



International Civil Aviation Organization

North American, Central American and Caribbean Office

Sixth Meeting of Directors of Civil Aviation of the Central Caribbean (C/CAR DCA/6)

Nassau, Bahamas, 02-04 July 2003

C/CAR DCA/6 - WP/10

09/06/03

Agenda Item 6: Activities in the Technical Cooperation area

REPORT ON THE TECHNICAL COOPERATION PROJECTS ACTIVITIES

(Presented by the Secretariat)

SUMMARY

This Working Paper presents to the Meeting a summary of the projects activities, which are developed under ICAO's Technical Cooperation Programme in the CAR and SAM Regions for the implementation of the CNS/ATM Systems.

1. Introduction

1.1 In order to inform the States on the activities related with the CNS/ATM Systems implementation carried out within the technical cooperation projects in the CAR/SAM Regions, a summary is presented so that the meeting may note that technical cooperation programme is an efficient tool for those purposes and that the Administrations consider the convenience of supporting those projects.

2. Project RLA/98/003 – Transition to the CNS/ATM Systems in the CAR/SAM Regions

2.1 The Project's Coordination Committee approved the tentative programme of activities to be carried out during the year 2002 during its Fourth Meeting held in Lima, Peru 4-5 December 2002, presented as **Appendix A** of this Working Paper.

2.2 In the same Appendix A, a summary on the main activities carried out during the year 2002 and a list of the Central Caribbean States participation in such activities is presented. Likewise, a Programme of Activities of the project for the year 2003, approved during the Fifth Meeting of the Coordination Committee in Lima, Peru 17 and 18 March 2003 is added.

3. UNDP/ICAO RLA/00/009 Project - GNSS Augmentation Test (CSTB)

3.1. The project RLA/00/009 is being developed in the CAR/SAM Region through a Memorandum of Understanding (MOU) between ICAO and the FAA for a period of four years and a budget of \$USD 188 936.00. The following States and International Organizations participate financially: Argentina, Bolivia, Colombia, Ecuador, Panama, Peru, Venezuela and COCESNA.

3.2 The main objective of the RLA/00/009 Project is to develop a test plan to evaluate the technical and operational benefits contained in the system augmentation wide area of the FAA of the United States applied in the CAR/SAM Regions. In this regard it is expected to obtain results that contribute to the establishment of an operational model of the augmentation systems.

3.3 The project's development is in an advanced stage and trials, ionosphere impact studies and other activities have been carried out in the participant States. Results are expected by year 2004.

4. Project RLA/ 03/902 – EGNOS trials in the CAR/SAM Region

4.1 The general purpose of this project, which initiated in May 2003, with the participation of COCESNA (Representing the Central American States), Colombia, Cuba, Spain, European Commission (EC), European Space Agency (ESA), is to carry out tests of the ESTB/EGNOS System (European Geostationary Navigation Overlay Service System Test Bed) in the CAR/SAM Regions, and to develop trials and studies plan to evaluate the technical and operational benefits that the augmentation system, based on satellites (SBAS) will bring both to regions.

4.2 Within the project's activities programme it is foreseen to carry out the following activities:

- train personnel in the installation and operation of VSAT and ESTB stations. carry out trials of EGNOS/SBAS augmentation system
- an analysis of the operational need as a result of the tests
- train personnel and boost their practical experience in SBAS technology
- explore the possibility of integrating the EGNOS and WAAS technologies for a joint use for the users benefit
- verify the use of EGNOS in the different transport modes.

4.3 Within the project's activities, a course in Bogota, Colombia, from 21 to 23 May 2003 was held to trained the personnel from the participant States in the installation, configuration and test bed of ESTB and VSAT stations. Likewise a conference was programmed titled "Global Navigation Satellite Systems (GNSS) in the CAR/SAM Regions", which was held in La Antigua, Guatemala from 23 to 25 June 2003. The Administrations of the CAR/SAM regions were invited to participate at the event by financing the participation of two officers per country under the project's funds. The conference was addressed to high-level authorities with a directorate and technical level. For a better reference **Appendix B** of this Working Paper includes the conference programme for the CAAs acknowledgment on the GNSS subjects handled in the CAR/SAM Regions.

4.4 Also the main objectives of this project together with the RLA/00/009 Project "SBAS/WASS Trials in the CAR/SAM Regions", point at helping in the GNSS operational model definition which is being developed by the GREPECAS ATM/CNS Subgroup and represents a link for the establishment of a cooperation frame between Europe and the CAR/SAM Regions in the GNSS system sphere that will be enriched by the Galileo system future constellation. To this end, an agreement between ICAO and the ESA (European Space Agency) was signed in the Organisation's headquarters in Montreal in April 2003.

5. Project RLA/03/000 – MEVA II Digital Network Implementation

5.1 The States/Territories/International Organization members of the MEVA network, Aruba, Bahamas, Cayman Islands, Cuba, Dominican Republic, , Haiti, Jamaica, Netherlands Antilles, Panama, United States and COCESNA (representing Belize, Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua), through the Technical Management Group (TMG) considered it necessary to enhance the network for the following purpose:

- implement a network architecture, reliable, efficient and integrated
- support the requirements of the CNS/ATM systems in the present and future
- allowing the interconnectivity with other digital networks, in order to obtain a homogeneous environment of the network and facilitate the interoperability of the users applications in the CAR/SAM regions.

5.2 The project would include the acquisition, installation, commission of the required equipment, and the subsequent network operation, management and maintenance.

5.3 The current status of the Project Document is in its revision phase by the respective Administrations. The document is based on the RFP (Request for Proposal), approved by the mentioned Technical Management Group (TMG).

6. ICAO's Function

6.1 According to Article 37 of the Chicago Convention, ICAO will continue being responsible for the adoption and amendment of the standards, and recommended practices and procedures that govern the CNS/ATM systems. In order to ensure the highest level of uniformity concerning the security, regularity and efficiency of the air navigation, ICAO will coordinate and supervise the worldwide implementation of the CNS/ATM systems, in accordance with the air navigation regional plans and the global plan, coordinated for the ICAO CNS/ATM systems. In addition, ICAO will facilitate the provision of assistance to States, in connection with the technical, financial, management, legal and cooperation aspects of the implementation. ICAO's function will continue being recognized in the coordination and usage of the spectrum of frequencies regarding communications and navigation in support of the international civil aviation.

7. Technical cooperation

7.1 ICAO recognizes that for a coordinated and harmonious global implementation and to obtain fast benefits for the States, users and suppliers, the development of technical cooperation programmes are necessary to achieve an effective implementation and an efficient exploitation of the CNS/ATM systems. With this purpose, ICAO fulfills its central function in the coordination of arrangements of technical cooperation for the implementation of the CNS/ATM systems. ICAO also invites the States that are under conditions to do so, provide assistance in connection with the technical, financial, management, legal and cooperation aspects for the implementation to those States that so require.

8. Agreements of the First Meeting of Directors of Civil Aviation of the North America, Central America and Caribbean Region

8.1 As a result of the above, and to support the technical cooperation as a tool offered by ICAO for the development of civil aviation and its dynamic changes, the First Meeting of Directors of Civil Aviation of the North America, Central America and Caribbean Region (NACC/DCA/1, Grand Cayman, 8-11 October 2002), adopted the following conclusions, described below for ease of reference:

CONCLUSION 1/24 INSTRUMENTS FOR THE EFFECTIVE IMPLEMENTATION OF NEW CIVIL AVIATION SYSTEMS

That, recognizing the urgent need to take effective measures for the efficient implementation of the new civil aviation systems, States/Territories/International Organizations consider taking the following actions:

- a) dedicate financial resources to provide the necessary support to the implementation of the new civil aviation systems, taking into account that infrastructure and services are high cost items and that it is necessary to plan and develop a national plan;
- b) analyse the feasibility of developing regional technical cooperation projects, involving several States/Territories/International Organizations;
- c) consider the convenience of promoting international co-operation and bilateral/multilateral agreements that facilitate mutual assistance among States/Territories/International Organizations;
- d) undertake major efforts to join and actively participate in the Regional Technical Co-operation projects, currently executed in the CAR/SAM Regions; and
- e) propose new projects as deemed necessary.

CONCLUSION 1/25 FINANCING SOURCES TO INCREASE THE PARTICIPATION OF STATES / TERRITORIES / INTERNATIONAL ORGANIZATIONS IN THE REGIONAL PROJECTS DESIGNED TO INCREASE CAPACITY, SAFETY, REGULARITY AND EFFICIENCY OF CIVIL AVIATION

ICAO and States/Territories/International Organizations are urged to continue the efforts to obtain financing sources in the regional projects in order to participate in the regional projects for the implementation of the new civil aviation systems aimed at increasing airspace capacity, safety, efficiency and regularity of civil aviation.

9. Conclusion

9.1 Based on the information contained in this Working Paper and its Appendix A, which emphasizes the importance of developing technical cooperation projects for the effectiveness of the CNS/ATM systems implementation, the Administrations are required to consider the adoption of the following Draft Conclusion:

DRAFT**CONCLUSIÓN 6/xx:****ADHERENCE TO REGIONAL TECHNICAL COOPERATION PROJECTS RELATED TO THE CNS/ATM SYSTEMS IMPLEMENTATION.**

In order that the States/Territories carry out actions that allows the national and regional plans implementation of the CNS/ATM systems to be develop in an integrated, harmonized and homogeneous way, the Director Generals of Civil Aviation of the Central Caribbean agree to consider:

- a) supporting the operational, administrative and financial cooperation among the States/Territories, in view of the high capacity and cost of the new technology, in order to implement the CNS/ATM concept;
- b) keeping up to date the Administrations personnel with the state of the art technology involved in the CNS/ATM systems implementation, considering that the technical cooperation projects facilitate the means to achieve this objective;
- c) participating in the programmed activities for an homogeneous implementation of the CNS/ATM elements within the existing technical cooperation projects; and
- d) the adherence to the technical cooperation projects currently in force on CNS/ATM Systems implementation, such as the RLA/98/003 "Transition to the CNS/ATM Systems and RLA/03/902 "EGNOS trials in the CAR/SAM Region", and to develop new projects such as RLA/00/003 "Implementation of the CAR MEVA II Digital Network", in order to achieve harmonized and joint solutions in the CAR Region.

9. **Suggested action**

9.1 The Meeting is invited to:

- a) take note on the information contained in this working paper;
- b) review the Draft Conclusion presented under paragraph 8.1 and consider its approval; and
- c) to adopt any other action related to the technical cooperation projects that the Meeting considers appropriate.

APPENDIX A

TENTATIVE PROGRAM OF PROJECT ACTIVITIES FOR 2002

- 1) Development of the State Profiles to provide a regional and national vision of the requirements of each States, the different implementation alternatives and, at the same time and as possible, integrating, rationalizing and harmonizing the actual facilities and services. To be implemented by the CNS, ATM and Institutional Issues consultants team (6 weeks between April and May).
- 2) Preparation of the ACC Tentative Transition Plan by the CNS, ATM and Institutional Issues consultants team (8 weeks between September and October).
- 3) Preparation of the GNSS transition plan in charge of the CNS consultant (10 weeks between August and October).
- 4) Visits to States and coordination meeting with air operators, reports preparation, development of validation scenarios, development of plans and business cases in charge of the CNS, ATM and Institutional issues and Financial consultants (14 weeks between September and December).
- 5) Continuation of the evaluation of the pre-operational trials in routes UT655, UT410 and UT776/419 and initiation of coordinations to implement a group of RNAV routes approved by GREPECAS. Initiation of a trials program for the planning of RNP10 in route UL70 and in parallel, in charge of the ATM consultant (continuous activity during all the year).
- 6) Seminar on institutional issues, implementation options and familiarization with CNS/ATM planning tools (Tegucigalpa, Honduras, one week between May and June).
- 7) Seminar on the Reduced Vertical Separation Minima RVSM (Lima, one week in August).
- 8) Development of RVSM implementation program in charge of the ATM consultant (continuous activity during all the year).
- 9) Seminar on CNS/ATM Human Resources and Training (Lima, one week between April and May).
- 10) III Meeting/Workshop of ATM Authorities and Planners for the evaluation of routes UT655, UT410, UT776/419 and analyze RNP10 and RVSM activities (Lima, one week in May).
- 11) IV Meeting/Workshop of ATM Authorities and Planners to analyze the progress achieved in RNP10 and RVSM implementation process (Lima, one week in November).

SUMMARY OF EXECUTED ACTIVITIES OF THE RLA/98/003 PROJECT**1. Institutional Aspects**

- a) As programmed, the “CNS/ATM Seminar on Institutional and Economic Considerations, implementation options and familiarization with the CNS/ATM planning tools” was carried out, in Tegucigalpa, Honduras, 30 September to 4 October 2002.
- b) It was recognized in this Seminar that to obtain benefits, arrangements are should be made very different from the ones utilized in the conventional services provision and they can be obtained only through the Global ATM System and for this purpose, integration between State’s, as well as the systems rationalization and harmonization will require a level of operational, administrative and financial cooperation, due to the great investment and the high capacity of the new technology. For this, it was exemplify with COCESNA, Eurocontrol, Airways International, CANSO, among others.
- c) Participation of 48 experts from 9 States and 7 International Organizations: Argentina, Brazil, Chile, Colombia, El Salvador, Honduras, Paraguay, Peru, Venezuela, Airways International, CANSO, COCESNA, DISC, EUROCONTROL, FAA and SITA.

2. Meetings/Workshops of ATM Planners

- a) The “Third and Fourth Meeting/Workshop of Air Traffic Management (ATM) authorities and planners we carried out. The Meeting/Workshop AP/ATM/3 was held in Lima, Per fro 20 to 24 May 2003 and the AP/ATM/4 in Santa Cruz, Bolivia from 27 to 31 January 2003.
- b) During the AP/ATM/3 evaluation of pre-operational trials and demonstrations RNAV routes UT655, UT410 and UT 776/419, studies for the implementation of the RNAV routes approved by the GREPECAS, the analysis of the Action Plan related to the RNP 10 implementation in the routes UL 780 and UL 302 and the RVSM implementation in the CAR/SAM Regions. The participation of 52 experts of 20 States and 2 International Organizations: Argentina, Bolivia, Brazil, Chile, Colombia, Cuba, Dominican Republic, Ecuador, Guyana, Haiti, Jamaica, Mexico, Netherlands Antilles, Panama, Paraguay, Peru, Surinam, United States, Uruguay, Venezuela, COCESNA and IATA.
- c) During the AP/ATM/4, review of the Implementation Programme of routes RNAV UL 417, UL 655, UL 776, UL 793, UL 674, UL 337, UL 423 and UL 471; the actions analysis carried out for the execution of the Action Plan for the Implementation fro RNP 10 pre-operatinal in paralell routes UL 780 and UL 302, in the Santiago-Lima segment; as well as the analysis of GREPECAS/11 Conclusions on the RVSM matters and the actions taken by the RVSM Working Group and its respective Working Groups for the Action Plan execution for the RVSM Implementation in the CAR/SAM Regions. Also participation of 105 experts of 22 States and 4 International Organizations: Argentina, Bolivia, Brazil, Chile, Colombia, Cuba, Dominican Republic, Ecuador, El Salvador, Guyana, Haiti, Jamaica, Mexico, Netherlands Antilles, Panama, Paraguay, Peru, Surinam, Trinidad and Tobago, United States, Uruguay, Venezuela, COCESNA, IATA, IFALPA and IFATCA.
- d) The following aspects were analyzed and established in the Meeting/Workshop AP/ATM/4:

- Establishment of the CARSAMMA Infraestructure;
- Training for CARSAMMA Personnel in the William J. Hughes of the FAA Technical Centre;
- Elaboration and review of the guidance for the RVSM implementation in the CAR/SAM Regions;
- Preliminary analysis of Cost/Benefit for the RVSM Implementation in the CAR/SAM Regions presented by the FAA;
- Elaboration and review of the RVSM Concept of Operations (CONOPS).

3. Pre-operational RNAV routes trials

- a) Pre-operational and implementation RNAV and RNP 10 routes trials were carried out and their evaluation in routes UT 655 (Sao Paulo/Los Angeles), UT 410 (Buenos Aires/Miami). Consequently, the amendment process to include the routes in the Air Navigation Regional Plan (ANP) CAR/SAM, Vol. Basic, was executed.
- b) Likewise the implementation process of the Pre-operational RNP 10 in the segment Santiago de Chile/Lima and the routes UL 780 and UL 302 continues, according to the Action Plan developed for this purpose.

4. Seminars

- a) The First Seminar on RVSM Implementation (Reduced Vertical Separation Minimum) in the CAR/SAM Regions was held in Lima Peru from 5 to 7 August 2003. Participation of 73 experts from 17 States and 4 International Organizations: Argentina, Bolivia, Brazil, Chile, Colombia, Dominican Republic, Ecuador, Guyana, French Guyana, Haiti, Panama, Paraguay, Peru, Spain, Uruguay, Venezuela, Aeromech Inc., Boeing, COCESNA, Embraer, IATA, IFALPA and IFATCA.
- b) The Human Resources and Training Seminar in the CNS/ATM Systems to be held in 2002, was postponed to take place during 2003.

Participation of the CAR Region States in the RLA/98/003 Project Activities

Activity		Date	Participants per State	Total
1	Seminar/Workshop on the Planning Methodology and Study of Business Cases for the Transition to the CNS/ATM Systems. (Lima Peru, Office SAM)	31 May to 4 June 1999	PANAMÁ (3) DOMINICAN REPUBLIC (3)	6
2	Second Seminar/Workshop on the Planning Methodology and Study of Business Cases for the Transition to the CNS/ATM Systems. (IPV, Sao José Dos Campos, Brazil)	26 to 30 July 1999	COCESNA (3) CUBA (3) NETHERLANDS ANTILLES (3) HAITI (3) MEXICO (3)	15
3	Seminar/Workshop on AIS/MAP Management Systems. (Sao José Dos Campos, Brazil)	13-17 March 2000	COCESNA (1) CUBA (1) MEXICO (1)	3
4	Seminar/Workshop on Airspace Planning for the implementation of the New CNS/ATM Systems (SAM Office, Lima)	27-31 March 2000	COCESNA (3) UNITED STATES (1) HAITI (2) MEXICO (1) DOMINICAN REPUBLIC (2) TRINIDAD Y TOBAGO (2)	11
5	Seminar on International World Geodesic System WGS-84 (Santa Fé de Bogotá, Colombia)	22 - 26 May, 2000	COCESNA (1)	1
6	First Meeting/Workshop of Air Traffic Management (ATM) Authorities and Planners (SAM Office, Lima)	18 - 21 July, 2000	COCESNA (1) NETHERLANDS ANTILLES (2) CUBA (2) UNITED STATES (1) HAITI (2) JAMAICA (1) TRINIDAD Y T. (2) DOMINICAN REPUBLIC (1)	12

- A5 -

Activity		Date	Participants per State	Total
7	Second Meeting/Workshop of Air Traffic Management (ATM) Authorities and Planners (SAM Office, Lima)	14 - 18 May, 2001	COCESNA (2) UNITED STATES (2) HAITI (1) MEXICO (1) NETHERLANDS ANTILLES (1) TRINIDAD Y T. (2) DOMINICAN REPUBLIC (2)	11
8	Second Seminar on International World Geodesic System WGS-84 (Santa Fé de Bogotá, Colombia)	9 18 July 2001	COCESNA (2) GUATEMALA (2) REP. DOMINICANA (1)	5
9	Seminar on the Implementation of CNS/ATM Facilities and Services (Santa Fé de Bogotá, Colombia)	10 - 14 September, 2001	COCESNA (2) UNITED STATES (1) GUATEMALA (2) HAITI (2) JAMAICA (1) DOMINICAN REPUBLIC (2)	10
10	Third Meeting/Workshop of Air Traffic (ATM) Authorities and Planners (SAM Office, Lima)	20 - 24 May, 2002	COCESNA (2) CUBA (1) UNITED STATES (2) HAITI (2) JAMAICA (1) MEXICO (1) NETHERLANDS ANTILLES (2) DOMINICAN REPUBLIC (2)	13
11	CNS/ATM Seminar on Institutional and Economic Considerations (Tegucigalpa, Honduras)	30 sept.- al 4 octubre 2002	EL SALVADOR (1)	1
12	First Seminar on RVSM Implementation in the CAR/SAM Regions (Oficina SAM, Lima)	5 - 7 August, 2002	COCESNA (2) UNITED STATES (10) HAITI (2) DOMINICAN REPUBLIC (2)	16

Activity		Date	Participants per State	Total
13	Fourth Meeting/workshop of Air Traffic Management (ATM) authorities and planners (AP/ATM/4) (Santa Cruz, Bolivia)	27 - 31 January, 2003	COCESNA (2) CUBA (1) EL SALVADOR (2) UNITED STATES (7) HAITI (3) JAMAICA (1) MEXICO (1) NETHERLANDS ANTILLES (2)	19
14	Seminar on Human Resources and Training (Cartagena de Indias, Colombia)	23 - 27 June, 2003	COCESNA (3) CUBA (2)	5
15	Second Seminar on RVSM Implementation in the CAR/SAM Regions (Panama, Panama)	16 - 17 June, 2003	COCESNA (2) CUBA (2) EL SALVADOR (1) HAITI (2)	7
16	Fifth Meeting/Workshop of ATM authorities and planners in the CAR/SAM Regions for RVSM, RNAV routes and RNP Implementation (AP/ATM/5 RVSM-RNAV-RNP) (Panama, Panama)	18- 20 June, 2003	COCESNA (2) CUBA (1) EL SALVADOR (1) UNITED STATES (14) HAITI (2) NETHERLANDS ANTILLES (2)	21
TOTAL:				145

TENTATIVE PROGRAM OF PROJECT ACTIVITIES FOR 2003

- 1) Finalization and distribution of the document “Guidance Material towards the ICAO ATM Global evolution in the CAR/SAM Regions”.
- 2) Final tuning of the planning and evaluation tool of CNS/ATM systems (CNS/ATM) and of the communications table 1, 2, 3.
- 3) Visits to States.
- 4) Second Seminar on RVSM Implementation in the CAR/SAM Regions
(Panama, Panama, 16 - 17 June, 2003)
- 5) Sixth Meeting/Workshop of ATM authorities and planners in the CAR/SAM Regions for RVSM, RNAV routes and RNP Implementation (AP/ATM/5 RVSM-RNAV-RNP) (Panama, Panama, 18- 20 June, 2003)
- 6) Fifth Meeting/Workshop of ATM authorities and planners in the CAR/SAM Regions for RVSM, RNAV routes and RNP Implementation (AP/ATM/5 RVSM-RNAV-RNP) (27 – 31 October 2003, place to be determined).
- 7) Seminar on Human Resources and Training
(Cartagena de Indias, Colombia, 23 - 27 June, 2003)
- 8) Seminar on the Automation of the Air Navigation Future Systems
(one week in Lima, Peru, November 2003).
- 9) Seminar/Workshop on vertical data determination WGS-84
(Río de Janeiro, Brazil, 2 – 4 December 2003, sujet to coordinations).

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APPENDIX B



**ORGANIZACION DE AVIACION CIVIL INTERNACIONAL
INTERNATIONAL CIVIL AVIATION ORGANIZATION**

**OFICINA REGIONAL PARA / REGIONAL OFFICE FOR
NORTEAMERICA, CENTROAMERICA Y EL CARIBE
NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN**

**Conferencia sobre / Conference on
SISTEMA MUNDIAL DE NAVEGACIÓN POR SATÉLITE (GNSS)
“EGNOS/GALILEO en las Regiones CAR/SAM”**

**GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS)
“EGNOS/GALILEO in CAR/SAM Regions”**

**PROYECTO REGIONAL OACI RLA/03/902
ICAO REGIONAL PROJECT RLA/03/902**

**CENTRO DE FORMACIÓN DE LA COOPERACIÓN ESPAÑOLA
AGENCIA ESPAÑOLA DE COOPERACIÓN INTERNACIONAL
(La Antigua, Guatemala, 23 al 25 de junio de 2003)**

Fecha/hora		Temas	Expositores
Date/time		Topics	Speakers
23 june / 23 June 2003			
0830-0930	Registro de participantes / Registration of participants		Secretaría / Secretariat.
0930-1030	Ceremonia de inauguración / Opening ceremony		EC/ESA/ICAO/AECI
1030-1100	Pausa para café / Coffee break		
1100-1130	GALILEO, Programme status and overview		EC
1130-1200	EGNOS, Programme status and overview		ESA
1200-1230	Institutional and Financial Framework (GALILEO Management and Financial)		EC
1230-1330	Almuerzo / Lunch		
1330-1400	EGNOS, Aena's experience as hosting entity/operator of some EGNOS elements		AENA
1400-1430	Overview of ICAO CAR/SAM GNSS Activities		ICAO
1430-1530	Mesa redonda sobre GNSS y el estado del arte de su desarrollo/ Discussion table on GNSS and the state of the art of its development		ICAO
1900-2100	Cóctel de bienvenida,/Welcome cocktail		

- B3 -

Fecha/hora	Temas	Expositores
Date/time	Topics	Speakers
24 junio / 24 June 2003		
0900-0930	EDISA Project and RLA/03/902 Overview	ICAO/ESA/EC
0930-1000	European experience on GNSS operational validation	EUROCONTROL
1000-1030	Local Partners GNSS Activities	COCESNA
1030-1100	Pausa para café / Coffee break.	
1100-1130	Local Partners GNSS Activities	Colombia
1130-1200	Local Partners GNSS Activities	Cuba
1200-1230	GNSS civil aviation experimentation activities in Spain	AENA
1230-1300	Air Traffic Navigation and Control: Looking back at the sky	Indra
1300-1400	Almuerzo / Lunch	
1400-1430	GNSS Applications today and new perspectives based on EGNOS and GALILEO	GMV
1430-1500	Proposal for a Training Center in the CAR/SAM Regions	SENASA
1500-1530	A learning application by satellite	HISPASAT
Recorrido turístico/City Tour		

Fecha/hora	Temas	Expositores
Date/time	Topics	Speakers
25 junio / 25 June 2003		
0900-0930	A model for SBAS service provision in an international framework	AENA
0930-1000	GSS (Galileo Sistemas y Servicios), Spanish response to the participation of the Private Sector in Galileo	AENA
1000-1030	European Application Development	ESA
1030-1100	Pausa para café / Coffee break	
1100-1130	Criteria for RLA/03/902 continuity	ICAO
1130-1200	GNSS cooperation opportunities between Europe and the CAR/SAM Regions	EC
1200-1330	Conclusions of the First GNSS in CAR/SAM Regions Conference	ICAO
1330-1530	Almuerzo de clausura / Closing Lunch	