d) participate in courses and workshops on aviation security screener certification organized by ICAO for 2008 – 2010;
- e) provide ICAO with up-to-date information on their AVSEC and FAL points-of-contact (if not already done so) before 28 November 2008;
- f) implement the recommended guidelines on security controls for screening liquids, gels and aerosols; and
- g) provide ICAO with timely information on acts of unlawful interference that have occurred within their territories.

5.2.7 As follow-up action to this Conclusion, the Meeting agreed that States/Territories must provide the ICAO NACC Office with name of their candidates to act as short-term AVSEC training specialists by **31 October 2008**, (item b), leaving items a), c), e) and f) to be informed not later than the NACC/DCA/4 Meeting.

**APPENDIX A**  
**ICAO/CANADA TRAINING PROGRAMME**  
**PROGRAMA DE INSTRUCCIÓN OACI/CANADA**  
**2008-2009**

<b>REGULAR PROGRAM: Training Program Course</b> <b>PROGRAMA REGULAR: Programa Nacional de Instructores</b>			
<b>Host State/Territory</b> <b>Estado Sede</b>	<b>Dates</b> <b>Fechas</b>	<b>Venue</b> <b>Sede</b>	<b>Participants</b> <b>Participantes</b>
ASTC Trinidad & Tobago	14-24 OCT 2008	ASTC Port of Spain	CAR/SAM English Speaking Countries Países de habla inglesa de la Región CAR/SAM
ASTC Argentina	4-14 NOV 2008	ASTC Buenos Aires CIPE	CAR/SAM Spanish Speaking Countries Países de habla española de la Región CAR/SAM
<b>ICAO CANADA TRAINING PROGRAM: Screener Certification Workshop</b> <b>PROGRAMA DE INSTRUCCIÓN OACI-CANADA: Taller sobre Certificación de personal operador de equipos de seguridad de la aviación</b>			
1. México	24-28 NOV 2008	Morelia, Mexico	Mexico
2. Colombia	1-5 DEC 2008	Bogotá, Colombia	Colombia, Ecuador, Venezuela
<b>ICAO CANADA TRAINING PROGRAM: Instructors Course</b> <b>PROGRAMA DE INSTRUCCIÓN OACI-CANADA: Programación de Instrucción</b>			
1. Brazil	21-29 OCT, 2008	Brazil	Brazil
2. Panama	18-26 NOV 2008	Panama	Costa Rica Nicaragua Panama
3. Peru	2-10 DEC, 2008	Peru	Bolivia Chile Peru
4. Bahamas	2-10 DEC, 2008	Bahamas	Bahamas Belize Jamaica
5. Uruguay	20-28 JAN 2009	Uruguay	Argentina Paraguay



REGULAR PROGRAM: Training Program Course PROGRAMA REGULAR: Programa Nacional de Instructores			
Host State/Territory Estado Sede	Dates Fechas	Venue Sede	Participants Participantes
			Uruguay
6. French Antilles	27 JAN -4 FEB 2009	Martinique, French Antilles	French Guiana Haiti French Antilles
7. Aruba	20-28 JAN 2009 20-28 ENE 2009	Aruba	Aruba Guyana Netherlands Antilles Suriname Trinidad and Tobago
8. El Salvador	3-11 FEB 2009	El Salvador	El Salvador Guatemala Honduras
9. Antigua and Barbuda	3-11 MAR 2009	Antigua and Barbuda	Antigua & Barbuda Barbados Dominica Grenada St.Kitts & Nevis St.Lucia St.Vincent & the Grenadines
10. Cuba	3-11 MAR, 2009	Cuba	Cuba Dominican Republic
11. Venezuela	10-18 MAR, 2009	Venezuela	Colombia Ecuador Venezuela
12. Mexico	17-25 MAR, 2009	Mexico	Mexico

**Note: Starting the second trimester of 2009, there will be more workshops and courses regarding National Cargo Security Programme for all States. States will keep the same grouping for this new training.**

**Nota: Durante el segundo trimestre del 2009, habrá más talleres y cursos correspondientes al Programa Nacional de Seguridad en la Carga para todos los Estados. Para dicha instrucción, se mantendrán los mismos grupos de países que en el programa anterior.**

**Agenda Item 6: Other Business**

6.1 Under this agenda item, the Meeting dealt with issues regarding human resource planning and training, the new ICAO NACC Regional Office website, the organizational review of ICAO's Regional Programme, the Tentative Meeting Schedule for 2009, and the next NACC/DCA meeting.

***Human Resource Planning and Training***

6.2 In regard to human resource planning and training, the Meeting recognized the need to have adequate and well-trained personnel attend to air navigation systems and services. In this regard, the Meeting was informed that human resource planning and training was previously managed through the respective GREPECAS Subgroup that was disbanded due to lack of activity, and that this subject will now be addressed separately by each GREPECAS Subgroup in accordance with its respective area.

6.3 The Meeting congratulated Cuba and the Dominican Republic for their new training installations for air navigation services operational and technical personnel. Likewise, the Meeting was informed of other available training and centers in Colombia with CEA, in Jamaica, and in Barbados which is a designated TRAINAIR facility.

6.4 Cuba indicated the need for advanced AIS training, especially considering the upcoming transition from AIS to AIM and e-TOD implementation.

6.5 Taking into account the improvements to the ICAO website, and in order to promote didactic contents and relevant events at the existing training centres in the Region, the Meeting requested that ICAO consider implementing a link or section on the website for access to this information. This facility would make more information available on events being held in the Region and promote regional training activities.

6.6 In accordance with previous CAR and SAM Region meeting conclusions, the Secretariat presented guidelines for considering regional human resource and training planning, which is enclosed as **Appendix A** to this part of the Report. The objective is to assist administrations with planning and establishing their training programmes, Civil Aviation Training Centres (CATCs) course schedules and regional human resource and training needs for the different aeronautical fields. Considering the need to promote development of human resources and training, the Meeting adopted the following Conclusions:

**CONCLUSION NACC/DCA/3/11 HUMAN RESOURCE PLANNING AND TRAINING IN THE NAM/CAR REGIONS**

That those States/Territories/International Organizations that do not have Human Resource Planning for air navigation services, safety oversight and civil aviation security consider the guidance material included in Appendix A to this part of the Report, and

- a) develop, not later than **30 September 2009**, a five-year Human Resource Plan including a civil aviation personnel training programme that includes the implementation and operation of the ATM system, safety oversight and civil aviation security; and

- b) promote the participation of specialists in activities sponsored by ICAO (courses, seminars, workshops, etc.) taking into account that such activities are aimed at complementing and updating civil aviation personnel training.

**CONCLUSION NACC/DCA/3/12      AERONAUTICAL TRAINING STRATEGY FOR THE  
CAR REGION**

That ICAO, in coordination with the CAR Region States, develop a regional training strategy that includes:

- a) determining CAR States training needs;
- b) develop regional instructors to train CAR Civil Aviation Administration aeronautical technical personnel;
- c) agreements to share training plans and programmes among the CAR Civil Aviation Training Centres (CATCs), taking into account the ICAO technical cooperation programmes;
- d) develop regional training guidelines in accordance with the ICAO TRAINAIR programme guidelines; and
- e) present progress on this regional strategy at the NACC/DCA/4 Meeting.

***New ICAO NACC Regional Office Website***

6.7            The Meeting was informed of works and activities being carried out by the ICAO NACC Regional Office to improve and develop a new website. This new website will serve as a tool for the exchange of information and to coordinate relevant air navigation events in the NAM/CAR Regions. In addition to the current sections, the site will be enhanced with new sections for the exclusive use of States, Territories and International Organizations (protected by a username and password\*), as well as new public sections that include useful and relevant information.

6.8            The Meeting recalled that through State Letter Ref. NA 6-1.6.1, EMX0882, dated 14 August 2008, States/Territories/International Organizations were invited to provide no later than **10 October 2008**:

- information that your State/Territory/International Organization considers important to include on the NACC Office website; and
- links to be included.

6.9 The current website, whose domain is [www.icao.int/nacc](http://www.icao.int/nacc) is to be kept in operation until the final release of the new website, whose domain will be [www.mexico.icao.int](http://www.mexico.icao.int), which can be visited starting 8 September 2008. Both sites will work simultaneously; operational readiness of the final version is foreseen by the end of October 2008.

6.10 The Meeting congratulated the ICAO NACC Office for this initiative, identifying the website as a valuable tool to facilitate States/Territories/International Organizations access to information, exchange of ideas and accelerating NAM/CAR region systems and services implementation procedures. In this regard, some improvements were proposed such as links to each NAM/CAR Region Civil Aviation Authority and International Organization websites.

***Survey on ICAO Regional Offices for States/Territories/Internacional Organizations***

6.11 The Meeting recalled that the ICAO Council established the Working Group on Efficiency (WGOE) to conduct a study on the regional offices in line with the Finance Committee's recommendation to provide detailed recommendations for the next planning cycle of the triennium budget.

6.12 The goal is to review the structure and scope of the Regional Programme, taking into account the needs of contracting States as well as resources available throughout the Organization. The project aims to streamline the development and monitor the implementation of regional, sub-regional and national plans on the basis of the Global Air Navigation Plan and arrange periodic progress reports.

6.13 In this regard, the Secretariat distributed State Letter S 2/12.1-08/56, dated 1 August 2008, with accompanying instructions for completing an online survey where States were requested to indicate their satisfaction with the regional programme. The online survey on the ICAO Regional Programme Review should be completed and delivered not later than **15 September 2008**, in order to ensure future support and assistance with regional activities.

***Proposed Meeting Schedule for 2009***

6.12 The Meeting agreed that to achieve a seamless global air navigation environment, as proposed by the Global Air Navigation Plan, personnel are required to have proper knowledge, particularly taking into account that the new CNS/ATM systems are based on many new concepts and their implementation presents a complex challenge.

6.13 The Meeting was informed that some States/Territories/International Organizations have expressed the need to have ICAO organize certain meetings/events to provide more detailed information on the relevant considerations for the implementation of new systems and the Global Air Navigation Plan CNS/ATM concepts and to better understand the progress, development and application of SARPs for implementation of these systems under the ATM Operational Concept.

6.14 In this regard, the Secretariat indicated that ICAO can organize and coordinate the execution and themes for these meetings and necessary events; however, in most cases, State / Territory / International Organization support or the offer to serve as host for these events is necessary in order to cover the logistical aspects of the event. It was identified that several States/Territories/International Organizations from the NAM/CAR Regions have adequate facilities to carry out training events, such as their own training centres, which most often have the necessary elements to facilitate these types of events.

6.15 **Appendix B** to this part of the Report presents the preliminary schedule of ICAO NACC Office meetings, workshops and seminars for 2009, which are formulated to cover the above-described requests and that require support from States/Territories/International Organizations. Each event includes tentative dates, estimated participation and relevant comments for execution. In this regard, Jamaica stated their willingness to host the Air Navigation Meteorological Services Workshop - English Language and Advanced Course on ATS Safety Assessment. Several other States/Territories indicated their support and will inform the ICAO NACC Regional Office of their availability to host events. In this regard, the Meeting agreed that the ICAO NACC Office will forward, no later than **31 October 2008**, a draft calendar of events for 2009, indicating which events need to be hosted by States / Territories / International Organizations.

6.16 Likewise, the Meeting was informed of the tentative schedule of events, meetings and seminars/workshops planned for 2009, where meetings of the NACC Working Groups (C/CAR/WG, CA/ANE/WG, E/CAR/WG and CAN/MEX/USA) were highlighted. In this regard, the Meeting was informed that in view that the CAR/WG/01 and NACC/WG/02 meetings were hosted by Trinidad and Tobago and Jamaica, respectively, in accordance with the approved rotational scheme, the next meetings of the C/CAR/WG and E/CAR/WG should be hosted by the United States and Antigua and Barbuda, respectively.

#### *Next NACC/DCA Meeting*

6.17 In order to avoid the hurricane season, the Meeting agreed that the Fourth Meeting of North American, Central American and Caribbean Directors of Civil Aviation (NACC/DCA/4) will be held in May/June 2011.

## **APPENDIX A**

### **GUIDELINES FOR REGIONAL HUMAN RESOURCE AND TRAINING PLANNING**

#### **Introduction**

1 Modern air navigation systems require training and human resource planning strategies to ensure sufficient personnel and to highlight enhancements in training activities as part of their organizational culture in order to achieve homogeneous performance of all its members.

#### ***Human Resource Planning Strategy***

2 The first step of a human resource planning strategy consists of developing a study of the factors to calculate the required number of personnel in line with the particular duties of each post and of each working unit along with forecasted air traffic demand. To this end, it is necessary to consider tasks and workload. Some analysis methodologies are set forth in Doc 9426 - *ATS Planning*.

3 Moreover, personnel must meet the minimum requirements of skills, knowledge and familiarization with the unit corresponding to the work post. Additional elements to be taken into consideration are weekly rest periods, vacations and foreseen absences. Some methods require establishing the busiest day of the year and/or peak hours.

4 In order to achieve these goals, a strategy in line with average traffic growth should be established for 3 or 5 year periods; a complete approach should consider long-term organizational goals and evolution. The annual periodic review of human resource and training needs will allow the organization to maintain the required level of personnel to fulfil operational service demand. The strategy should have a clear vision and goals so that all organization members commit to their achievement.

#### ***Training Strategy***

5 Training is characterized as a critical element for the organization to maintain international competitive standards and, at the same time, internal growth in line with the organization's objectives. This approach requires planning very complete training, from the basic to the most advanced levels.

6 Strategic training normally begins with the development of a broad view plan and programme to achieve the highest professional performance from all members, which will result in clear productivity benefits for the organization; one benefit goes along with the other. Some service providers of the CAR and NAM Regions are already working with this vision, taking into account current and future needs.

7 In the first instance, a training plan is required that covers service needs and at the same time allows the personnel to develop sufficient skills and technical, operational and managerial knowledge.

8 In line with the last discussions of the GREPECAS Human Resource and Training Subgroup, a good training strategy may be divided as follows:

**Basic Formal Training.**

9                   The objective of this training is to ensure that the personnel obtain knowledge and basic skills to perform their duties in an efficient manner, in line with organizational objectives.

**Familiarization or Introduction to Working Units**

10                  This objective provides all ATC personnel with introductory training on the tasks of the working units to which they have been assigned, new procedures or procedures that will be valid in the near future such as changes to operational handbooks, SIDs, STARs, NPAs, service enhancements, etc.

11                  This type of training provides personnel with a better understanding of the internal functions of the organization, the processes, techniques, relationships, etc., which will result in safe and efficient service.

**Recurrent Training**

12                  ATS personnel should receive periodic training including current objectives and procedures applicable to the unit and/or organization, in order to maintain the highest service levels (e.g., operational procedures, phraseology, letters of understanding between ATS units, etc.).

13                  Under this item, the fact that personnel should receive recurrent training in accordance with duties performed should also be considered.

**Proficiency Training**

14                  It is important to periodically monitor unit performance to detect training needs. Occasional monitoring and assessment of organizational performance will identify service deficiencies.

15                  A proficiency training programme that provides resolution to identified deficiencies through additional training courses should be considered when necessary. The objective of this training is to help personnel maintain proficiency in their performance and improve the quality of service.

16                  In addition, depending on organizational needs, specialization training programmes should be considered, which will allow personnel to achieve higher responsibility categories. These courses should normally be structured in accordance with organizational needs and should aim towards higher performance levels in collaboration with the international community.

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**APPENDIX B**  
**PROPOSED EVENTS TO BE HOSTED: 2009 SEMINARS/WORKSHOPS**

No.	Title of Event	Main Objectives	Tentative Dates	Participation	Comments
1.	ATN Ground-Ground Applications Seminar/Workshop	<ol style="list-style-type: none"> <li>1. Provide States / Territories / International Organizations a forum to deal with information, analysis, debate, and exchange of experiences and aspects to consider in the planning and implementation of ATN ground-ground applications.</li> <li>2. Relevant topics will be covered: AMHS and AIDC system implementation, new SARPs on IPS, regional management for implementation.</li> </ol>	25-27 May	CAR/SAM	
2.	ATN Data link and Air-Ground Applications Seminar/Workshop	<ol style="list-style-type: none"> <li>1. Inform on implementation experiences with data transmission in other regions, the functionalities or applications that have been implemented through these links, current SARPs and ICAO provisions.</li> <li>2. Relevant aspects and considerations for the implementation of these links and the experience from trials.</li> <li>3. Comparison of the different techniques for these applications.</li> </ol>	2-4 November	CAR/SAM	
3.	Aeronautical Studies in the AGA environment	Identify, within the ICAO standards on aerodrome design, operations and certification, those aspects that could require aeronautical studies in the AGA environment, mainly on subjects related to RESAs, runway strips, control of obstacles and others.	8-12 June	CAR/SAM	
4.	Bird Hazard and Wildlife Prevention International Conference	Inform States/Territories about activities of the CARSAMPAF Regional Committee on bird hazard and wildlife prevention in order to incorporate more Member States and to implement control programmes for the airports in both Regions.	23-27 November	CAR/SAM	



No.	Title of Event	Main Objectives	Tentative Dates	Participation	Comments
5.	Air Navigation Meteorological Services Workshop - English Language	Inform States/Territories about the terminology and applied concepts in Aeronautical Meteorology for Air Navigation, the requirements and standards used and considerations for its organization and application.	Second Quarter	CAR	One-week duration
6.	Advanced Course on ATS Safety Assessment	Develop specialists to assess ATS safety in States/Territories/International Organizations of the NAM/CAR Regions.	Third Quarter	NAM/CAR	Two-week duration
7.	Second eTOD Seminar	<ol style="list-style-type: none"> <li>1. Update eTOD information regarding the implementation experiences from other regions, especially Europe.</li> <li>2. Provide States / Territories / International Organizations with the latest developments on eTOD.</li> </ol> <p>Involve mapping agencies and States' aeronautical authorities in the same eTOD training process.</p>	Second Semester	CAR/SAM	One-week duration