



RAAC/8

INTERNATIONAL CIVIL AVIATION ORGANIZATION

South American Regional Office

EIGHTH MEETING OF CIVIL AVIATION AUTHORITIES OF THE

SAM REGION

RAAC/8

REPORT

(Buenos Aires, Argentina, 23 – 25 April 2003)

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HISTORY OF THE MEETING

ii-1 PLACE AND DURATION OF THE MEETING

The Eighth Meeting of Civil Aviation Authorities of the SAM Region, was held in Buenos Aires, Argentina, from 23 to 25 April 2003, at the premises of the Crowne Plaza Panamericano Hotel.

ii-2 OPENING CEREMONY AND OTHER MATTERS

Mr. Renato Claudio Costa Pereira, ICAO Secretary General, on behalf of the Organisation, thanked the Administration of Argentina for hosting this Meeting, and emphasized its importance for the development of plans that will contribute to safety in the Region. Mr. José Miguel Ceppi, Regional Director of the ICAO SAM Office and Secretary of the Meeting, welcomed the participants and highlighted the objectives of the event, giving a brief explanation on matters to be discussed. Brigadier General Guillermo Adolfo Donadille, Commander of Aeronautical Regions, on behalf of the Argentinean government welcomed the participants to the meeting and stressed the importance of these meetings for the development of regional air transport and officially inaugurated the Eighth Meeting of Civil Aviation Authorities of the SAM Region.

ii-3 SCHEDULE, ORGANIZATION, WORKING METHODS, OFFICERS AND SECRETARIAT

Mr. Guillermo Adolfo Donadille, Commander of Aeronautical Regions, was elected Chairman of the Meeting, and Mr. Rafael Dávila Fierro, Director General of Civil Aviation of Ecuador, was elected as Vice-Chairman. Mr. José Miguel Ceppi, acted as Secretary, assisted by Mr. Carlos Stehli Deputy Director a.i. of the SAM Office, Mr. Marco Ospina, Air Transport Regional Officer of the SAM Office and Secretary of LACAC, and Mr. Samuel H. Cardoso, Aerodrome Regional Officer of the ICAO SAM Office.

ii-4 WORKING LANGUAGES

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

ii-5 AGENDA

The following agenda was adopted:

- Agenda Item 1: Analysis of the new air transport scenario in the South American Region.
- Agenda Item 2: Analysis of the ICAO AVSEC Programme and its impact on the Region

- Agenda Item 3: Safety oversight
- Agenda Item 4: Regional Air Navigation Plan -Transition to the CNS/ATM Systems
- Agenda Item 5: Review of Regional activities with regard to the reduction or elimination of deficiencies identified in air navigation services
- Agenda Item 6: Review of institutional aspects related to the implementation of CNS/ATM systems
- Agenda Item 7: Follow-up on the implementation of Conclusions adopted by previous RAAC meetings
- Agenda Item 8: Other matters

ii-6 **ATTENDANCE**

Ten States of the SAM Region, 1 State of the NAM Region and 3 International Organisations, IATA, IFALPA and LACAC, totalling 64 participants, attended the meeting. The list of participants is shown in pages iii-1 to iii-11.

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Agenda Item 1: Analysis of the new air transport scenario in the South American Region and airport privatization

1.1 The meeting received updated information on the status of air transport in the Region following the events of 11 September 2001, and on the activities to be carried out by the Regional Air Transport Competitiveness Committee (Post-Colloquium Committee), in an attempt to solve the difficulties facing air transport in the Region. In this respect, the meeting reviewed the background information since the ICAO/LACAC/IADB/IATA/AITAL colloquium and the work being carried out by the organisations involved in the adoption of measures aimed at the development of air transport in the region.

1.2 On the other hand, emphasis was placed on consolidating the integration of the countries in the South American subregions, by means of more liberal agreements, co-ordination meetings, and studies for the establishment of common policies. It stressed that air transport is a basic tool for attaining the integrationist objectives, and highlighted the work of the Sub-regional Air Services Agreement of the Fortaleza Agreement, and the progress made by the Andean Community of Nations (CAN).

1.3 It also noted that the ICAO South American Regional Office, in close co-ordination with LACAC, has fostered this type of processes, playing a harmonisation and co-ordination role for the merging of policies that will meet the interests of all actors (aeronautical authorities, regulatory bodies, airport operators, and airlines) and air transport users.

1.4 Upon reviewing the current air transport scenario, it was noted that this new structure should take not only aeronautical authorities and airlines as points of reference in this activity, but also airport operators and regulatory bodies of concessions assigned by States. In this regard, the organisations specialised in aviation should pay special attention to consumers, understood to be not only air transport users, but also airport users.

1.5 The meeting considered that the work to be carried out by the “Regional air transport competitiveness committee” should be aimed at the development of a strategy to eliminate the “bottlenecks” in terms of proceedings, permits and competencies, so as to comply with the agreements reached by the Ministers of Transport and Aeronautical Authorities, starting with LACAC Resolution A15-1 on the “Agreements reached by the Ministers of Transport and Aeronautical Authorities of Latin America”, in response to the mandates of the 11th and 12th Ibero-American Summits of Heads of State and Government.

1.6 The meeting supported the idea that the aforementioned strategy should, *inter alia*, contemplate the creation of local committees with the participation of all actors (aeronautical authorities, airlines, regulatory bodies, and airport operators), which, led by the aeronautical authority, would pursue these tasks within each State. It was also felt that the Regional competitiveness committee should monitor this process.

1.7 During the debate, the delegates expressed their concern regarding the serious problems facing air transport since the events of 11 September, now aggravated by the war in Iraq and the problem of atypical Asian pneumonia. This has caused a substantial drop in air traffic, seriously affecting all those involved in the aeronautical activity. Consequently, the meeting considered that preventive measures should be studied and adopted in order to face similar cases in the future.

1.8 The meeting noted that ICAO, in co-ordination with LACAC, as the organisations specialised in civil aviation, should focus their work on this new scenario in order to harmonise economic policies with technical aspects, fostering the adoption of political decisions that meet the interest of consumers, always seeking the security of this means of transportation. To that end, it formulated the following conclusion:

CONCLUSION 8/1 NEW AIR TRANSPORT SCENARIO

That the States of the Region should take steps to foster:

- a) intra-subregional co-operation in the field of air transport, promoting the integration of the Fortaleza Agreement and the Andean Community of Nations (CAN), so that a flexibility agreement may be reached in the South American Region in the future.
- b) the work of the regional air transport competitiveness committee, as a mechanism for strengthening regional air transport; and
- c) co-ordination among the specialised organisations (ICAO and LACAC) and support to other regional initiatives that might emerge.

Agenda Item 2: Analysis of the ICAO AVSEC Programme and its impact on the Region

2.1 On this agenda item, the meeting examined the background information on this issue emanating from the RAAC/7, the ICAO AVSEC programme, the Action Plan and the regional situation. It also analysed the proposals on the drafting and inclusion of an AVSEC clause in bilateral agreements, and on the development of AVSEC warning message procedures for the States which might be affected by the shortcomings and deficiencies identified. It also considered another proposal on the reinforcement of the cockpit door, in compliance with Chapter 13 paragraph 13.2 of Annex 6 to the Chicago Convention.

2.2 Upon reviewing the regional situation, special attention was given to co-ordinations between the GREPECAS AVSEC Committee and the LACAC AVSEC Panel, highlighting that the work carried out in these fora should be consistent and complementary so as to avoid duplication of efforts. However, both organisations should remain independent, based on their statutory objectives. In this regard, the meeting welcomed the idea of holding consecutive meetings at the same facilities, since several experts of the States participate in both fora.

2.3 Another issue examined with special attention referred to the measures being adopted by ICAO, mainly: the review of legal instruments; the enhancement of Annex 17 to the Convention on International Civil Aviation “*Security*” – *Protection of international civil aviation against acts of unlawful interference*”; the review of other Annexes to the Chicago Convention in relation to security; the strengthening of the AVSEC mechanism, especially concerning technical assessments; the activation of the work on mechanically-read documents; the review of air navigation service procedures; the review of ICAO manuals and guidelines, and the development of teaching material on security; and the strengthening of training programmes.

2.4 Upon discussing the ICAO AVSEC Action Plan, emphasis was placed on the regular, binding, systematic and harmonised audit programme that the organisation will develop within the USAP framework. The meeting stressed that developing countries should receive technical and financial assistance for the adoption of corrective measures to eliminate the deficiencies identified during the aforementioned audits. Likewise, the meeting endorsed the strict compliance of the principles of sovereignty, universality, transparency, opportunity, broadness, consistency, objectivity, justice and quality.

2.5 During the debate, the meeting stressed the need to adopt, at a regional level, measures aimed at: fostering industrial and technological co-operation; encouraging co-ordination among regional and sub-regional organisations; and examining “warning notice” mechanisms to detect shortcomings and deficiencies. Based on the broad discussion carried out, the Meeting determined to emphasize the measures aimed at improving the security, by adopting the following conclusion:

CONCLUSION 8/2 MEASURES TO IMPROVE SECURITY IN THE REGION

That the representatives of SAM States in the regional fora (ICAO – LACAC), foster the following activities:

- assess the application of ICAO standards, recommended practices and guidelines, as well as the reporting of differences.
- review the courses taught at training centres, so that they may respond to the needs of the region.
- provide proper audit training at regional level, and ensure that auditors responsible for this work belong to the region.
- foster regional co-operation in terms of human, material, and economic resources.
- assess new threats at regional level, and identify those that are really affecting the States of the region, in order to establish appropriate policies that will enable a co-ordinated work to guarantee the establishment of an adequate level of security in the States of the region.
- emphasize the need to join efforts for the acquisition of equipment, and seek an agreement for the joint purchase of such equipment so as to reduce costs.
- foster industrial and technological co-operation;
- encourage co-ordination among regional and sub-regional organisations; and
- examine “warning notice” mechanisms to detect shortcomings and deficiencies.

2.6 Likewise, the Meeting considered opportune that on bilateral air transport agreements, held among States of the Region, as well as in those cases whenever possible/necessary? with other States, a clause contemplating the broadest cooperation on AVSEC matters between both States, be included. Based on this, the following conclusion was adopted:

CONCLUSION 8/3 AVSEC CLAUSE ON AIR TRANSPORT BILATERAL AGREEMENTS

That States,

Include in air transport bilateral conventions, an AVSEC clause contemplating the broadest possible cooperation on training, technology, procedures, certification and auditing matters.

2.7 Finally, the Meeting thoroughly reviewed the proposal presented aimed at adopting regional measures to block the cockpit door access, in accordance with Chapter XIII of Annex 6 to the Chicago Convention. The Meeting agreed on the need to consult the South American States on the proposal and review the results of the consultation, as soon as possible. Based on this, the Civil Aviation Authorities formulated the following conclusion:

CONCLUSION 8/4 BLOCK OF THE COCKPIT DOOR ACCESS

That the ICAO South American Regional Office:

- a) Consult States of the SAM Region their points of view on the proposal included in the **Appendix** to this part of the Report;
- b) Consolidate the responses and analyzes with the Directors of Civil Aviation of the SAM Region present at the oncoming LACAC Executive Committee Meeting (Varadero, Cuba, 18 – 19 June 2003); and
- c) Aimed at obtaining a common position before the implementation date, 1 November 2003, inform the States on the results obtained from the execution of paragraphs a) and b).

APPENDIX**1. Alternate method**

1. The operator shall take the necessary measures so as to all passenger-carrying airplanes of a maximum take-off mass in excess of 45500 kg or with a passenger seating capacity greater than 60 shall be equipped with an approved flight crew compartment door that is designed to resist penetration by small arms fire and grenade shrapnel, and to resist forcible intrusions by unauthorized persons. This door shall be capable of being locked and unlocked from either pilot's station.

2. Deadline for door reinforcement:

2.2.1 For international flights (USA and Canada) : 9 April 2003

2.2.2 For international flights (Europe/Asia/Oceania) : 1 Nov. 2003

3. Air operators that carry out domestic and regional flights (South America) in aircraft affected by the aforementioned modification, and for aircraft operating with foreign registration, shall implement a system to block the cockpit door so as to prevent access to individuals other than crew members.

Implementation deadline : 1 Nov. 2003

4. The operator shall provide the means for monitoring from either pilot's station the entire door area outside the flight crew compartment to identify persons requesting entry and to detect suspicious behaviour or potential threat. Deadlines for future implementation of this equipment shall be advised in due time.

5. The reinforcement of the cockpit door, its locking system and the surrounding area monitoring system shall be implemented based on design, manufacturing and installing specifications duly certified by the civil aviation administration.

Agenda Item 3: Safety oversight

3.1 The debate on this subject revolved around the following aspects:

- a) the ICAO Universal Safety Oversight Audit Programme (IUSOAP);
- b) expansion of the IUSOAP;
- c) the Regional Safety Oversight Co-operation System; and
- d) licensing of pilots over 60 years of age.

ICAO universal safety oversight audit programme (IUSOAP)

3.2 The meeting noted that the universal audit programme had been completed in June 2002, and that the States audited totalled 179, in addition to 5 independent territories which had also been audited. To date, audit follow-up missions have shown the success of the IUSOAP and that most of the States visited had made significant progress towards the solution of the safety problems identified.

Expansion of the IUSOAP

3.3 The meeting was reminded that, starting in 2004, in keeping with Assembly Resolution A33-8, the IUSOAP will be expanded to cover Annexes 11, 13 and 14. Likewise, it was noted that the preparatory tasks scheduled for 2003 included, *inter alia*, the training of auditors, pre-audit questionnaires, audit protocols, adjustment of the audit findings and differences database (AFDD), and amendments to the ICAO publications on the IUSOAP, such as Document 9734, *Safety Oversight Manual, Part A – Establishment and Management of a State safety oversight system*, and Document 9735, *Safety oversight audit manual*.

3.4 The pre-audit questionnaire will be one of the most important tools to be used by the audit process. This questionnaire will be made up of three parts, in which the level of compliance with the SARPs will be assessed. This questionnaire will be sent to States during the second quarter of 2003, and answers are expected within 6 weeks of receiving the questionnaire.

3.5 In relation to the air traffic services audit, this scrutiny will not only cover Annex 11, but also relevant sections of Annex 2, *Rules of the Air*, Annex 10, *Aeronautical Telecommunications*, and Annex 15, *Aeronautical Information Services*.

3.6 The Action Plan developed by ICAO for conducting the audits envisaged in the expansion, contemplates the following phases:

Phase 1: Development of the questionnaire by ICAO. To be completed by the end of September 2003.

Phase 2: Internal ICAO preparations for the audits. Activities such as the creation of training material for auditors will be undertaken. It is expected that States will contribute with experts to be trained as auditors in the process.

Phase 3: Actual audits between February 2004 and December 2008.

3.7 Upon discussing this matter, the meeting agreed that, although each State would have to prepare for its individual audits, everybody could benefit from a joint information-sharing mechanism in order to streamline the process and avoid duplication of efforts. This mechanism could easily work through the use of telephone and electronic communications to share experiences and distribute work among States. To that end, the meeting adopted the following conclusion:

CONCLUSION 8/5 REGIONAL STRATEGY IN PREPARATION FOR THE AUDITS

In order to streamline the process of preparation for the IUSOAP audits of Annexes 11, 13 and 14, an appeal is made:

- a) to each State to identify a point of contact from its organization in charge of IUSOAP audit preparations and commit to exchange information on a regular basis over the telephone or through electronic means;
- b) to ICAO to conduct, as soon as possible, a regional seminar on the expanded audit programme; and
- c) to the ICAO Lima Regional Office to co-ordinate the necessary activities to carry out the actions referred to in paragraphs a) and b) above.

Regional Safety Oversight Co-operation System

3.8 States were encouraged to take advantage of the airport inspector certification courses, seminars and workshops being offered by the United States Federal Aviation Administration and others, in preparation for the upcoming expansion of the ICAO USOAP Programme to airports in 2004 and airport certification requirements, to become effective in November 2003.

3.9 The meeting noted that the regional system had recognised that the first step towards improving safety in the region was the establishment of harmonised rules and procedures, using clear language in their wording to facilitate compliance by air operators in the region, while improving their competitiveness *vis-à-vis* operators in other Regions.

3.10 In this sense, the meeting was reminded that the Regional Safety Oversight System regulations, in article 4, paragraph b), as one of the functions of the system, provided for the establishment of uniform rules and procedures in the areas of personnel licensing, operation of aircraft and airworthiness, consistent with the relevant ICAO standards and recommended practices and related procedures and guidance texts, aimed at the harmonisation and adoption of such rules and procedures by the participating States.

3.11 Likewise, the meeting was informed that efforts had been made to harmonise the following rules, which were under consultation with the States:

- LAR 11 Rules for the formulation, issuance and amendment of LARs
- LAR 145 Approved maintenance organisations
- LAR PEL 61, 63, 65 and 67 Personnel licensing; and
- LAR OPS Operation of aircraft and certification.

3.12 The meeting was informed that the regional system also envisaged the establishment of collaborative inspection agreements. Within this framework, the project intended to conduct a series of aircraft repair shop certification trials that would help the regional system to obtain information and experience on the logistic difficulties that a multinational team might face in the conduction of certification and inspection tasks and for certification in the States. Likewise, a programme for the implementation of a regional co-operation system to approve aircraft repairs and modifications was being developed.

3.13 The meeting supported the work being carried out by the Regional Safety Oversight Co-operation System and the action being taken for the establishment of a regional safety oversight body.

Licensing of pilots over 60 years of age

3.14 The meeting went on to discuss a proposal to extend the age limit for pilots. The subject was analysed taking into account international standards (Annex 1 to the Chicago Convention), the legal aspects of the legislation of some States in the Region, and psychological, physical and aeronautical aspects.

3.15 The meeting was informed that ICAO had been studying this matter for several years, which was currently included in its work programme, and that the standard established in Annex 1 had not been modified.

3.16 Following an extensive debate on this matter which revealed some differences in the application of the standard among the States of the Region, the meeting concluded that the subject should continue in the hands of the ICAO specialised bodies: the Technical Panel and the Air Navigation Commission. Likewise, it urged those States that, in their national regulations, were applying a different standard from that established in Annex 1 to the Chicago Convention, to report it to ICAO in accordance with article 38 of the cited Convention. Finally, it urged the States, if the case so required, to enter into agreements for authorising pilots with licenses not consistent with the international standard to enter their respective airspaces, in accordance with Article 40 of the aforementioned Chicago Convention. In this regard, the meeting of Civil Aviation Authorities adopted the following conclusion:

CONCLUSION 8/6 LICENSING OF PILOTS OVER 60 YEARS OF AGE

Civil Aviation Authorities of the South American Region that apply in their national regulations a standard different from that shown in paragraph 2.1.10.1 of Annex 1 to the Chicago Convention, are urged to:

- a) report the difference to ICAO, according to Article 38 of the Chicago Convention; and
- b) establish bilateral agreements, if necessary, for authorising pilots with annotated licenses to enter their airspaces, in accordance with articles 39 and 40 of the Chicago Convention.

Agenda Item 4: Regional Air Navigation Plan -Transition to the CNS/ATM Systems

4.1 Under this agenda item, the meeting examined the following items:

- a) ATS quality assurance;
- b) implementation of RNAV routes, RNP10, and RVSM;
- c) activities in preparation for the ITU WRC-2003, with a view to the protection of the aeronautical radio frequency spectrum;
- d) regional technical co-operation project RLA/98/019 – South American Digital Network (REDDIG);
- e) regional GNSS augmentation trial;
- f) activities in preparation for the Eleventh Air Navigation Conference; and
- g) CNS/ATM implementation.

ATS quality assurance

4.2 The meeting analysed the activities that were being carried out in the CAR/SAM Regions for the implementation of an ATS quality assurance programme for both Regions, pursuant to the recommendations of the CAR/SAM/3 RAN meeting. It also noted that the guidance material for the establishment of the ATS quality assurance programme had been developed by GREPECAS.

4.2.1 The meeting was informed that, pursuant to Conclusion 7/15 of the RAAC/7 meeting, the States were designating the responsible parties for, and co-ordinators of, the ATS quality assurance programmes that were being gradually implemented at the various levels of ATS units in the respective States. The meeting agreed that the implementation of quality assurance programmes would contribute significantly to the reduction of ATS incidents, as part of the improvements to be introduced in ATS safety management systems.

4.2.2 In addition, the meeting noted the importance for States to take advantage of the training courses, seminars and workshops being offered by ICAO and the United States Federal Aviation Administration. Another opportunity to obtain expertise is the FAA International Course on Air Traffic Quality Assurance that will be available in August 2003. This training can be offered at the FAA Academy in Oklahoma City, Oklahoma, or in-country.

4.2.3 The meeting took note of the event organised by ICAO to disseminate, provide training on, and implement ATS quality assurance programmes. In this sense, it noted that a new workshop was being scheduled to be held in Lima, Peru, from 12 to 16 May 2003.

4.2.4 The meeting examined a proposal to amend the regional guidance material for ATS quality assurance programmes (Chapter 3, paragraph 3.3 – Structure), taking away from the ATS directorate the responsibility for structuring and implementing the quality assurance programme, so that units providing the service would no longer be responsible for assessing its quality. An extensive debate ensued in this respect, and the conclusion was reached that the quality assurance programme had to be implemented at all levels, and that each administration should structure its quality assurance programme according to its needs. On the other hand, it was stated that the existing guidance material was aimed at the establishment of a quality assurance programme within ATS units, but that it could be revised in the future, based on the audits to be carried out as part of the extended ICAO USOAP programme. The meeting noted the connection between the ATS Quality Assurance Programme and the expansion of the ICAO IUSOAP to Air Traffic Services. The ATS Quality Assurance Programme can be used as a tool in assisting States for the ICAO IUSOAP preparations.

Implementation of RNAV routes, RNP10, and RVSM

4.3 The meeting took note of the activities carried out for the implementation of RNAV routes, RNP10, and RVSM since the RAAC/7 meeting. In this regard, it also noted the support provided by regional project RLA/98/003, as an implementation and assistance tool for the transition to CNS/ATM systems, supporting the holding of meetings of air traffic management authorities and planners (AP/ATM), events which have been extremely successful for the implementation of RNAV routes, RNP10, and RVSM.

4.3.1 Regarding the implementation of RNAV routes, note was taken that the AP/ATM/4 meeting, held in Santa Cruz de la Sierra, Bolivia, in January 2003, had continued with the studies and co-ordination for the implementation of RNAV routes, such as routes Santiago de Chile/Madrid; Asunción/Campo Grande; Sao Paulo/Lima; Sao Paulo/Santiago de Chile; Asunción/Sao Paulo; and Panama/San Juan de Puerto Rico. The meeting took note of the significant benefits derived from the implementation of RNAV routes, as well as of their gradual introduction to the CAR/SAM ANP, through the corresponding amendments.

4.3.2 The meeting was also informed of the plans for RNP10 pre-operational implementation on routes UL780 and UL302 (Santiago de Chile/Lima) and the intention of Chile and Peru to proceed with the implementation, together with the CAR/SAM Regional Monitoring Agency (CARSAMMA), represented by Brazil. On the other hand, the meeting was informed that matters concerning RNP planning and implementation would be reviewed at the AP/ATM meetings and that the bases for the preliminary studies of an RNP implementation strategy in the CAR/SAM Regions had already been established.

4.3.3 The meeting took note of the progress made in RVSM implementation and in the establishment of the CARSAMMA by Brazil. In this respect, information was provided on the most relevant developments regarding RVSM implementation since the AP/ATM/4 meeting. While discussing the measures to be adopted by the States, the meeting considered that those States that had not issued the AIC by 15 April 2003 for RVSM implementation in their airspaces, should do so as soon as possible, so as not to affect regional RVSM implementation plans and avoid the establishment of transition areas, which might compromise the uniformity of RVSM implementation in the CAR/SAM Regions.

4.3.4 Brazil presented detailed information on its plans for the implementation of RNAV routes, RNP and RVSM, and its proposals for the forthcoming AP/ATM/5 meeting.

4.3.5 The meeting felt it was not necessary to formulate recommendations in addition to those already made. However, it agreed to pursue regional efforts to enable a broad and committed participation, not only of high-level authorities but also of experts in each area, in all of the activities required for the implementation of RNAV routes, RNP10 and RVSM in the CAR and SAM Regions.

Activities in preparation for the ITU WRC-2003, with a view to the protection of the aeronautical radio frequency spectrum

4.4 The meeting received information on the agenda for the ITU WRC-2003 and on the updating of the final document on the ICAO position to be presented to the ITU as an information paper in May 2003.

4.4.1 Regarding the agenda for the WRC-2003, the meeting took note of the following topics of interest to civil aviation:

- a) Ensure spectrum availability in the 5 091 – 5 150 MHz band for use of MLS and future aeronautical communication applications. Agenda Item 1.4 of the WRC-2003;
- b) Harmful interference to aeronautical mobile services. Agenda Item 1.14 of the WRC-2003;
- c) Ensure the protection of DME in the 1164-1215 MHz band and of radar systems in the 1215-1300 MHz band from possible interference caused by radio navigation satellite systems (RNSS), and the protection of radar systems operating in the 2700-2900 MHz band from interference by non-aeronautical mobile communication systems - Agenda Item 1.15 of the WRC 2003; and
- d) Use of GNSS differential correction in the 108-117.975 Mhz band - Agenda Item 1.28 of the WRC-2003.

4.4.1.1 The meeting examined the measures recommended by ICAO for securing the support of the States to the ICAO position at the WRC-2003. Likewise, for purposes of co-ordination between the ICAO Regional Offices/Headquarters and the States, the meeting considered that the States should implement Conclusion 11/39 of the GREPECAS/11 meeting, by designating a point of contact closely related to the work carried out at national level on aeronautical matters related to WRC-2003, and communicating such designation to ICAO.

Regional technical co-operation project RLA/98/019 – South American Digital Network (REDDIG)

4.5 The meeting received information on the status of the South American Digital Network being implemented through regional technical co-operation project RLA/98/019, by virtue of which ICAO had signed a contract with the French company SEEE for the provision, installation and start up of the cited network. The meeting was also advised about the timetable of activities for the implementation of the REDDIG and that this network was expected to start operations in May 2003.

4.5.1 It was also noted that, as confirmed during the visits made by ICAO and the contractor, all node equipment for provisional acceptance tests (PSAT) had been installed in the respective locations to prepare the nodes for the next step, that is, network tests, which would be controlled from the Lima node. In this regard, ICAO drew the attention of the States to the fact that the PSATs revealed issues pending implementation and of the responsibility of the Administrations, in relation to the preparation of communication interfaces and the programming of terminal equipment to be connected to the REDDIG nodes. In this regard, the meeting stressed that, in order to proceed with the project, these outstanding issues had to be resolved by the Administrations. The **Appendix** to this part of the report contains a list of these outstanding issues. Upon discussing this matter, the meeting formulated the following conclusion:

CONCLUSION 8/7

IMPLEMENTATION OF THE REDDIG

That, as a matter of urgency, and in order to successfully put the REDDIG in operation in the time foreseen, the States participating in UNDP/ICAO technical co-operation project RLA/98/019 make utmost efforts to resolve, before the REDDIG network tests (NAT), all outstanding issues listed in the Appendix to this part of the report, as identified during the provisional acceptance tests (PSAT) carried out by the project, the contracting company and the State counterpart.

4.5.2 The meeting also noted the work done with respect to the new technical co-operation project RLA/03/901, which had the following three main objectives:

Objective No. 1 *To develop a proposal for the creation of an multinational mechanism for the definitive management of the REDDIG, taking into account the studies to be conducted by GREPECAS in that respect.*

Objective No. 2 *REDDIG management under the conditions established by the Third Coordination Meeting (RCC/3) of Project RLA/98/00, for a period of at least two years and leasing of the space segment.*

Objective No. 3 *To plan the regional development of CNS/ATM applications and implement said applications in keeping with CAR/SAM FASID requirements.*

4.5.2.1 The meeting was also informed that, with the exception of Colombia, this new project was being supported by all the States of the Region. In this regard, it was noted that Colombia had expressed that it had certain limitations to participate in the new REDDIG project, and that the States and ICAO should establish an agreement with Colombia so as not to modify the REDDIG operational programming being implemented and to maintain the satellite segment in a single block for technical reasons. The meeting was informed that this matter would be addressed by the Fifth Meeting of the REDDIG Co-ordination Committee, to be held next May with the purpose of examining the start up of the network and its future management by both the RLA/98/019 and the new RLA/03/901 project.

GNSS regional augmentation trial

4.6 The meeting was informed on the progress made under project RLA/00/009, GNSS Regional Augmentation Trial, and the arrangements for the activation of the new Regional Technical Co-operation Project RLA/03/902, SBAS/EGNOS Trials in the CAR/SAM Regions, which was being established pursuant to Conclusion 11/45 of the GREPECAS/11 meeting. In this regard, it was noted that Project RLA/00/009 was to complete its activities in 2004, and that the document of the new SBAS/EGNOS trial project, in which Colombia, Cuba and COCESNA participated, was being prepared.

4.6.1 Colombia provided the meeting with a detailed description of the trials to be carried out through the EGNOS test bed (ESTB) to be implemented in the CAR/SAM Regions, which included the broadcasting of augmentation signals through the INMARSAT III AOR-E satellite. It was noted that the project would demonstrate the European GNSS augmentation capabilities and would provide complementary results to project RLA/00/009. Likewise, there would be two potential areas of co-operation between these two projects, aimed at the establishment of the GNSS operational model for the CAR/SAM Regions. These areas of co-operation would relate to the study of the ionosphere and EGNOS/WAAS interconnectivity. In this regard, the meeting considered that these technical aspects should be duly studied in an appropriate technical forum, that is, the CNS Committee of the GREPECAS ATM/CNS Subgroup. In this sense, the meeting formulated the following conclusion:

CONCLUSION 8/8 CO-OPERATION BETWEEN PROJECTS RLA/00/009 AND RLA/03/902 ON GNSS AUGMENTATION

That Colombia, as a member of GREPECAS, document co-operation aspects between projects RLA/00/009 and RLA/03/902 regarding the study of the ionosphere and the EGNOS/WAAS interconnectivity, for their review by the CNS Committee of the CNS/ATM Subgroup, in support of the definition of the GNSS operational concept for the CAR/SAM Regions.

Activities in preparation for the Eleventh Air Navigation Conference (AN-Conf/11)

4.7 The meeting was provided with information on matters examined by the Eleventh Air Navigation Conference and the preparatory actions being taken by ICAO in co-ordination with Colombia, Brazil and COCESNA, pursuant to Conclusion 11/54 of the GREPECAS/11 meeting. In this respect, it was noted that the ICAO Regional Offices of Lima and Mexico were planning to develop jointly the corresponding documentation to be submitted, together with other relevant information, to a meeting/seminar in preparation for the AN-Conf/11 to be held in Lima next July, so that the States may attain a common regional position on AN-Conf/11 Agenda Items 5, 6 and 7. In this regard, the meeting formulated the following conclusion:

**CONCLUSION 8/9 SUPPORT OF THE STATES TO THE DEVELOPMENT
OF A COMMON CO-ORDINATED POSITION FOR THE
AN-CONF/11**

That, in order to attain a common co-ordinated position for the Eleventh Air Navigation Conference on Agenda Items 5, 6 and 7, the States fully co-operate in the development of the co-ordination activities that the Regional Offices are carrying out together with Brazil, Colombia and COCESNA.

CNS/ATM implementation

4.8 Colombia presented to the meeting a CNS/ATM element implementation concept, which it named *Balanced principle for CNS/ATM implementation in the Region*. In this sense, it was noted that, according to the balanced principle, ICAO, in fostering the transition to the CNS/ATM systems, should carry out the process, not only based on airspace safety studies or the existence of a reliable technological infrastructure in the States, but also, and primarily, based on a gradual transition process and the co-existence of the current and the proposed systems. This would allow regional fleets to adjust to the financial conditions of the sector or plan the replacement of avionics so as to obtain maximum benefits within a balanced, equitable process and a time span consistent with the global economy of the sector.

4.8.1 In this regard, the meeting, upon examining the essence of the so-called balanced principle, clearly recognised that it was fully in line with the ICAO general policy statement for the implementation and operation of CNS/ATM systems, particularly with those principles related to institutional arrangements and CNS/ATM implementation. It also noted that the Regional Plan for the Implementation of CNS/ATM Systems contained, both in Documents I and II, the balanced principle concepts. The meeting considered that the paper presented by Colombia was a very good contribution, since it expressed, in very few words, clear concepts on the transition to the new CNS/ATM systems. This transition should be carried out gradually, building upon the existing conventional systems, and should be designed to offer well-thought, feasible and cost-effective improvements that will meet the needs of the users and develop into a system that meets the safety, capacity, efficiency, regularity and environmental protection requirements.

APPENDIX

ACTIVITIES RELATED TO THE REDDIG NODES PENDING IMPLEMENTATION BY THE STATES AS A RESULT OF THE PSATs

ARGENTINA

AFTN

Programme new AFTN ports in the message switch and connect them to the MUX FRAD CX950 B multiplexer, whose ports are duly identified. The number of ports is six:

SAEZ	SCEL
SAEZ	SUMU
SAEZ	SGAS
SAEZ	SLLP
SAEZ	SPIM
SAEZ	SBCT/SBBR

ATS SPEECH CIRCUITS

Programme the ACC VCCS speech circuit switching system, which allows the controller in the ATC console position to access voice communication services, so that each console position may have the dedicated and switched ATS speech circuits that are consistent with the operations of the Ezeiza control centre.

Make the respective connections between the VCCS and the MUX FRAD CX950 B multiplexer of the REDDIG node, whose ports are duly identified.

Dedicated ATS circuits

The dedicated ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer are:

SAEZ	SCEL
SAEZ	SUMU
BAIRES	CARRASCO APP
BAIRES	SUMU
SAEZ	CARRASCO APP

Switched ATS circuits

The switched ATS circuits to be programmed in the VCCS and connected to the FRAD CX950 B multiplexer will provide the following connections:

SARE /SAEZ SGAS
 SACO/ SAEZ SCEL
 SACO/SAEZ SLLP
 SAVC/SAEZ SCEL/SCTE
 SAVC/SAEZ SCEL/SCCI
 SARE /SAEZ SBCT
 SARE/ SAEZ SUMU
 SARE/SAEZ SUMU/SUCA
 SARE/SAEZ SBCT/SBWI
 SAZS/SAEZ SCEL/SCTE

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer, whose ports are duly identified.

GNSS DATA

Establish the physical connection between the DB60 serial outlet of the Cisco 2501 router of the GNSS augmentation trial system TRS and the FRAD CX950 B multiplexer, whose ports are duly identified (winchester V.35 connector of the TRS node connected to the V.35 connector in the REDDIG rack).

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. Since there is no ISDN service available, a dedicated circuit must be implemented. See Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched telephone line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated within the REDDIG equipment.

OPERATION LICENSE FOR VSAT STATION

Complete the procedures to obtain the operation license for the local VSAT station.

BOLIVIA

AFTN

Programme new AFTN ports in the message switch and connect them to the MUX FRAD CX950 B multiplexer, whose ports are duly identified. The number of ports is three:

SLLP SBCT/SBBR
 SLLP SAEZ
 SLLP SPIM

ATS SPEECH CIRCUITS

Programme the new PBAX exchange so that each ATC console position may have the dedicated and switched ATS speech circuits that are consistent with the operations of the La Paz control centre.

Make the respective connections between the PBAX and the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

Dedicated ATS circuits

The dedicated ATS circuits to be programmed in the PBAX and connected from the PBAX to the FRAD CX950 B multiplexer are:

SLLP	SPIM
SLLP	SBMN/SBPH

Switched ATS circuits

The switched ATS circuits to be programmed in the PBAX and connected from the PBAX to the FRAD CX950 B multiplexer will provide the following connections:

SLLP	SCEL
SLLP	SBCT/SBBR
SLLP	SAEZ/SACO
SLLP	SBCT
SLLP	SGAS

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer, whose ports are duly identified.

GNSS DATA

Establish the physical connection between the DB60 serial outlet of the Cisco 2501 router of the GNSS augmentation trial system TRS to the FRAD CX950 B multiplexer, whose ports are duly identified (winchester V.35 connector of the TRS node connected to the V.35 connector in the REDDIG rack).

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. Since there is no ISDN service available, a dedicated circuit must be implemented. See Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched telephone line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated within the REDDIG equipment.

OPERATION LICENSE FOR VSAT STATION

Complete the procedures to obtain the operation license for the local VSAT station.

BRAZIL**CURITIBA***AFTN*

Programme new AFTN ports in the message switch and connect them to the MUX FRAD CX950 B multiplexer, whose ports are duly identified. The number of ports is four:

SBBR/SBCT SLLP
 SBBR/SBCT SAEZ
 SBBR/SBCT SUMU
 SBBR/SBCT SGAS

ATS SPEECH CIRCUITS

Programme the ACC VCCS speech circuit switching system, which allows the controller in the ATC console position to access voice communication services, so that each console position may have the dedicated and switched ATS speech circuits that are consistent with the operations of the Curitiba control centre.

Make the respective connections between the VCCS and the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

Dedicated ATS circuits

The dedicated ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer are:

SBCT SGAS
 SBCT SUMU

Switched ATS circuits

The switched ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer will provide the following connections:

SBBR/SBCT SLLP
 SBCT SAEZ/SARE
 SBCT SLLP
 SBWI/SBCT SAEZ/SARE
 SBWI/SBCT SGAS
 SBWI/SBCT SBRF
 SBCT SBMN

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer, whose ports are duly identified.

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. If the ISDN service is not implemented, a dedicated circuit must be implemented. For connection, see Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched telephone line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated within the REDDIG equipment.

GNSS DATA

Establish the physical connection between the GNSS augmentation system master station located in Rio de Janeiro and the FRAD CX950 B multiplexer, whose ports are duly identified. To this end, one of the REDDIG nodes of Brazil would have to be selected.

OPERATION LICENSE FOR VSAT STATION

Complete the procedures to obtain the operation license for the local VSAT station.

RECIFE*AFTN*

Programme new AFTN ports in the message switch and connect them to the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

SBCT SVMI

ATS SPEECH CIRCUITS

Programme the ACC VCCS speech circuit switching system, which allows the controller in the ATC console position to access voice communication services, so that each console position may have the dedicated and switched ATS speech circuits that are consistent with the operations of the Recife control centre.

Make the respective connections between the VCCS, through its interphases to the external trunk circuits, and the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

Switched ATS circuits

The switched ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer will provide the following connections:

SBRF SOCA
SBRF SUMU
SBRF SBMN
SBRF SBCT

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer, whose ports are duly identified.

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. If the ISDN service is not implemented, a dedicated circuit must be implemented. For connection, see Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched telephone line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated within the REDDIG equipment.

OPERATION LICENSE FOR VSAT STATION

Complete the procedures to obtain the operation license for the local VSAT station.

MANAUS*AFTN*

Programme new AFTN ports in the message switch and connect them to the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

The number of ports is five:

SBBR/SBMN SOCA
SBBR/SBMN SMPB
SBBR/SBMN SYGC
SBBR/SBMN SKED
SBBR/SBMN SPIM

ATS SPEECH CIRCUITS

Programme the ACC VCCS speech circuit switching system, which allows the controller in the ATC console position to access voice communication services, so that each console position may have the dedicated and switched ATS speech circuits that are consistent with the operations of the Manaus control centre.

Make the respective connections between the VCCS and the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

Dedicated ATS circuits

The dedicated ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer are:

SBMN	SVMI	
SBMN	SKED	
SBMN		SKED/SKLT
SBPH/SBMN	SKED	
SBPH/SBMN	SLLP	

Switched ATS circuits

The switched ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer will provide the following connections:

SBBE/SBMN	SMPB
SBBE/SBMN	SOCA
SBMN	SYGC
SBPH/SBMN	SPIM
SBMN	SBRF
SBMN	SBCT

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer, whose ports are duly identified.

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. If the ISDN service is not implemented, a dedicated circuit must be implemented. For connection, see Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched telephone line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated within the REDDIG equipment.

OPERATION LICENSE FOR VSAT STATION

Complete the procedures to obtain the operation license for the local VSAT station.

*CHILE**AFTN*

Programme new AFTN ports in the message switch and connect them to the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

The number of ports is two:

SCEL SPIM

SCEL SAEZ

ATS SPEECH CIRCUITS

Programme the ACC VCCS speech circuit switching system, which allows the controller in the ATC console position to access voice communication services, so that each console position may have the dedicated and switched ATS speech circuits that are consistent with the operations of the Santiago control centre.

Make the respective connections between the VCCS, through its interphases to the external trunk circuits, and the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

Dedicated ATS circuits

The dedicated ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer are:

SCEL SPIM

SCEL SAEZ/SAME

Switched ATS circuits

The switched ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer will provide the following connections:

SCEL SAEZ/SACO

SCEL SLLP

SCTE/SCEL SAEZ/SAVC

SCCI/SCEL SAEZ/SAVC

SCTE/SCEL SAEZ/SAZS

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer, whose ports are duly identified.

GNSS DATA

Establish the physical connection between the GNSS augmentation trial equipment TMS to the FRAD CX950 B multiplexer of the REDDIG, whose ports are duly identified.

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. Since there is no ISDN service available, a dedicated circuit must be implemented. For connection, see Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched telephone line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated within the REDDIG equipment.

COLOMBIA

AFTN

Programme new AFTN ports in the message switch and connect them to the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

The number of ports is two:

SKED SPIM

SKED SEGU

SKED SBMN/SBBR

SKED SVMI

ATS SPEECH CIRCUITS

Programme the ACC VCCS speech circuit switching system, which allows the controller in the ATC console position to access voice communication services, so that each console position may have the dedicated and switched ATS speech circuits that are consistent with the operations of the Bogota control centre.

Make the respective connections between the VCCS, through its interphases to the external trunk circuits, and the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

Dedicated ATS circuits

The dedicated ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer are:

SKED SEGU

SKED SPIM

SKED SVMI

SKED SBMN

SKED SBMN/SBPH

SKEC/SKED SVMI

SKLT/SKED SVMI

Switched ATS circuits

The switched ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer will provide the following connections:

SKAN/SKED SEGU
SKCL /SKED SEGU
SKLT/SKED SPIM
SKCC /SKED SVMI

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer, whose ports are duly identified.

GNSS DATA

Establish the physical connection between the DB60 serial outlet of the Cisco 2501 router of the GNSS augmentation equipment reference station and the FRAD CX950 B multiplexer, whose ports are duly identified (winchester V.35 connector of the TRS node connected to the V.35 connector in the REDDIG rack).

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. If the ISDN service is not implemented, a dedicated circuit must be implemented. For connection, see Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched telephone line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated within the REDDIG equipment.

ECUADOR

AFTN

Programme new AFTN ports in the message switch and connect them to the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

The number of ports is three:

SEGU SPIM
SEGU SKED
SEGU SVMI

ATS SPEECH CIRCUITS

Programme the PBAX exchange so that each ATC console position may have the dedicated and switched ATS speech circuits that are consistent with the operations of the Guayaquil control centre.

Make the respective connections between the PBAX, through its interphases to the external trunk circuits, and the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

Dedicated ATS circuits

The dedicated ATS circuits to be programmed in the PBAX and connected from the PBAX to the FRAD CX950 B multiplexer are:

SEGU SPIM
SEGU SKED

Switched ATS circuits

The switched ATS circuits to be programmed in the PBAX and connected from the PBAX to the FRAD CX950 B multiplexer will provide the following connections:

SEGU SKAN/SKED
SEGU SKCL /SKED

ADMINISTRATIVE NETWORK VOICE COMMUNICATION

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer, whose ports are duly identified.

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. Since there is no ISDN service available, a dedicated circuit must be implemented. For connection, see Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated in the REDDIG equipment.

OPERATION LICENSE FOR VSAT STATION

Complete the procedures to obtain the operation license for the local VSAT station.

FRENCH GUYANA***AFTN***

Programme new AFTN ports in the message switch and connect them to the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

The number of ports is two:

SOCA	SVMI
SOCA	SBMN/SBBR

ATS SPEECH CIRCUITS

Programme the ACC VCCS speech circuit switching system, which allows the controller in the ATC console position to access voice communication services, so that each console position may have the dedicated and switched ATS speech circuits that are consistent with the operations of the Cayenne control centre.

At the same time, the respective connections have to be made between the VCCS, through its interphases to the external trunk circuits, and the MUX FRAD CX950 B multiplexer whose ports are duly identified.

Switched ATS circuits

the switched ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer will provide the following connections:

SOCA	SBMN/SBBE
SOCA	SMPM
SOCA	SBRF

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer whose ports are duly identified.

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. If the ISDN service is not implemented, a dedicated circuit must be implemented. For connection, see Appendix C.

OPERATION LICENSE FOR VSAT STATION

Complete the procedures to obtain an operation license for the local VSAT station.

GUYANA

AFTN

Since, at present, Guyana does not have an AFTN switching centre, it has to connect dedicated terminals with AFTN applications to each of the new ports envisaged, and connect these to the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

The number of ports is three:

SYGC SMPM

SYGC SVMI

SYGC SBMN/SBBR

ATS SPEECH CIRCUITS

Since Guyana does not have a VCCS system nor a PBAX exchange, it has to install dedicated telephones and connect them to the FRAD CX950 B multiplexer of the REDDIG node whose ports are duly identified.

Switched ATS circuits

SYGC SBMN

SYGC SMPM

SYGC SVMI

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer whose ports are duly identified.

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. Since there is no ISDN service available, a dedicated circuit must be implemented. See connection in Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched telephone line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated within the REDDIG equipment.

GROUNDING OF NODE EQUIPMENT

Ground the REDDIG node equipment.

PARAGUAY*AFTN*

Programme new AFTN ports in the message switch and connect them to the MUX FRAD CX950 B multiplexer, whose ports are duly identified. Since the AFTN message switching centre in the communication sub-system operates with current loop circuits, and the equipment to be connected to the REDDIG (MUX FRAD CX950 B multiplexer) operates with RS232, the respective interphases must be installed for the conversion.

The number of ports is two:

SGAS SBCT/SBBR
SGAS SAEZ

ATS SPEECH CIRCUITS

Since Paraguay does not have a VCCS system nor a PBAX exchange, it must install dedicated telephones and connect them to the FRAD CX950 B multiplexer of the REDDIG node whose ports are duly identified, in order to carry out the programmed dedicated and switched communications.

Dedicated circuits

SGAS SBCT

Switched circuits

SGAS SLLP
SGAS SBCT/SBWI
SGAS SAEZ/SARE

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer whose ports are duly identified.

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. Since there is no ISDN service available, a dedicated circuit must be implemented See connection in Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched telephone line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated within the REDDIG equipment.

OPERATION LICENSE FOR VSAT STATION

Complete the procedures to obtain the operation license for the local VSAT station.

PERU

AFTN

Programme new AFTN ports in the message switch and connect them to the MUX FRAD CX950 B multiplexer of the REDDIG node whose ports are duly identified. The number of ports is seven:

SPIM SCEL
SPIM SLLP
SPIM SAEZ
SPIM SEGU
SPIM SVMI
SPIM SKED
SPIM SBMN/SBBR

ATS SPEECH CIRCUITS

Programme the ACC VCCS speech circuit switching system, which allows the controller in the ATC console position to access voice communication services, so that each console position may have the dedicated and switched ATS speech circuits that are consistent with the operations of the Lima control centre.

Make the respective connections between the VCCS, through its interphases to the external trunk circuits, and the MUX FRAD CX950 B multiplexer of the REDDIG node, whose ports are duly identified.

Dedicated ATS circuits

The dedicated ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer will provide the following connections:

SPIM SCEL
SPIM SKED
SPIM SEGU
SPIM SLLP

Switched ATS circuits

The switched ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer are:

SPIM SKED/SKLT
SPIM SBMN/SBPH

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer, whose ports are duly identified.

GNSS DATA

Establish the physical connection between the DB60 serial outlet of the Cisco 2501 router of the GNSS augmentation trial system reference station to the FRAD CX950 B multiplexer, whose ports are duly identified (winchester V.35 connector of the TRS node connected to the V.35 connector in the REDDIG rack).

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. If the ISDN service is not implemented, a dedicated circuit must be implemented. See connection in Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched telephone line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated within the REDDIG equipment.

OPERATION LICENSE FOR VSAT STATION

Complete the procedures to obtain the operation license for the local VSAT station.

SURINAME*AFTN*

The message switching centre needs urgent repair in order to connect the AFTN services to the REDDIG node. The AFTN system has only one terminal left; all the rest are out of commission. New ports must be programmed to the switching centre and connected to the MUX FRAD CX950 B multiplexer of the REDDIG node, whose ports are duly identified.

The number of ports is three:

SMPM	SYGCS
SMPM	SVMI
SMPM	SBMN/SBBR

ATS SPEECH CIRCUITS

Since Suriname does not have a VCCS system nor a PBAX exchange, it must install dedicated telephones and connect them to the FRAD CX950 B multiplexer of the REDDIG node, whose ports are duly identified.

Switched circuits

SMPB	SBMN/SBBE
SMPM	SYGC
SMPM	SOCA

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer, whose ports are duly identified.

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. Since there is no ISDN service available, a dedicated circuits must be implemented. See Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched telephone line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated within the REDDIG equipment.

OPERATION LICENSE FOR VSAT STATION

Complete the procedures to obtain the operation license for the local VSAT station.

URUGUAY*AFTN*

Programme new AFTN ports in the message switch and connect them to the MUX FRAD CX950 B multiplexer of the REDDIG node, whose ports are duly identified. The number of ports is two:

SUMU	SBCT/SBBR
SUMU	SAEZ

ATS SPEECH CIRCUITS

Programme the ACC VCCS speech circuit switching system, which allows the controller in the ATC console position to access voice communication services, so that each console position may have the dedicated and switched ATS speech circuits that are consistent with the operations of the Montevideo control centre.

Make the respective connections between the VCCS, through its interphases to the external trunk circuits, and the MUX FRAD CX950 B multiplexer of the REDDIG node, whose ports are duly identified.

Dedicated ATS circuits

The dedicated ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer are:

SUMU	SAEZ
SUMU	BAIRES
Carrasco APP	BAIRES
Carrasco APP	SAEZ

SUMU SBCT

Switched ATS circuits

The switched ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer will provide the following connections:

SUMU SAEZ/SARE
 SUCA/SUMU SAEZ/SABE
 SUMU SBRF

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer, whose ports are duly identified.

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. Since there is no ISDN service available, a dedicated circuit must be implemented. See connection in Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched telephone line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated within the REDDIG equipment.

VENEZUELA

AFTN

Programme new AFTN ports in the message switch and connect them to the MUX FRAD CX950 B multiplexer of the REDDIG node, whose ports are duly identified. The number of ports is six:

SVMI SYGC
 SVMI SOCA
 SVMI SMPM
 SVMI SPIM
 SVMI SEGU
 SVMI SKED
 SVMI SBRF

ATS SPEECH CIRCUITS

Programme the ACC VCCS speech circuit switching system, which allows the controller in the ATC console position to access voice communication services, so that each console position may have the switched and hot-line ATS speech circuits that are consistent with the operations of the Maiquetía control centre.

Make the respective connections between the VCCS, through its interphases to the external trunk circuits, and MUX FRAD CX950 B multiplexer, whose ports are duly identified.

Dedicated ATS circuits

The dedicated ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer are:

SVMI SKED
SVMI SBMN
SVMI SKED/SKEC

Switched ATS circuits

The switched ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer will provide the following connections:

SVMI SKED/SKCC
SVMI SYGC

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer, whose ports are duly identified.

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. Since there is no ISDN service available, a dedicated circuit must be implemented. See connection in Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched telephone line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated within the REDDIG equipment.

LICENSE OPERATION FOR VSAT STATION

Complete the procedures to obtain the operation license for the local VSAT station.

- END -

Agenda Item 5: Review of regional activities with regard to the reduction or elimination of deficiencies identified in air navigation services

5.1 Regarding this agenda item, the civil aviation authorities of the South American Region took note of the problems related to the list, by State, of the deficiencies in each of the air navigation areas.

5.2 The meeting was reminded that, in principle, air navigation deficiencies were those identified on the basis of the ICAO Air Navigation Plan, which, in the case of the CAR/SAM Regions, is Document 8733, Edition 14, which contains the Basic ANP and the FASID Document. These deficiencies also involve the application of the ICAO SARPs related to said Plan.

5.3 The meeting was informed on the activities carried out by the ICAO SAM Regional Office as follow-up to Conclusion 7/13 of the RAAC/7 meeting, according to which the States should submit, no later than 31 October 2002, a plan of action to correct the deficiencies that had been identified, validated and classified at that meeting. Following various formal contacts with the States, the ICAO Regional Office had only received the plans from 6 States.

5.4 Likewise, the meeting reviewed Conclusion 11/55 of GREPECAS/11, which established that the States/Territories should develop and implement, as a matter of urgency, a plan of action for each deficiency, specifying the corrective measures and date of completion, and assigning the required resources. These plans should be submitted to ICAO no later than 30 April 2003.

5.5 The meeting was also reminded that letter M7/1-02/69 by the ICAO Secretary General, dated 27 September 2002, requested States to give priority to the deficiencies existing in the Region and to prepare a plan of action to eliminate such deficiencies.

5.6 The meeting was presented with a course of action and a common ICAO/States strategy to improve co-ordination procedures and the implementation of measures for the efficient resolution of the deficiencies identified by the various mechanisms considered in the methodology developed by the ICAO Council. This methodology, presented in the **Appendix** to this part of the report, emphasises the importance of clearly defining the corrective measures to be adopted.

5.7 In view of the foregoing, the meeting formulated the following conclusion:

CONCLUSION 8/10 REGIONAL STRATEGY FOR THE RESOLUTION OF DEFICIENCIES

That, in order to resolve the deficiencies in the Region:

- a) the Regional Strategy, presented in the Appendix to this part of the report, is approved; and
- b) the ICAO Regional Office, in Lima, co-ordinate, as necessary, the implementation of the strategy indicated in paragraph a) of this conclusion.

APPENDIX

Draft Regional Strategy for the Resolution of Deficiencies

1. Objective

1.1 This strategy for the identification, evaluation, classification and resolution of the deficiencies that affect air navigation services will be applied by the Regional Office, in coordination with the States, for the establishment of a Coordinated Action Plan and the respective follow-up and reporting tools for the resolution of the most critical deficiencies that affect the implementation of the Air Navigation Plan and the application of the corresponding SARPs. When applying the strategy, the following should be taken into account:

- a) Pursuant to the directives of the Council, and as a regular function, the Regional Office must keep a list of concrete deficiencies that exist in the SAM Region, adopting the necessary measures for the collection of information in order to identify, evaluate and classify deficiencies, assigning the corresponding priorities, in keeping with the uniform methodology approved by the Council.
- b) The deficiency report format will be that defined in the methodology approved by the Council. Under the Corrective Measures/Description column, a detailed description of the Coordinated Action Plan with the State for the resolution of deficiencies will be provided.
- c) The Regional Office will submit to GREPECAS the “U” deficiencies to be dealt by the Regional Group, together with an executive summary of the most relevant actions taken by the Regional Office/States for the resolution of deficiencies types “A” and “B” (GREPECAS Conclusion 10/60). The Regional Office, through the GREPECAS reports and the action taken by the Council/Air Navigation Commission on “U” deficiencies, will coordinate the corresponding Coordinated Action Plan with the States.

1.2 This strategy must be considered by the Regional Office and the States as a matter of high priority for the resolution of deficiencies.

2. Regional strategy

2.1 Identification, evaluation and classification of deficiencies

2.1.1 The Regional Office, for the identification, evaluation and classification of deficiencies will use mainly the following sources:

- a) regular correspondence with the States;
- b) visits to the States (mission reports);
- c) air navigation meetings of all types (formal and informal);
- d) users, through IATA, IFALPA, etc; and

- e) reports on aircraft incidents/accidents.

2.1.2 Each air navigation area of the Regional Office, after examining the deficiency, will assign the corresponding priority. The Regional office will advise the State about this matter as a first step for the establishment of the corresponding coordinated action plan.

2.2 **Records of deficiencies kept by the Regional Office**

2.2.1 The Regional Office will keep the following types of deficiency records:

- a) regular files, in hard copy, as part of the information records
- b) database

2.2.1.1 Regarding the files other than the General File on Deficiencies LT 1/19, each air navigation area (AGA, AIS, ATM, CNS, MET, SAR) must open the corresponding file.

2.2.1.2 As a matter of urgency, a database shall be developed that, in keeping with the format contained in the methodology approved by the Council, delivers different types of reports, namely:

- a) reports on all deficiencies, by State
- b) reports on deficiencies in specific areas, by State
- c) others

2.2.1.3 Each air navigation area of the Regional Office will be responsible for maintaining that part of the database of its competence, which will be accessed by the person responsible in each area. Likewise, each air navigation area will be responsible for the management and updating of the files and for the follow-up of the Action Plans Coordinated with the States. Each area, based on the records and in coordination with the Office Director, will prepare the deficiency reports for internal follow-up and for their presentation to the air navigation meetings within and outside the Region and to GREPECAS.

2.3 **Resolution of deficiencies**

2.3.1 Once the deficiency has been identified, evaluated, and classified according to the corresponding priority, the Office, based on the review made by each air navigation area, will begin coordinations with the State in order to establish the corresponding Coordinated Action Plan for solving the deficiency. This coordinated action plan must contain a summary of, at least, the following information:

- a) *What* action and *how* will it be implemented by the State/States involved in the implementation of the solutions to the deficiency.
- b) *When* (date) is it more likely that the action and procedures to be carried out to solve the deficiency, in keeping with a) above, will become effective.
- c) If possible, resources (personnel and budget) committed for the resolution of the deficiency.
- d) Financing source (own State's resources, others); and

- e) Recommendations to improve service provision (for example, the application of datalink instead of speech circuits for ATS coordination).

Note: This Coordinated Action Plan can also be established at the air navigation meetings or during visits to the States.

2.3.2 For purposes of the work to be carried out by the Regional Offices, the following mechanisms must be considered as tools for coordination, follow-up and reporting of deficiencies:

- a) official visits to the States by Regional Office staff
- b) official correspondence with the States
- c) air navigation meetings (formal and informal).

2.3.3 As indicated in 2.2.1.3, each air navigation area of the Regional Office will be responsible for the follow-up of the Coordinated Action Plans agreed by the States. In keeping with the classification and priority assigned to the deficiency, these follow-up actions must be carried out on an on-going basis so as not to lose the momentum generated by the establishment of the cited plan. In this sense, and in coordination with the Director, each Regional Official, based on the coordination with the States and in keeping with their regional vision, should consider annual objectives measurable against the resolution of deficiencies. For instance, a percentage value could be assumed for the resolution of a certain type of deficiency in the region or in some States or State in particular. In doing so, the Regional Official should establish and implement an appropriate work plan, preferably supported by a project management tool.

Air navigation meetings to support the resolution of deficiencies

2.3.4 For each air navigation area, the Regional Office will schedule at least one implementation meeting per year. These meetings will deal, *inter alia*, with all matters that are deemed necessary for the resolution of deficiencies under a specific agenda item of the meeting. In order to guarantee this support mechanism, the Regional Office must make sure that the States are fully committed to the holding of these implementation meetings and to participating with delegates with ample decision-making power.

2.3.5 The Regional Office will be in constant coordination with the States with respect to the implementation of the coordinated action plans. The Meetings of Civil Aviation Authorities will be the events of highest institutional hierarchy to which the Regional Office will submit a detailed report of the status of implementation of the coordinated action plans, with a view to defining actions aimed at strengthening the mechanisms for the implementation of such plans.

Official visits to the States

2.3.6 One of the main objectives of the official visits to the States by the staff of the ICAO Regional Office will be the resolution of deficiencies, based on the Coordinated Action Plan. During the visit, the ICAO staff will assist the State in furthering the application of the cited plan. The visit will also be used to identify other deficiencies for subsequent review, in keeping with the aforementioned procedures.

Other mechanisms to strengthen the implementation of solutions to deficiencies

2.3.7 The Regional Office, in coordination with the States, may agree to other possible mechanisms for establishing measures for the resolution of deficiencies. In this respect, ICAO tools include the mechanism offered by its technical cooperation, the special implementation projects of the Council, seminars and workshops.

Agenda Item 6: Review of institutional aspects related to the implementation of CNS/ATM systems

6.1 Under this agenda item, the meeting received information on the activities carried out in the region for the implementation of multinational services and facilities. Within this context, it was recalled that the Seventh Meeting of Civil Aviation Authorities had taken note of the regional mechanisms available for analysing institutional matters, as well as of a series of systems/services whose management, maintenance, operation and control could be subject to institutional agreements.

6.2 The meeting was informed that said systems/services were being examined by Project RLA/98/003, in support of the activities of the GREPECAS mechanism. The meeting concluded that the results to be obtained from the study to be carried out by GREPECAS on institutional arrangements would be analysed by the Regional Group of High-Level Experts, whose terms of reference had been established by the RAAC/7 meeting, through Conclusion 7/5.

6.3 The meeting agreed that international co-operation among all the parties concerned and responsible for CNS/ATM implementation seemed to be the best way to address institutional aspects. In this sense, the meeting was informed that GREPECAS had examined and implemented two important issues related to this matter, one CNS and one ATM, namely the South American Digital Network (REDDIG) and the Monitoring Agency (CARSAMMA).

6.4 The meeting was informed that the Fifth Co-ordination Meeting of Project RLA/98/003 (March 2003) restructured the objectives of the latter. One of said objectives defined the activities required to complete the tasks on institutional aspects, including the formulation of a regional institutional arrangement for air navigation services. It was noted that the project could deliver its results for consideration by the GREPECAS Institutional Aspects Task Force by mid 2005.

6.5 The meeting agreed on the importance of the work on institutional aspects being carried out by Project RLA/98/003 and that, without the support of the States, it would be difficult to harmonise a plan that accommodated the interests of all and each of the States regarding CNS/ATM implementation in the medium and long term. In this sense, the meeting formulated the following conclusion:

CONCLUSION 8/11 SUPPORT TO THE RLA/98/003 REGIONAL TECHNICAL CO-OPERATION PROJECT ON INSTITUTIONAL ASPECTS FOR THE IMPLEMENTATION OF CNS/ATM SYSTEMS

That, in order for Regional Technical Co-operation Project RLA/98/003 to obtain effective and efficient results on institutional aspects, the States, whether participating or not in the project, support its activities by:

- a) providing the project or the Regional Office with as complete information as possible on all the operational, technical, and administrative aspects related to the planning and implementation of CNS/ATM services/systems;

- b) creating a broad regional co-operation environment that will facilitate the understanding, harmonisation and establishment of common CNS/ATM plans; and
- c) expediting internal procedures within each State for the approval of project results, so as to set the foundations for the creation of a framework for a regional institutional agreement on future air navigation services.

6.6 The meeting noted that the main entity for the analysis and review of institutional aspects in the CAR/SAM Regions was the GREPECAS Institutional Aspects Task Force, and that the complex tasks to be carried out by this task force would require an effective and efficient co-operation from its members, which, in turn, would need the support of their administrations to fulfill the tasks assigned to them. In view of the above, the meeting formulated the following conclusion:

**CONCLUSION 8/12 SUPPORT TO THE WORK TO BE CARRIED OUT BY
THE INSTITUTIONAL ASPECTS TASK FORCE**

That Argentina, Brazil, Chile, Peru and the United States, which have agreed to designate experts for the Institutional Aspects Task Force, provide all possible support to said experts so that the task force may complete its tasks in an effective and efficient manner.

6.7 In keeping with the tasks on institutional aspects to be carried out by regional project RLA/98/003 and GREPECAS, the meeting agreed that the investments required for the implementation of a regional institutional arrangement for air navigation services, such as a regional central body, would require well co-ordinated planning, together with an analysis of the legal and institutional aspects involved. In this sense, it was agreed that the meeting should plan its implementation, taking into account money and time savings, taking advantage of capacities already installed or in the process of installation, in order to ensure successful planning.

6.8 Finally, the meeting examined a proposal in the sense that ICAO, in co-ordination with the States interested in participating, approach the Andean Community of Nations for the establishment, by the member States of this organization, of multinational systems for the provision of services or for safety control. In this regard, the meeting unanimously agreed that it would not be advisable to take technical and operational activities away from the specialised organisations, and that, in any case, this would be a matter for discussion at bilateral or multilateral meetings of the States concerned.

Agenda Item 7: Follow-up on the implementation of Conclusions adopted by previous RAAC meetings

7.1 Under this agenda item, the meeting reviewed and updated the status of implementation of each of the conclusions adopted by the previous meetings of Civil Aviation Authorities of the Region.

7.2 The meeting agreed on the need for each State to review the list of outstanding conclusions contained in the **Appendix** to this part of the report, and take, as applicable, the necessary action for full compliance.

7.3 Various comments were made regarding Conclusion 5/11, *Reporting of ATS incidents in the SAM Region*, and Conclusion 6/19, *Implementation of ATS incident investigation programmes in the SAM Region*. It was concluded that, although compliance of these conclusions had resulted in a reduction of ATS incidents, numbers were still high, and, therefore, efforts should continue to reduce them further.

**OUTSTANDING CONCLUSIONS ISSUED BY THE MEETINGS OF CIVIL AVIATION
AUTHORITIES OF THE SAM REGION (RAAC)**

**CONCLUSION 5/4 COORDINATION BETWEEN CIVIL AVIATION AUTHORITIES AND
GEOGRAPHIC INSTITUTE AUTHORITIES**

That civil aviation administrations:

- a) in close coordination with the geographic institutes responsible for national cartography, establish plans for effectively implementing the WGS-84; and
- b) send in due time the implementation schedules resulting from the plans cited in the previous paragraph to the ICAO Regional Office.

CONCLUSION 5/5 HARMFUL PROLIFERATION OF GESs

That, through GREPECAS, the ICAO SAM Regional Office promote:

- a) a coordinated region-wide effort to ensure that the AMSS includes the optimum number of GESs; and
- b) the means to furnish services, placing emphasis on shared facilities.

CONCLUSION 6/5 ACCESSION TO THE REGIONAL SAFETY OVERSIGHT SYSTEM

The Sixth Meeting of Civil Aviation Authorities of the SAM Region encourages the States that have not yet adhered to the Regional Safety Oversight System to do so as soon as possible, by signing the relevant agreement with LACAC.

**CONCLUSION 6/8 DEVELOPMENT OF SCENARIOS FOR THE PROVISION OF
FACILITIES AND SERVICES**

That the Regional Office, through GREPECAS, develop scenarios for the evaluation of issues related to the implementation, administration and operation of CNS/ATM systems, including their economic, institutional and political impact.

CONCLUSION 6/15 SUPPORT TO THE PAN-AMERICAN CIVIL AVIATION INSTITUTE

The Sixth Meeting of Civil Aviation Authorities of the SAM Region, recognising the need to provide management-level training to the personnel from civil aviation entities, agrees to provide its full support to the development of the activities of the Pan-American Civil Aviation Institute "Assaid Kotaite", expediting the participation of the professionals required as speakers for the courses it organises, and making use of the training programmes it fosters.

CONCLUSION 6/16 PERSONNEL AND FINANCIAL LIMITATIONS

To encourage States to:

- a) participate in the ICAO associated experts programme (short-term secondment of national officials, paid by the State under an agreement with ICAO, in those areas in which the Office has insufficient human resources to meet the needs of the Region; and
- b) continue supporting the meeting programme of the SAM Office and, thus, reduce their cost.

CONCLUSION 6/19 IMPLEMENTATION OF ATS INCIDENT INVESTIGATION PROGRAMMES IN THE SAM REGION

That:

- a) States in the SAM Region that have an ATS incident investigation programme in place do their utmost to improve the procedures used; and
- b) States that have not yet done so, establish an ATS incident investigation programme in order to determine and identify the causes of such incidents, take the necessary corrective measures, and thus avoid a decline of safety and efficiency levels.

CONCLUSION 7/1 STRENGTHENING OF AIR TRANSPORTATION IN THE SOUTH AMERICAN REGION

Civil Aviation Authorities of the SAM Region are urged to:

- a) encourage cooperation between sub-regions in the field of air transportation, encouraging the integration of the Fortaleza and the Andean Community of Nations (CAN) agreements, in order to reach an agreement on increased flexibility for the South American region;
- b) encourage internal and external coordination among the bodies representing the new actors (aeronautical authorities, regulatory bodies, airport operators and airlines);
- c) promote the establishment of national strategies for implementing the agreements reached by the Ministers;
- d) provide all their support to the forum of ministers of the air transportation subsector within the framework of LACAC, as a mechanism for strengthening regional air transportation;
- e) support the coordination between the specialized bodies and any new initiatives that may arise, in order to continue supporting international cooperation and avoiding the duplication of efforts; and
- f) promote the harmonization of economic standards and regulations for air transportation, with emphasis on the development of CNS/ATM systems and the corresponding multinational services and facilities.

CONCLUSION 7/2 AVIATION SECURITY (AVSEC) COORDINATION

ICAO and LACAC are urged to carry out the necessary coordination to avoid duplication of work in the AVSEC area.

CONCLUSION 7/3 MEASURES TO IMPROVE AVIATION SECURITY (AVSEC)

Civil aviation authorities are urged:

- a) to the extent of their possibilities, to take action aimed at maintaining effective control systems that permit a balance between facilitation and security.
- b) for future work, to take into account the coordination and cooperation that should exist among the States of the Region, considering the economic limitations for purchasing equipment, that will permit dealing with new and emerging threats.
- c) to implement measures consistent with the level of threat of each State, taking into account that not all are in the same situation.
- d) To foster preventive measures aimed at “passenger identification”, promoting the creation of a regional database, using means such as mechanical reading or biometric identification passports.
- e) To encourage the standardization of standards at the regional level, and the exchange and/or joint acquisition of equipment.
- f) To clearly identify the training needs of States, and foster training with experts from the same region.
- g) To support the active participation of the “global aviation war risk aeronautical plan” sponsored by ICAO.
- h) Orient their representatives at the ICAO Council, in order that they act jointly when making decisions on civil aviation Security, according to the Civil Aviation interests of the SAM Region.

CONCLUSION 7/4 SUPPORT FOR THE IMPLEMENTATION OF RNAV ROUTES

That the Civil Aviation Authorities of the SAM Region are encouraged to pay the highest level of support in the commitments made inside the implementation plans established by the GREPECAS mechanism and the programmed works in regards to the Regional Project RLA/98/003, in order to culminate for a successful execution of the implementation plans for the RNAV routes.

CONCLUSION 7/5 HIGH LEVEL REGIONAL GROUP OF EXPERTS.

That:

- a) The terms of reference and work program for the high level regional Group of experts to study the viability of the implementation of the CNS/ATM systems, that are referred in Conclusion 6/9 of the RAAC/6 Meeting are the ones indicated in the Appendix B; and
- b) The ICAO Regional Office coordinate with the States the first meeting of the Group, once GREPECAS produces the corresponding studies about the multinational installations/services.

CONCLUSION 7/7 AGREEMENT FOR THE TECHNICAL AND ADMINISTRATIVE MANAGEMENT OF THE REDDIG

That the Regional Project RLA/98/019 and ICAO, as the project executing organization, when drafting the REDDIG Technical Management and Administration Agreement, use the relevant parts of the guidelines on the establishment of multinational facilities and services developed by the CAR/SAM/3 RAN meeting and updated by GREPECAS.

CONCLUSION 7/8 DEVELOPMENT OF A RVSM IMPLEMENTATION PLAN IN THE STATES OF THE SAM REGION

SAM States are urged to elaborate a national RVSM implementation plan within the framework of the CAR/SAM Regional RVSM implementation program that contemplates the administrative, economic, institutional and technical/operative aspects required for its execution.

CONCLUSION 7/10 GREATER SUPPORT BY THE STATES FOR THE TASKS TO BE DEVELOPED BY GREPECAS.

That the administrations in order to make a greater contributions to the work to be developed by GREPECAS, adopt as their own the assigned tasks to their nominated experts to the mechanism and contribute the necessary contributions in support of its expert in order that the tasks assigned be developed within the time established in the work program of the respective organism of GREPECAS' mechanism.

CONCLUSION 7/11 COORDINATION FOR THE SUPPORT OF ICAO'S POSITION IN THE ITU CRM-2003

The Civil Aviation Authorities are urged to:

- a) Make possible all of the necessary efforts to coordinate with the communication sector authorities in order to obtain their support to the ICAO position for the next ITU World Radio Telecommunications Conference (CRM-2003);

- b) Consider the participation of representatives of their administration within the State's delegation to the Conference; and
- c) Once the coordinations referred to in the previous paragraphs a) and b) have been made, inform the Regional Office on the obtained results.

CONCLUSION 7/13 DEFICIENCIES IN THE VARIOUS FIELDS OF AIR NAVIGATION IN THE SAM REGION

That the aeronautical authorities:

- a) review the deficiencies included in Appendix C to this part of the report which correspond to their State, and identify the appropriate corrective (technical/operational/financial/organizational) measures to solve them; and
- b) based on a), prepare an Action Plan and send it to the ICAO SAM Regional Office by 31 October 2002.

CONCLUSION 7/14 AERODROME CERTIFICATION

Civil aviation authorities are urged to:

- a) Develop, if they have not done so yet, an intensive programme to meet the requirements of Amendment 4 to Annex 14, Volume I, as soon as possible;
- b) Participate in aerodrome certification training programmes, so that their staff may receive training in the conduction of aerodrome certification processes and the analysis of Aerodrome Manuals and Safety Management Systems;
- c) Be prepared for the aerodrome audits that will start in 2004;
- d) Implement Safety Management Systems at their aerodromes before 24 November 2005, in order to meet the requirements of Amendment 4 to ICAO Annex 14, Volume I.
- e) Carry out actions aimed at complementing the instructions contained in ICAO Doc 9774, searching for an effective international harmonization in the aerodrome certification process.

CONCLUSION 7/15 ATS QUALITY ASSURANCE PROGRAMMES

That the SAM States:

- a) based on the guidance material for ATS quality assurance programmes approved by the CAR/SAM Regional Planning and Implementation Group, implement a quality assurance programme at ATS units and designate the person responsible who will also be the focal point and coordinator of the programme;
- b) Inform the ICAO SAM Regional Office about such designation; and

- c) Participate actively at all events that seek to disseminate, provide training in, and implement ATS quality assurance programmes.

CONCLUSION 7/17 COORDINATION AMONG THE REPRESENTATIVES OF THE SAM STATES BEFORE THE ICAO COUNCIL

That the Civil Aviation Authorities of those States of the SAM Region holding representation before the ICAO Council, encourage their representatives to carry out continued co-ordinations among them, on the various issues discussed at the Council, aimed at establishing joint positions on civil aviation matters, according to SAM States' common interests.

Agenda Item 8: Other matters

8.1 Under this agenda item, the meeting discussed the following topics:

- a) Improvement of airspace control through the use of monopulse radar
- b) General and agricultural aviation in times of crisis
- c) English language

Improvement of airspace control through the use of monopulse radar

8.2 Argentina presented information to the meeting regarding the financial difficulties it had faced for the implementation of an air traffic control and surveillance plan through the deployment of a secondary radar network in the FIRs under its jurisdiction. In this sense, it was noted that a thorough analysis had been carried out for studying the possibility of acquiring locally-manufactured monopulse radars for route control, capable of integrating radar data and with mode S capability. for application in the CNS/ATM environment.

8.3 It was also noted that, as a result of this analysis, an agreement had been signed with a local company for the manufacturing of 11 monopulse secondary radars, which would be delivered within a period of 7 years. It was stated that, with this initiative, the Argentinean Administration would derive substantial benefits, since the implementation cost of locally-manufactured radars would be much lower than the cost of radars obtained in the international market.

8.4 Several States congratulated the Argentinean Administration for its initiative, because it could open the possibility of future bilateral agreements with other States to facilitate, among other things, the exchange of radar data.

General aviation and special aerial work in times of crisis

8.5 The meeting was informed on the general aviation and special aerial work situation in time of crisis. The basic components that form these activities (Flight Schools, Training Centres, general aviation, special aerial work, etc.) are facing the same difficulties raised by the current situation.

8.6 The aero-commercial activity focuses most of the attention and efforts from the Civil Aviation Authorities of each country, due to its dynamics and importance. However, the same does not occur with the activities listed in the title of the working paper.

8.7 It was proposed to carry out a study and prepare a regional programme gathering in the short term all available efforts in the Region that adequately harmonized, aimed at protecting the basic components (general aviation and special aerial work), through a fluent exchange of capabilities.

8.8 In discussing this matter, the Meeting considered that the proposal merits an adequate and opportune response by the ones executing the aeronautical authority, through the establishment of

supporting policies reflecting specific actions, aimed at contributing to overcome the difficult situation, in order to maintain a profitable and state-of-the-art civil aviation.

8.9 Although the meeting could not reach a unanimous decision on the subject, it considered that this matter should be addressed within LACAC on a preliminary basis, so as to examine the relevant aspects that could meet the expectations and the potential capability of the sector, in order to recover the soundness of commercial civil aviation. In view of the foregoing, the Regional Air Transport Officer of the SAM Office, who also is the LACAC Secretary shall submit this matter to the forthcoming meeting of the Executive Committee of this organisation.

English language in aeronautical communications

8.10 Regarding the English language in aeronautical communications, the Meeting took note that the ICAO Council had approved last March amendments to Annexes 1, 6, 10 and 11, prescribing a minimum level of knowledge of the English language that must be complied by pilots and air traffic controllers, starting the year 2008.

8.10.1 In this sense, the Meeting agreed on the future need for the Civil Aviation Administrations of the States, to take action in order to comply with the new standards specified in the aforementioned annexes.

Agenda Item 1: Analysis of the new air transport scenario in the South American Region and airport privatization

1.1 The meeting received updated information on the status of air transport in the Region following the events of 11 September 2001, and on the activities to be carried out by the Regional Air Transport Competitiveness Committee (Post-Colloquium Committee), in an attempt to solve the difficulties facing air transport in the Region. In this respect, the meeting reviewed the background information since the ICAO/LACAC/IADB/IATA/AITAL colloquium and the work being carried out by the organisations involved in the adoption of measures aimed at the development of air transport in the region.

1.2 On the other hand, emphasis was placed on consolidating the integration of the countries in the South American subregions, by means of more liberal agreements, co-ordination meetings, and studies for the establishment of common policies. It stressed that air transport is a basic tool for attaining the integrationist objectives, and highlighted the work of the Sub-regional Air Services Agreement of the Fortaleza Agreement, and the progress made by the Andean Community of Nations (CAN).

1.3 It also noted that the ICAO South American Regional Office, in close co-ordination with LACAC, has fostered this type of processes, playing a harmonisation and co-ordination role for the merging of policies that will meet the interests of all actors (aeronautical authorities, regulatory bodies, airport operators, and airlines) and air transport users.

1.4 Upon reviewing the current air transport scenario, it was noted that this new structure should take not only aeronautical authorities and airlines as points of reference in this activity, but also airport operators and regulatory bodies of concessions assigned by States. In this regard, the organisations specialised in aviation should pay special attention to consumers, understood to be not only air transport users, but also airport users.

1.5 The meeting considered that the work to be carried out by the “Regional air transport competitiveness committee” should be aimed at the development of a strategy to eliminate the “bottlenecks” in terms of proceedings, permits and competencies, so as to comply with the agreements reached by the Ministers of Transport and Aeronautical Authorities, starting with LACAC Resolution A15-1 on the “Agreements reached by the Ministers of Transport and Aeronautical Authorities of Latin America”, in response to the mandates of the 11th and 12th Ibero-American Summits of Heads of State and Government.

1.6 The meeting supported the idea that the aforementioned strategy should, *inter alia*, contemplate the creation of local committees with the participation of all actors (aeronautical authorities, airlines, regulatory bodies, and airport operators), which, led by the aeronautical authority, would pursue these tasks within each State. It was also felt that the Regional competitiveness committee should monitor this process.

1.7 During the debate, the delegates expressed their concern regarding the serious problems facing air transport since the events of 11 September, now aggravated by the war in Iraq and the problem of atypical Asian pneumonia. This has caused a substantial drop in air traffic, seriously affecting all those involved in the aeronautical activity. Consequently, the meeting considered that preventive measures should be studied and adopted in order to face similar cases in the future.

1.8 The meeting noted that ICAO, in co-ordination with LACAC, as the organisations specialised in civil aviation, should focus their work on this new scenario in order to harmonise economic policies with technical aspects, fostering the adoption of political decisions that meet the interest of consumers, always seeking the security of this means of transportation. To that end, it formulated the following conclusion:

CONCLUSION 8/1 NEW AIR TRANSPORT SCENARIO

That the States of the Region should take steps to foster:

- a) intra-subregional co-operation in the field of air transport, promoting the integration of the Fortaleza Agreement and the Andean Community of Nations (CAN), so that a flexibility agreement may be reached in the South American Region in the future.
- b) the work of the regional air transport competitiveness committee, as a mechanism for strengthening regional air transport; and
- c) co-ordination among the specialised organisations (ICAO and LACAC) and support to other regional initiatives that might emerge.

Agenda Item 2: Analysis of the ICAO AVSEC Programme and its impact on the Region

2.1 On this agenda item, the meeting examined the background information on this issue emanating from the RAAC/7, the ICAO AVSEC programme, the Action Plan and the regional situation. It also analysed the proposals on the drafting and inclusion of an AVSEC clause in bilateral agreements, and on the development of AVSEC warning message procedures for the States which might be affected by the shortcomings and deficiencies identified. It also considered another proposal on the reinforcement of the cockpit door, in compliance with Chapter 13 paragraph 13.2 of Annex 6 to the Chicago Convention.

2.2 Upon reviewing the regional situation, special attention was given to co-ordinations between the GREPECAS AVSEC Committee and the LACAC AVSEC Panel, highlighting that the work carried out in these fora should be consistent and complementary so as to avoid duplication of efforts. However, both organisations should remain independent, based on their statutory objectives. In this regard, the meeting welcomed the idea of holding consecutive meetings at the same facilities, since several experts of the States participate in both fora.

2.3 Another issue examined with special attention referred to the measures being adopted by ICAO, mainly: the review of legal instruments; the enhancement of Annex 17 to the Convention on International Civil Aviation “*Security*” – *Protection of international civil aviation against acts of unlawful interference*”; the review of other Annexes to the Chicago Convention in relation to security; the strengthening of the AVSEC mechanism, especially concerning technical assessments; the activation of the work on mechanically-read documents; the review of air navigation service procedures; the review of ICAO manuals and guidelines, and the development of teaching material on security; and the strengthening of training programmes.

2.4 Upon discussing the ICAO AVSEC Action Plan, emphasis was placed on the regular, binding, systematic and harmonised audit programme that the organisation will develop within the USAP framework. The meeting stressed that developing countries should receive technical and financial assistance for the adoption of corrective measures to eliminate the deficiencies identified during the aforementioned audits. Likewise, the meeting endorsed the strict compliance of the principles of sovereignty, universality, transparency, opportunity, broadness, consistency, objectivity, justice and quality.

2.5 During the debate, the meeting stressed the need to adopt, at a regional level, measures aimed at: fostering industrial and technological co-operation; encouraging co-ordination among regional and sub-regional organisations; and examining “warning notice” mechanisms to detect shortcomings and deficiencies. Based on the broad discussion carried out, the Meeting determined to emphasize the measures aimed at improving the security, by adopting the following conclusion:

CONCLUSION 8/2 MEASURES TO IMPROVE SECURITY IN THE REGION

That the representatives of SAM States in the regional fora (ICAO – LACAC), foster the following activities:

- assess the application of ICAO standards, recommended practices and guidelines, as well as the reporting of differences.
- review the courses taught at training centres, so that they may respond to the needs of the region.
- provide proper audit training at regional level, and ensure that auditors responsible for this work belong to the region.
- foster regional co-operation in terms of human, material, and economic resources.
- assess new threats at regional level, and identify those that are really affecting the States of the region, in order to establish appropriate policies that will enable a co-ordinated work to guarantee the establishment of an adequate level of security in the States of the region.
- emphasize the need to join efforts for the acquisition of equipment, and seek an agreement for the joint purchase of such equipment so as to reduce costs.
- foster industrial and technological co-operation;
- encourage co-ordination among regional and sub-regional organisations; and
- examine “warning notice” mechanisms to detect shortcomings and deficiencies.

2.6 Likewise, the Meeting considered opportune that on bilateral air transport agreements, held among States of the Region, as well as in those cases whenever possible/necessary? with other States, a clause contemplating the broadest cooperation on AVSEC matters between both States, be included. Based on this, the following conclusion was adopted:

CONCLUSION 8/3 AVSEC CLAUSE ON AIR TRANSPORT BILATERAL AGREEMENTS

That States,

Include in air transport bilateral conventions, an AVSEC clause contemplating the broadest possible cooperation on training, technology, procedures, certification and auditing matters.

2.7 Finally, the Meeting thoroughly reviewed the proposal presented aimed at adopting regional measures to block the cockpit door access, in accordance with Chapter XIII of Annex 6 to the Chicago Convention. The Meeting agreed on the need to consult the South American States on the proposal and review the results of the consultation, as soon as possible. Based on this, the Civil Aviation Authorities formulated the following conclusion:

CONCLUSION 8/4 BLOCK OF THE COCKPIT DOOR ACCESS

That the ICAO South American Regional Office:

- a) Consult States of the SAM Region their points of view on the proposal included in the **Appendix** to this part of the Report;
- b) Consolidate the responses and analyzes with the Directors of Civil Aviation of the SAM Region present at the oncoming LACAC Executive Committee Meeting (Varadero, Cuba, 18 – 19 June 2003); and
- c) Aimed at obtaining a common position before the implementation date, 1 November 2003, inform the States on the results obtained from the execution of paragraphs a) and b).

Agenda Item 3: Safety oversight

3.1 The debate on this subject revolved around the following aspects:

- a) the ICAO Universal Safety Oversight Audit Programme (IUSOAP);
- b) expansion of the IUSOAP;
- c) the Regional Safety Oversight Co-operation System; and
- d) licensing of pilots over 60 years of age.

ICAO universal safety oversight audit programme (IUSOAP)

3.2 The meeting noted that the universal audit programme had been completed in June 2002, and that the States audited totalled 179, in addition to 5 independent territories which had also been audited. To date, audit follow-up missions have shown the success of the IUSOAP and that most of the States visited had made significant progress towards the solution of the safety problems identified.

Expansion of the IUSOAP

3.3 The meeting was reminded that, starting in 2004, in keeping with Assembly Resolution A33-8, the IUSOAP will be expanded to cover Annexes 11, 13 and 14. Likewise, it was noted that the preparatory tasks scheduled for 2003 included, *inter alia*, the training of auditors, pre-audit questionnaires, audit protocols, adjustment of the audit findings and differences database (AFDD), and amendments to the ICAO publications on the IUSOAP, such as Document 9734, *Safety Oversight Manual, Part A – Establishment and Management of a State safety oversight system*, and Document 9735, *Safety oversight audit manual*.

3.4 The pre-audit questionnaire will be one of the most important tools to be used by the audit process. This questionnaire will be made up of three parts, in which the level of compliance with the SARPs will be assessed. This questionnaire will be sent to States during the second quarter of 2003, and answers are expected within 6 weeks of receiving the questionnaire.

3.5 In relation to the air traffic services audit, this scrutiny will not only cover Annex 11, but also relevant sections of Annex 2, *Rules of the Air*, Annex 10, *Aeronautical Telecommunications*, and Annex 15, *Aeronautical Information Services*.

3.6 The Action Plan developed by ICAO for conducting the audits envisaged in the expansion, contemplates the following phases:

Phase 1: Development of the questionnaire by ICAO. To be completed by the end of September 2003.

Phase 2: Internal ICAO preparations for the audits. Activities such as the creation of training material for auditors will be undertaken. It is expected that States will contribute with experts to be trained as auditors in the process.

Phase 3: Actual audits between February 2004 and December 2008.

3.7 Upon discussing this matter, the meeting agreed that, although each State would have to prepare for its individual audits, everybody could benefit from a joint information-sharing mechanism in order to streamline the process and avoid duplication of efforts. This mechanism could easily work through the use of telephone and electronic communications to share experiences and distribute work among States. To that end, the meeting adopted the following conclusion:

CONCLUSION 8/5 REGIONAL STRATEGY IN PREPARATION FOR THE AUDITS

In order to streamline the process of preparation for the IUSOAP audits of Annexes 11, 13 and 14, an appeal is made:

- a) to each State to identify a point of contact from its organization in charge of IUSOAP audit preparations and commit to exchange information on a regular basis over the telephone or through electronic means;
- b) to ICAO to conduct, as soon as possible, a regional seminar on the expanded audit programme; and
- c) to the ICAO Lima Regional Office to co-ordinate the necessary activities to carry out the actions referred to in paragraphs a) and b) above.

Regional Safety Oversight Co-operation System

3.8 States were encouraged to take advantage of the airport inspector certification courses, seminars and workshops being offered by the United States Federal Aviation Administration and others, in preparation for the upcoming expansion of the ICAO USOAP Programme to airports in 2004 and airport certification requirements, to become effective in November 2003.

3.9 The meeting noted that the regional system had recognised that the first step towards improving safety in the region was the establishment of harmonised rules and procedures, using clear language in their wording to facilitate compliance by air operators in the region, while improving their competitiveness *vis-à-vis* operators in other Regions.

3.10 In this sense, the meeting was reminded that the Regional Safety Oversight System regulations, in article 4, paragraph b), as one of the functions of the system, provided for the establishment of uniform rules and procedures in the areas of personnel licensing, operation of aircraft and airworthiness, consistent with the relevant ICAO standards and recommended practices and related procedures and guidance texts, aimed at the harmonisation and adoption of such rules and procedures by the participating States.

3.11 Likewise, the meeting was informed that efforts had been made to harmonise the following rules, which were under consultation with the States:

- LAR 11 Rules for the formulation, issuance and amendment of LARs
- LAR 145 Approved maintenance organisations
- LAR PEL 61, 63, 65 and 67 Personnel licensing; and
- LAR OPS Operation of aircraft and certification.

3.12 The meeting was informed that the regional system also envisaged the establishment of collaborative inspection agreements. Within this framework, the project intended to conduct a series of aircraft repair shop certification trials that would help the regional system to obtain information and experience on the logistic difficulties that a multinational team might face in the conduction of certification and inspection tasks and for certification in the States. Likewise, a programme for the implementation of a regional co-operation system to approve aircraft repairs and modifications was being developed.

3.13 The meeting supported the work being carried out by the Regional Safety Oversight Co-operation System and the action being taken for the establishment of a regional safety oversight body.

Licensing of pilots over 60 years of age

3.14 The meeting went on to discuss a proposal to extend the age limit for pilots. The subject was analysed taking into account international standards (Annex 1 to the Chicago Convention), the legal aspects of the legislation of some States in the Region, and psychological, physical and aeronautical aspects.

3.15 The meeting was informed that ICAO had been studying this matter for several years, which was currently included in its work programme, and that the standard established in Annex 1 had not been modified.

3.16 Following an extensive debate on this matter which revealed some differences in the application of the standard among the States of the Region, the meeting concluded that the subject should continue in the hands of the ICAO specialised bodies: the Technical Panel and the Air Navigation Commission. Likewise, it urged those States that, in their national regulations, were applying a different standard from that established in Annex 1 to the Chicago Convention, to report it to ICAO in accordance with article 38 of the cited Convention. Finally, it urged the States, if the case so required, to enter into agreements for authorising pilots with licenses not consistent with the international standard to enter their respective airspaces, in accordance with Article 40 of the aforementioned Chicago Convention. In this regard, the meeting of Civil Aviation Authorities adopted the following conclusion:

CONCLUSION 8/6 LICENSING OF PILOTS OVER 60 YEARS OF AGE

Civil Aviation Authorities of the South American Region that apply in their national regulations a standard different from that shown in paragraph 2.1.10.1 of Annex 1 to the Chicago Convention, are urged to:

- a) report the difference to ICAO, according to Article 38 of the Chicago Convention; and
- b) establish bilateral agreements, if necessary, for authorising pilots with annotated licenses to enter their airspaces, in accordance with articles 39 and 40 of the Chicago Convention.

Agenda Item 4: Regional Air Navigation Plan -Transition to the CNS/ATM Systems

4.1 Under this agenda item, the meeting examined the following items:

- a) ATS quality assurance;
- b) implementation of RNAV routes, RNP10, and RVSM;
- c) activities in preparation for the ITU WRC-2003, with a view to the protection of the aeronautical radio frequency spectrum;
- d) regional technical co-operation project RLA/98/019 – South American Digital Network (REDDIG);
- e) regional GNSS augmentation trial;
- f) activities in preparation for the Eleventh Air Navigation Conference; and
- g) CNS/ATM implementation.

ATS quality assurance

4.2 The meeting analysed the activities that were being carried out in the CAR/SAM Regions for the implementation of an ATS quality assurance programme for both Regions, pursuant to the recommendations of the CAR/SAM/3 RAN meeting. It also noted that the guidance material for the establishment of the ATS quality assurance programme had been developed by GREPECAS.

4.2.1 The meeting was informed that, pursuant to Conclusion 7/15 of the RAAC/7 meeting, the States were designating the responsible parties for, and co-ordinators of, the ATS quality assurance programmes that were being gradually implemented at the various levels of ATS units in the respective States. The meeting agreed that the implementation of quality assurance programmes would contribute significantly to the reduction of ATS incidents, as part of the improvements to be introduced in ATS safety management systems.

4.2.2 In addition, the meeting noted the importance for States to take advantage of the training courses, seminars and workshops being offered by ICAO and the United States Federal Aviation Administration. Another opportunity to obtain expertise is the FAA International Course on Air Traffic Quality Assurance that will be available in August 2003. This training can be offered at the FAA Academy in Oklahoma City, Oklahoma, or in-country.

4.2.3 The meeting took note of the event organised by ICAO to disseminate, provide training on, and implement ATS quality assurance programmes. In this sense, it noted that a new workshop was being scheduled to be held in Lima, Peru, from 12 to 16 May 2003.

4.2.4 The meeting examined a proposal to amend the regional guidance material for ATS quality assurance programmes (Chapter 3, paragraph 3.3 – Structure), taking away from the ATS directorate the responsibility for structuring and implementing the quality assurance programme, so that units providing the service would no longer be responsible for assessing its quality. An extensive debate ensued in this respect, and the conclusion was reached that the quality assurance programme had to be implemented at all levels, and that each administration should structure its quality assurance programme according to its needs. On the other hand, it was stated that the existing guidance material was aimed at the establishment of a quality assurance programme within ATS units, but that it could be revised in the future, based on the audits to be carried out as part of the extended ICAO USOAP programme. The meeting noted the connection between the ATS Quality Assurance Programme and the expansion of the ICAO IUSOAP to Air Traffic Services. The ATS Quality Assurance Programme can be used as a tool in assisting States for the ICAO IUSOAP preparations.

Implementation of RNAV routes, RNP10, and RVSM

4.3 The meeting took note of the activities carried out for the implementation of RNAV routes, RNP10, and RVSM since the RAAC/7 meeting. In this regard, it also noted the support provided by regional project RLA/98/003, as an implementation and assistance tool for the transition to CNS/ATM systems, supporting the holding of meetings of air traffic management authorities and planners (AP/ATM), events which have been extremely successful for the implementation of RNAV routes, RNP10, and RVSM.

4.3.1 Regarding the implementation of RNAV routes, note was taken that the AP/ATM/4 meeting, held in Santa Cruz de la Sierra, Bolivia, in January 2003, had continued with the studies and co-ordination for the implementation of RNAV routes, such as routes Santiago de Chile/Madrid; Asunción/Campo Grande; Sao Paulo/Lima; Sao Paulo/Santiago de Chile; Asunción/Sao Paulo; and Panama/San Juan de Puerto Rico. The meeting took note of the significant benefits derived from the implementation of RNAV routes, as well as of their gradual introduction to the CAR/SAM ANP, through the corresponding amendments.

4.3.2 The meeting was also informed of the plans for RNP10 pre-operational implementation on routes UL780 and UL302 (Santiago de Chile/Lima) and the intention of Chile and Peru to proceed with the implementation, together with the CAR/SAM Regional Monitoring Agency (CARSAMMA), represented by Brazil. On the other hand, the meeting was informed that matters concerning RNP planning and implementation would be reviewed at the AP/ATM meetings and that the bases for the preliminary studies of an RNP implementation strategy in the CAR/SAM Regions had already been established.

4.3.3 The meeting took note of the progress made in RVSM implementation and in the establishment of the CARSAMMA by Brazil. In this respect, information was provided on the most relevant developments regarding RVSM implementation since the AP/ATM/4 meeting. While discussing the measures to be adopted by the States, the meeting considered that those States that had not issued the AIC by 15 April 2003 for RVSM implementation in their airspaces, should do so as soon as possible, so as not to affect regional RVSM implementation plans and avoid the establishment of transition areas, which might compromise the uniformity of RVSM implementation in the CAR/SAM Regions.

4.3.4 Brazil presented detailed information on its plans for the implementation of RNAV routes, RNP and RVSM, and its proposals for the forthcoming AP/ATM/5 meeting.

4.3.5 The meeting felt it was not necessary to formulate recommendations in addition to those already made. However, it agreed to pursue regional efforts to enable a broad and committed participation, not only of high-level authorities but also of experts in each area, in all of the activities required for the implementation of RNAV routes, RNP10 and RVSM in the CAR and SAM Regions.

Activities in preparation for the ITU WRC-2003, with a view to the protection of the aeronautical radio frequency spectrum

4.4 The meeting received information on the agenda for the ITU WRC-2003 and on the updating of the final document on the ICAO position to be presented to the ITU as an information paper in May 2003.

4.4.1 Regarding the agenda for the WRC-2003, the meeting took note of the following topics of interest to civil aviation:

- a) Ensure spectrum availability in the 5 091 – 5 150 MHz band for use of MLS and future aeronautical communication applications. Agenda Item 1.4 of the WRC-2003;
- b) Harmful interference to aeronautical mobile services. Agenda Item 1.14 of the WRC-2003;
- c) Ensure the protection of DME in the 1164-1215 MHz band and of radar systems in the 1215-1300 MHz band from possible interference caused by radio navigation satellite systems (RNSS), and the protection of radar systems operating in the 2700-2900 MHz band from interference by non-aeronautical mobile communication systems - Agenda Item 1.15 of the WRC 2003; and
- d) Use of GNSS differential correction in the 108-117.975 Mhz band - Agenda Item 1.28 of the WRC-2003.

4.4.1.1 The meeting examined the measures recommended by ICAO for securing the support of the States to the ICAO position at the WRC-2003. Likewise, for purposes of co-ordination between the ICAO Regional Offices/Headquarters and the States, the meeting considered that the States should implement Conclusion 11/39 of the GREPECAS/11 meeting, by designating a point of contact closely related to the work carried out at national level on aeronautical matters related to WRC-2003, and communicating such designation to ICAO.

Regional technical co-operation project RLA/98/019 – South American Digital Network (REDDIG)

4.5 The meeting received information on the status of the South American Digital Network being implemented through regional technical co-operation project RLA/98/019, by virtue of which ICAO had signed a contract with the French company SEEE for the provision, installation and start up of the cited network. The meeting was also advised about the timetable of activities for the implementation of the REDDIG and that this network was expected to start operations in May 2003.

4.5.1 It was also noted that, as confirmed during the visits made by ICAO and the contractor, all node equipment for provisional acceptance tests (PSAT) had been installed in the respective locations to prepare the nodes for the next step, that is, network tests, which would be controlled from the Lima node. In this regard, ICAO drew the attention of the States to the fact that the PSATs revealed issues pending implementation and of the responsibility of the Administrations, in relation to the preparation of communication interfaces and the programming of terminal equipment to be connected to the REDDIG nodes. In this regard, the meeting stressed that, in order to proceed with the project, these outstanding issues had to be resolved by the Administrations. The **Appendix** to this part of the report contains a list of these outstanding issues. Upon discussing this matter, the meeting formulated the following conclusion:

CONCLUSION 8/7

IMPLEMENTATION OF THE REDDIG

That, as a matter of urgency, and in order to successfully put the REDDIG in operation in the time foreseen, the States participating in UNDP/ICAO technical co-operation project RLA/98/019 make utmost efforts to resolve, before the REDDIG network tests (NAT), all outstanding issues listed in the Appendix to this part of the report, as identified during the provisional acceptance tests (PSAT) carried out by the project, the contracting company and the State counterpart.

4.5.2 The meeting also noted the work done with respect to the new technical co-operation project RLA/03/901, which had the following three main objectives:

Objective No. 1 *To develop a proposal for the creation of an multinational mechanism for the definitive management of the REDDIG, taking into account the studies to be conducted by GREPECAS in that respect.*

Objective No. 2 *REDDIG management under the conditions established by the Third Coordination Meeting (RCC/3) of Project RLA/98/00, for a period of at least two years and leasing of the space segment.*

Objective No. 3 *To plan the regional development of CNS/ATM applications and implement said applications in keeping with CAR/SAM FASID requirements.*

4.5.2.1 The meeting was also informed that, with the exception of Colombia, this new project was being supported by all the States of the Region. In this regard, it was noted that Colombia had expressed that it had certain limitations to participate in the new REDDIG project, and that the States and ICAO should establish an agreement with Colombia so as not to modify the REDDIG operational programming being implemented and to maintain the satellite segment in a single block for technical reasons. The meeting was informed that this matter would be addressed by the Fifth Meeting of the REDDIG Co-ordination Committee, to be held next May with the purpose of examining the start up of the network and its future management by both the RLA/98/019 and the new RLA/03/901 project.

GNSS regional augmentation trial

4.6 The meeting was informed on the progress made under project RLA/00/009, GNSS Regional Augmentation Trial, and the arrangements for the activation of the new Regional Technical Co-operation Project RLA/03/902, SBAS/EGNOS Trials in the CAR/SAM Regions, which was being established pursuant to Conclusion 11/45 of the GREPECAS/11 meeting. In this regard, it was noted that Project RLA/00/009 was to complete its activities in 2004, and that the document of the new SBAS/EGNOS trial project, in which Colombia, Cuba and COCESNA participated, was being prepared.

4.6.1 Colombia provided the meeting with a detailed description of the trials to be carried out through the EGNOS test bed (ESTB) to be implemented in the CAR/SAM Regions, which included the broadcasting of augmentation signals through the INMARSAT III AOR-E satellite. It was noted that the project would demonstrate the European GNSS augmentation capabilities and would provide complementary results to project RLA/00/009. Likewise, there would be two potential areas of co-operation between these two projects, aimed at the establishment of the GNSS operational model for the CAR/SAM Regions. These areas of co-operation would relate to the study of the ionosphere and EGNOS/WAAS interconnectivity. In this regard, the meeting considered that these technical aspects should be duly studied in an appropriate technical forum, that is, the CNS Committee of the GREPECAS ATM/CNS Subgroup. In this sense, the meeting formulated the following conclusion:

CONCLUSION 8/8 CO-OPERATION BETWEEN PROJECTS RLA/00/009 AND RLA/03/902 ON GNSS AUGMENTATION

That Colombia, as a member of GREPECAS, document co-operation aspects between projects RLA/00/009 and RLA/03/902 regarding the study of the ionosphere and the EGNOS/WAAS interconnectivity, for their review by the CNS Committee of the CNS/ATM Subgroup, in support of the definition of the GNSS operational concept for the CAR/SAM Regions.

Activities in preparation for the Eleventh Air Navigation Conference (AN-Conf/11)

4.7 The meeting was provided with information on matters examined by the Eleventh Air Navigation Conference and the preparatory actions being taken by ICAO in co-ordination with Colombia, Brazil and COCESNA, pursuant to Conclusion 11/54 of the GREPECAS/11 meeting. In this respect, it was noted that the ICAO Regional Offices of Lima and Mexico were planning to develop jointly the corresponding documentation to be submitted, together with other relevant information, to a meeting/seminar in preparation for the AN-Conf/11 to be held in Lima next July, so that the States may attain a common regional position on AN-Conf/11 Agenda Items 5, 6 and 7. In this regard, the meeting formulated the following conclusion:

**CONCLUSION 8/9 SUPPORT OF THE STATES TO THE DEVELOPMENT
OF A COMMON CO-ORDINATED POSITION FOR THE
AN-CONF/11**

That, in order to attain a common co-ordinated position for the Eleventh Air Navigation Conference on Agenda Items 5, 6 and 7, the States fully co-operate in the development of the co-ordination activities that the Regional Offices are carrying out together with Brazil, Colombia and COCESNA.

CNS/ATM implementation

4.8 Colombia presented to the meeting a CNS/ATM element implementation concept, which it named *Balanced principle for CNS/ATM implementation in the Region*. In this sense, it was noted that, according to the balanced principle, ICAO, in fostering the transition to the CNS/ATM systems, should carry out the process, not only based on airspace safety studies or the existence of a reliable technological infrastructure in the States, but also, and primarily, based on a gradual transition process and the co-existence of the current and the proposed systems. This would allow regional fleets to adjust to the financial conditions of the sector or plan the replacement of avionics so as to obtain maximum benefits within a balanced, equitable process and a time span consistent with the global economy of the sector.

4.8.1 In this regard, the meeting, upon examining the essence of the so-called balanced principle, clearly recognised that it was fully in line with the ICAO general policy statement for the implementation and operation of CNS/ATM systems, particularly with those principles related to institutional arrangements and CNS/ATM implementation. It also noted that the Regional Plan for the Implementation of CNS/ATM Systems contained, both in Documents I and II, the balanced principle concepts. The meeting considered that the paper presented by Colombia was a very good contribution, since it expressed, in very few words, clear concepts on the transition to the new CNS/ATM systems. This transition should be carried out gradually, building upon the existing conventional systems, and should be designed to offer well-thought, feasible and cost-effective improvements that will meet the needs of the users and develop into a system that meets the safety, capacity, efficiency, regularity and environmental protection requirements.

Agenda Item 5: Review of regional activities with regard to the reduction or elimination of deficiencies identified in air navigation services

5.1 Regarding this agenda item, the civil aviation authorities of the South American Region took note of the problems related to the list, by State, of the deficiencies in each of the air navigation areas.

5.2 The meeting was reminded that, in principle, air navigation deficiencies were those identified on the basis of the ICAO Air Navigation Plan, which, in the case of the CAR/SAM Regions, is Document 8733, Edition 14, which contains the Basic ANP and the FASID Document. These deficiencies also involve the application of the ICAO SARPs related to said Plan.

5.3 The meeting was informed on the activities carried out by the ICAO SAM Regional Office as follow-up to Conclusion 7/13 of the RAAC/7 meeting, according to which the States should submit, no later than 31 October 2002, a plan of action to correct the deficiencies that had been identified, validated and classified at that meeting. Following various formal contacts with the States, the ICAO Regional Office had only received the plans from 6 States.

5.4 Likewise, the meeting reviewed Conclusion 11/55 of GREPECAS/11, which established that the States/Territories should develop and implement, as a matter of urgency, a plan of action for each deficiency, specifying the corrective measures and date of completion, and assigning the required resources. These plans should be submitted to ICAO no later than 30 April 2003.

5.5 The meeting was also reminded that letter M7/1-02/69 by the ICAO Secretary General, dated 27 September 2002, requested States to give priority to the deficiencies existing in the Region and to prepare a plan of action to eliminate such deficiencies.

5.6 The meeting was presented with a course of action and a common ICAO/States strategy to improve co-ordination procedures and the implementation of measures for the efficient resolution of the deficiencies identified by the various mechanisms considered in the methodology developed by the ICAO Council. This methodology, presented in the **Appendix** to this part of the report, emphasises the importance of clearly defining the corrective measures to be adopted.

5.7 In view of the foregoing, the meeting formulated the following conclusion:

CONCLUSION 8/10 REGIONAL STRATEGY FOR THE RESOLUTION OF DEFICIENCIES

That, in order to resolve the deficiencies in the Region:

- a) the Regional Strategy, presented in the Appendix to this part of the report, is approved; and
- b) the ICAO Regional Office, in Lima, co-ordinate, as necessary, the implementation of the strategy indicated in paragraph a) of this conclusion.

Agenda Item 6: Review of institutional aspects related to the implementation of CNS/ATM systems

6.1 Under this agenda item, the meeting received information on the activities carried out in the region for the implementation of multinational services and facilities. Within this context, it was recalled that the Seventh Meeting of Civil Aviation Authorities had taken note of the regional mechanisms available for analysing institutional matters, as well as of a series of systems/services whose management, maintenance, operation and control could be subject to institutional agreements.

6.2 The meeting was informed that said systems/services were being examined by Project RLA/98/003, in support of the activities of the GREPECAS mechanism. The meeting concluded that the results to be obtained from the study to be carried out by GREPECAS on institutional arrangements would be analysed by the Regional Group of High-Level Experts, whose terms of reference had been established by the RAAC/7 meeting, through Conclusion 7/5.

6.3 The meeting agreed that international co-operation among all the parties concerned and responsible for CNS/ATM implementation seemed to be the best way to address institutional aspects. In this sense, the meeting was informed that GREPECAS had examined and implemented two important issues related to this matter, one CNS and one ATM, namely the South American Digital Network (REDDIG) and the Monitoring Agency (CARSAMMA).

6.4 The meeting was informed that the Fifth Co-ordination Meeting of Project RLA/98/003 (March 2003) restructured the objectives of the latter. One of said objectives defined the activities required to complete the tasks on institutional aspects, including the formulation of a regional institutional arrangement for air navigation services. It was noted that the project could deliver its results for consideration by the GREPECAS Institutional Aspects Task Force by mid 2005.

6.5 The meeting agreed on the importance of the work on institutional aspects being carried out by Project RLA/98/003 and that, without the support of the States, it would be difficult to harmonise a plan that accommodated the interests of all and each of the States regarding CNS/ATM implementation in the medium and long term. In this sense, the meeting formulated the following conclusion:

**CONCLUSION 8/11 SUPPORT TO THE RLA/98/003 REGIONAL TECHNICAL
CO-OPERATION PROJECT ON INSTITUTIONAL
ASPECTS FOR THE IMPLEMENTATION OF CNS/ATM
SYSTEMS**

That, in order for Regional Technical Co-operation Project RLA/98/003 to obtain effective and efficient results on institutional aspects, the States, whether participating or not in the project, support its activities by:

- a) providing the project or the Regional Office with as complete information as possible on all the operational, technical, and administrative aspects related to the planning and implementation of CNS/ATM services/systems;

- b) creating a broad regional co-operation environment that will facilitate the understanding, harmonisation and establishment of common CNS/ATM plans; and
- c) expediting internal procedures within each State for the approval of project results, so as to set the foundations for the creation of a framework for a regional institutional agreement on future air navigation services.

6.6 The meeting noted that the main entity for the analysis and review of institutional aspects in the CAR/SAM Regions was the GREPECAS Institutional Aspects Task Force, and that the complex tasks to be carried out by this task force would require an effective and efficient co-operation from its members, which, in turn, would need the support of their administrations to fulfill the tasks assigned to them. In view of the above, the meeting formulated the following conclusion:

**CONCLUSION 8/12 SUPPORT TO THE WORK TO BE CARRIED OUT BY
THE INSTITUTIONAL ASPECTS TASK FORCE**

That Argentina, Brazil, Chile, Peru and the United States, which have agreed to designate experts for the Institutional Aspects Task Force, provide all possible support to said experts so that the task force may complete its tasks in an effective and efficient manner.

6.7 In keeping with the tasks on institutional aspects to be carried out by regional project RLA/98/003 and GREPECAS, the meeting agreed that the investments required for the implementation of a regional institutional arrangement for air navigation services, such as a regional central body, would require well co-ordinated planning, together with an analysis of the legal and institutional aspects involved. In this sense, it was agreed that the meeting should plan its implementation, taking into account money and time savings, taking advantage of capacities already installed or in the process of installation, in order to ensure successful planning.

6.8 Finally, the meeting examined a proposal in the sense that ICAO, in co-ordination with the States interested in participating, approach the Andean Community of Nations for the establishment, by the member States of this organization, of multinational systems for the provision of services or for safety control. In this regard, the meeting unanimously agreed that it would not be advisable to take technical and operational activities away from the specialised organisations, and that, in any case, this would be a matter for discussion at bilateral or multilateral meetings of the States concerned.

Agenda Item 7: Follow-up on the implementation of Conclusions adopted by previous RAAC meetings

7.1 Under this agenda item, the meeting reviewed and updated the status of implementation of each of the conclusions adopted by the previous meetings of Civil Aviation Authorities of the Region.

7.2 The meeting agreed on the need for each State to review the list of outstanding conclusions contained in the **Appendix** to this part of the report, and take, as applicable, the necessary action for full compliance.

7.3 Various comments were made regarding Conclusion 5/11, *Reporting of ATS incidents in the SAM Region*, and Conclusion 6/19, *Implementation of ATS incident investigation programmes in the SAM Region*. It was concluded that, although compliance of these conclusions had resulted in a reduction of ATS incidents, numbers were still high, and, therefore, efforts should continue to reduce them further.

Agenda Item 8: Other matters

8.1 Under this agenda item, the meeting discussed the following topics:

- a) Improvement of airspace control through the use of monopulse radar
- b) General and agricultural aviation in times of crisis
- c) English language

Improvement of airspace control through the use of monopulse radar

8.2 Argentina presented information to the meeting regarding the financial difficulties it had faced for the implementation of an air traffic control and surveillance plan through the deployment of a secondary radar network in the FIRs under its jurisdiction. In this sense, it was noted that a thorough analysis had been carried out for studying the possibility of acquiring locally-manufactured monopulse radars for route control, capable of integrating radar data and with mode S capability. for application in the CNS/ATM environment.

8.3 It was also noted that, as a result of this analysis, an agreement had been signed with a local company for the manufacturing of 11 monopulse secondary radars, which would be delivered within a period of 7 years. It was stated that, with this initiative, the Argentinean Administration would derive substantial benefits, since the implementation cost of locally-manufactured radars would be much lower than the cost of radars obtained in the international market.

8.4 Several States congratulated the Argentinean Administration for its initiative, because it could open the possibility of future bilateral agreements with other States to facilitate, among other things, the exchange of radar data.

General aviation and special aerial work in times of crisis

8.5 The meeting was informed on the general aviation and special aerial work situation in time of crisis. The basic components that form these activities (Flight Schools, Training Centres, general aviation, special aerial work, etc.) are facing the same difficulties raised by the current situation.

8.6 The aero-commercial activity focuses most of the attention and efforts from the Civil Aviation Authorities of each country, due to its dynamics and importance. However, the same does not occur with the activities listed in the title of the working paper.

8.7 It was proposed to carry out a study and prepare a regional programme gathering in the short term all available efforts in the Region that adequately harmonized, aimed at protecting the basic components (general aviation and special aerial work), through a fluent exchange of capabilities.

8.8 In discussing this matter, the Meeting considered that the proposal merits an adequate and opportune response by the ones executing the aeronautical authority, through the establishment of

supporting policies reflecting specific actions, aimed at contributing to overcome the difficult situation, in order to maintain a profitable and state-of-the-art civil aviation.

8.9 Although the meeting could not reach a unanimous decision on the subject, it considered that this matter should be addressed within LACAC on a preliminary basis, so as to examine the relevant aspects that could meet the expectations and the potential capability of the sector, in order to recover the soundness of commercial civil aviation. In view of the foregoing, the Regional Air Transport Officer of the SAM Office, who also is the LACAC Secretary shall submit this matter to the forthcoming meeting of the Executive Committee of this organisation.

English language in aeronautical communications

8.10 Regarding the English language in aeronautical communications, the Meeting took note that the ICAO Council had approved last March amendments to Annexes 1, 6, 10 and 11, prescribing a minimum level of knowledge of the English language that must be complied by pilots and air traffic controllers, starting the year 2008.

8.10.1 In this sense, the Meeting agreed on the future need for the Civil Aviation Administrations of the States, to take action in order to comply with the new standards specified in the aforementioned annexes.

APPENDIX**1. Alternate method**

1. The operator shall take the necessary measures so as to all passenger-carrying airplanes of a maximum take-off mass in excess of 45500 kg or with a passenger seating capacity greater than 60 shall be equipped with an approved flight crew compartment door that is designed to resist penetration by small arms fire and grenade shrapnel, and to resist forcible intrusions by unauthorized persons. This door shall be capable of being locked and unlocked from either pilot's station.

2. Deadline for door reinforcement:

2.2.1 For international flights (USA and Canada) : 9 April 2003

2.2.2 For international flights (Europe/Asia/Oceania) : 1 Nov. 2003

3. Air operators that carry out domestic and regional flights (South America) in aircraft affected by the aforementioned modification, and for aircraft operating with foreign registration, shall implement a system to block the cockpit door so as to prevent access to individuals other than crew members.

Implementation deadline : 1 Nov. 2003

4. The operator shall provide the means for monitoring from either pilot's station the entire door area outside the flight crew compartment to identify persons requesting entry and to detect suspicious behaviour or potential threat. Deadlines for future implementation of this equipment shall be advised in due time.

5. The reinforcement of the cockpit door, its locking system and the surrounding area monitoring system shall be implemented based on design, manufacturing and installing specifications duly certified by the civil aviation administration.

APPENDIX

ACTIVITIES RELATED TO THE REDDIG NODES PENDING IMPLEMENTATION BY THE STATES AS A RESULT OF THE PSATs

ARGENTINA

AFTN

Programme new AFTN ports in the message switch and connect them to the MUX FRAD CX950 B multiplexer, whose ports are duly identified. The number of ports is six:

SAEZ	SCEL
SAEZ	SUMU
SAEZ	SGAS
SAEZ	SLLP
SAEZ	SPIM
SAEZ	SBCT/SBBR

ATS SPEECH CIRCUITS

Programme the ACC VCCS speech circuit switching system, which allows the controller in the ATC console position to access voice communication services, so that each console position may have the dedicated and switched ATS speech circuits that are consistent with the operations of the Ezeiza control centre.

Make the respective connections between the VCCS and the MUX FRAD CX950 B multiplexer of the REDDIG node, whose ports are duly identified.

Dedicated ATS circuits

The dedicated ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer are:

SAEZ	SCEL
SAEZ	SUMU
BAIRES	CARRASCO APP
BAIRES	SUMU
SAEZ	CARRASCO APP

Switched ATS circuits

The switched ATS circuits to be programmed in the VCCS and connected to the FRAD CX950 B multiplexer will provide the following connections:

SARE /SAEZ SGAS
 SACO/ SAEZ SCEL
 SACO/SAEZ SLLP
 SAVC/SAEZ SCEL/SCTE
 SAVC/SAEZ SCEL/SCCI
 SARE /SAEZ SBCT
 SARE/ SAEZ SUMU
 SARE/SAEZ SUMU/SUCA
 SARE/SAEZ SBCT/SBWI
 SAZS/SAEZ SCEL/SCTE

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer, whose ports are duly identified.

GNSS DATA

Establish the physical connection between the DB60 serial outlet of the Cisco 2501 router of the GNSS augmentation trial system TRS and the FRAD CX950 B multiplexer, whose ports are duly identified (winchester V.35 connector of the TRS node connected to the V.35 connector in the REDDIG rack).

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. Since there is no ISDN service available, a dedicated circuit must be implemented. See Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched telephone line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated within the REDDIG equipment.

OPERATION LICENSE FOR VSAT STATION

Complete the procedures to obtain the operation license for the local VSAT station.

BOLIVIA

AFTN

Programme new AFTN ports in the message switch and connect them to the MUX FRAD CX950 B multiplexer, whose ports are duly identified. The number of ports is three:

SLLP SBCT/SBBR
 SLLP SAEZ
 SLLP SPIM

ATS SPEECH CIRCUITS

Programme the new PBAX exchange so that each ATC console position may have the dedicated and switched ATS speech circuits that are consistent with the operations of the La Paz control centre.

Make the respective connections between the PBAX and the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

Dedicated ATS circuits

The dedicated ATS circuits to be programmed in the PBAX and connected from the PBAX to the FRAD CX950 B multiplexer are:

SLLP	SPIM
SLLP	SBMN/SBPH

Switched ATS circuits

The switched ATS circuits to be programmed in the PBAX and connected from the PBAX to the FRAD CX950 B multiplexer will provide the following connections:

SLLP	SCEL
SLLP	SBCT/SBRR
SLLP	SAEZ/SACO
SLLP	SBCT
SLLP	SGAS

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer, whose ports are duly identified.

GNSS DATA

Establish the physical connection between the DB60 serial outlet of the Cisco 2501 router of the GNSS augmentation trial system TRS to the FRAD CX950 B multiplexer, whose ports are duly identified (winchester V.35 connector of the TRS node connected to the V.35 connector in the REDDIG rack).

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. Since there is no ISDN service available, a dedicated circuit must be implemented. See Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched telephone line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated within the REDDIG equipment.

OPERATION LICENSE FOR VSAT STATION

Complete the procedures to obtain the operation license for the local VSAT station.

BRAZIL**CURITIBA***AFTN*

Programme new AFTN ports in the message switch and connect them to the MUX FRAD CX950 B multiplexer, whose ports are duly identified. The number of ports is four:

SBBR/SBCT SLLP
 SBBR/SBCT SAEZ
 SBBR/SBCT SUMU
 SBBR/SBCT SGAS

ATS SPEECH CIRCUITS

Programme the ACC VCCS speech circuit switching system, which allows the controller in the ATC console position to access voice communication services, so that each console position may have the dedicated and switched ATS speech circuits that are consistent with the operations of the Curitiba control centre.

Make the respective connections between the VCCS and the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

Dedicated ATS circuits

The dedicated ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer are:

SBCT SGAS
 SBCT SUMU

Switched ATS circuits

The switched ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer will provide the following connections:

SBBR/SBCT SLLP
 SBCT SAEZ/SARE
 SBCT SLLP
 SBWI/SBCT SAEZ/SARE
 SBWI/SBCT SGAS
 SBWI/SBCT SBRF
 SBCT SBMN

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer, whose ports are duly identified.

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. If the ISDN service is not implemented, a dedicated circuit must be implemented. For connection, see Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched telephone line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated within the REDDIG equipment.

GNSS DATA

Establish the physical connection between the GNSS augmentation system master station located in Rio de Janeiro and the FRAD CX950 B multiplexer, whose ports are duly identified. To this end, one of the REDDIG nodes of Brazil would have to be selected.

OPERATION LICENSE FOR VSAT STATION

Complete the procedures to obtain the operation license for the local VSAT station.

RECIFE*AFTN*

Programme new AFTN ports in the message switch and connect them to the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

SBCT SVMI

ATS SPEECH CIRCUITS

Programme the ACC VCCS speech circuit switching system, which allows the controller in the ATC console position to access voice communication services, so that each console position may have the dedicated and switched ATS speech circuits that are consistent with the operations of the Recife control centre.

Make the respective connections between the VCCS, through its interphases to the external trunk circuits, and the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

Switched ATS circuits

The switched ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer will provide the following connections:

SBRF SOCA
SBRF SUMU
SBRF SBMN
SBRF SBCT

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer, whose ports are duly identified.

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. If the ISDN service is not implemented, a dedicated circuit must be implemented. For connection, see Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched telephone line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated within the REDDIG equipment.

OPERATION LICENSE FOR VSAT STATION

Complete the procedures to obtain the operation license for the local VSAT station.

MANAUS*AFTN*

Programme new AFTN ports in the message switch and connect them to the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

The number of ports is five:

SBBR/SBMN SOCA
SBBR/SBMN SMPB
SBBR/SBMN SYGC
SBBR/SBMN SKED
SBBR/SBMN SPIM

ATS SPEECH CIRCUITS

Programme the ACC VCCS speech circuit switching system, which allows the controller in the ATC console position to access voice communication services, so that each console position may have the dedicated and switched ATS speech circuits that are consistent with the operations of the Manaus control centre.

Make the respective connections between the VCCS and the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

Dedicated ATS circuits

The dedicated ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer are:

SBMN	SVMI	
SBMN	SKED	
SBMN		SKED/SKLT
SBPH/SBMN	SKED	
SBPH/SBMN	SLLP	

Switched ATS circuits

The switched ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer will provide the following connections:

SBBE/SBMN	SMPB
SBBE/SBMN	SOCA
SBMN	SYGC
SBPH/SBMN	SPIM
SBMN	SBRF
SBMN	SBCT

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer, whose ports are duly identified.

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. If the ISDN service is not implemented, a dedicated circuit must be implemented. For connection, see Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched telephone line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated within the REDDIG equipment.

OPERATION LICENSE FOR VSAT STATION

Complete the procedures to obtain the operation license for the local VSAT station.

*CHILE**AFTN*

Programme new AFTN ports in the message switch and connect them to the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

The number of ports is two:

SCEL SPIM

SCEL SAEZ

ATS SPEECH CIRCUITS

Programme the ACC VCCS speech circuit switching system, which allows the controller in the ATC console position to access voice communication services, so that each console position may have the dedicated and switched ATS speech circuits that are consistent with the operations of the Santiago control centre.

Make the respective connections between the VCCS, through its interphases to the external trunk circuits, and the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

Dedicated ATS circuits

The dedicated ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer are:

SCEL SPIM

SCEL SAEZ/SAME

Switched ATS circuits

The switched ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer will provide the following connections:

SCEL SAEZ/SACO

SCEL SLLP

SCTE/SCEL SAEZ/SAVC

SCCI/SCEL SAEZ/SAVC

SCTE/SCEL SAEZ/SAZS

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer, whose ports are duly identified.

GNSS DATA

Establish the physical connection between the GNSS augmentation trial equipment TMS to the FRAD CX950 B multiplexer of the REDDIG, whose ports are duly identified.

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. Since there is no ISDN service available, a dedicated circuit must be implemented. For connection, see Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched telephone line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated within the REDDIG equipment.

COLOMBIA

AFTN

Programme new AFTN ports in the message switch and connect them to the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

The number of ports is two:

SKED SPIM

SKED SEGU

SKED SBMN/SBBR

SKED SVMI

ATS SPEECH CIRCUITS

Programme the ACC VCCS speech circuit switching system, which allows the controller in the ATC console position to access voice communication services, so that each console position may have the dedicated and switched ATS speech circuits that are consistent with the operations of the Bogota control centre.

Make the respective connections between the VCCS, through its interphases to the external trunk circuits, and the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

Dedicated ATS circuits

The dedicated ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer are:

SKED SEGU

SKED SPIM

SKED SVMI

SKED SBMN

SKED SBMN/SBPH

SKEC/SKED SVMI

SKLT/SKED SVMI

Switched ATS circuits

The switched ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer will provide the following connections:

SKAN/SKED SEGU
SKCL /SKED SEGU
SKLT/SKED SPIM
SKCC /SKED SVMI

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer, whose ports are duly identified.

GNSS DATA

Establish the physical connection between the DB60 serial outlet of the Cisco 2501 router of the GNSS augmentation equipment reference station and the FRAD CX950 B multiplexer, whose ports are duly identified (winchester V.35 connector of the TRS node connected to the V.35 connector in the REDDIG rack).

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. If the ISDN service is not implemented, a dedicated circuit must be implemented. For connection, see Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched telephone line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated within the REDDIG equipment.

ECUADOR

AFTN

Programme new AFTN ports in the message switch and connect them to the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

The number of ports is three:

SEGU SPIM
SEGU SKED
SEGU SVMI

ATS SPEECH CIRCUITS

Programme the PBAX exchange so that each ATC console position may have the dedicated and switched ATS speech circuits that are consistent with the operations of the Guayaquil control centre.

Make the respective connections between the PBAX, through its interphases to the external trunk circuits, and the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

Dedicated ATS circuits

The dedicated ATS circuits to be programmed in the PBAX and connected from the PBAX to the FRAD CX950 B multiplexer are:

SEGU SPIM
SEGU SKED

Switched ATS circuits

The switched ATS circuits to be programmed in the PBAX and connected from the PBAX to the FRAD CX950 B multiplexer will provide the following connections:

SEGU SKAN/SKED
SEGU SKCL /SKED

ADMINISTRATIVE NETWORK VOICE COMMUNICATION

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer, whose ports are duly identified.

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. Since there is no ISDN service available, a dedicated circuit must be implemented. For connection, see Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated in the REDDIG equipment.

OPERATION LICENSE FOR VSAT STATION

Complete the procedures to obtain the operation license for the local VSAT station.

FRENCH GUYANA***AFTN***

Programme new AFTN ports in the message switch and connect them to the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

The number of ports is two:

SOCA	SVMI
SOCA	SBMN/SBBR

ATS SPEECH CIRCUITS

Programme the ACC VCCS speech circuit switching system, which allows the controller in the ATC console position to access voice communication services, so that each console position may have the dedicated and switched ATS speech circuits that are consistent with the operations of the Cayenne control centre.

At the same time, the respective connections have to be made between the VCCS, through its interphases to the external trunk circuits, and the MUX FRAD CX950 B multiplexer whose ports are duly identified.

Switched ATS circuits

the switched ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer will provide the following connections:

SOCA	SBMN/SBBE
SOCA	SMPM
SOCA	SBRF

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer whose ports are duly identified.

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. If the ISDN service is not implemented, a dedicated circuit must be implemented. For connection, see Appendix C.

OPERATION LICENSE FOR VSAT STATION

Complete the procedures to obtain an operation license for the local VSAT station.

GUYANA

AFTN

Since, at present, Guyana does not have an AFTN switching centre, it has to connect dedicated terminals with AFTN applications to each of the new ports envisaged, and connect these to the MUX FRAD CX950 B multiplexer, whose ports are duly identified.

The number of ports is three:

SYGC SMPM

SYGC SVMI

SYGC SBMN/SBBR

ATS SPEECH CIRCUITS

Since Guyana does not have a VCCS system nor a PBAX exchange, it has to install dedicated telephones and connect them to the FRAD CX950 B multiplexer of the REDDIG node whose ports are duly identified.

Switched ATS circuits

SYGC SBMN

SYGC SMPM

SYGC SVMI

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer whose ports are duly identified.

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. Since there is no ISDN service available, a dedicated circuit must be implemented. See connection in Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched telephone line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated within the REDDIG equipment.

GROUNDING OF NODE EQUIPMENT

Ground the REDDIG node equipment.

PARAGUAY

AFTN

Programme new AFTN ports in the message switch and connect them to the MUX FRAD CX950 B multiplexer, whose ports are duly identified. Since the AFTN message switching centre in the communication sub-system operates with current loop circuits, and the equipment to be connected to the REDDIG (MUX FRAD CX950 B multiplexer) operates with RS232, the respective interphases must be installed for the conversion.

The number of ports is two:

SGAS SBCT/SBBR
SGAS SAEZ

ATS SPEECH CIRCUITS

Since Paraguay does not have a VCCS system nor a PBAX exchange, it must install dedicated telephones and connect them to the FRAD CX950 B multiplexer of the REDDIG node whose ports are duly identified, in order to carry out the programmed dedicated and switched communications.

Dedicated circuits

SGAS SBCT

Switched circuits

SGAS SLLP
SGAS SBCT/SBWI
SGAS SAEZ/SARE

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer whose ports are duly identified.

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. Since there is no ISDN service available, a dedicated circuit must be implemented See connection in Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched telephone line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated within the REDDIG equipment.

OPERATION LICENSE FOR VSAT STATION

Complete the procedures to obtain the operation license for the local VSAT station.

PERU

AFTN

Programme new AFTN ports in the message switch and connect them to the MUX FRAD CX950 B multiplexer of the REDDIG node whose ports are duly identified. The number of ports is seven:

SPIM SCEL
SPIM SLLP
SPIM SAEZ
SPIM SEGU
SPIM SVMI
SPIM SKED
SPIM SBMN/SBBR

ATS SPEECH CIRCUITS

Programme the ACC VCCS speech circuit switching system, which allows the controller in the ATC console position to access voice communication services, so that each console position may have the dedicated and switched ATS speech circuits that are consistent with the operations of the Lima control centre.

Make the respective connections between the VCCS, through its interphases to the external trunk circuits, and the MUX FRAD CX950 B multiplexer of the REDDIG node, whose ports are duly identified.

Dedicated ATS circuits

The dedicated ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer will provide the following connections:

SPIM SCEL
SPIM SKED
SPIM SEGU
SPIM SLLP

Switched ATS circuits

The switched ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer are:

SPIM SKED/SKLT
SPIM SBMN/SBPH

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer, whose ports are duly identified.

GNSS DATA

Establish the physical connection between the DB60 serial outlet of the Cisco 2501 router of the GNSS augmentation trial system reference station to the FRAD CX950 B multiplexer, whose ports are duly identified (winchester V.35 connector of the TRS node connected to the V.35 connector in the REDDIG rack).

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. If the ISDN service is not implemented, a dedicated circuit must be implemented. See connection in Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched telephone line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated within the REDDIG equipment.

OPERATION LICENSE FOR VSAT STATION

Complete the procedures to obtain the operation license for the local VSAT station.

SURINAME*AFTN*

The message switching centre needs urgent repair in order to connect the AFTN services to the REDDIG node. The AFTN system has only one terminal left; all the rest are out of commission. New ports must be programmed to the switching centre and connected to the MUX FRAD CX950 B multiplexer of the REDDIG node, whose ports are duly identified.

The number of ports is three:

SMPM	SYGCS
SMPM	SVMI
SMPM	SBMN/SBBR

ATS SPEECH CIRCUITS

Since Suriname does not have a VCCS system nor a PBAX exchange, it must install dedicated telephones and connect them to the FRAD CX950 B multiplexer of the REDDIG node, whose ports are duly identified.

Switched circuits

SMPB	SBMN/SBBE
SMPM	SYGC
SMPM	SOCA

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer, whose ports are duly identified.

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. Since there is no ISDN service available, a dedicated circuits must be implemented. See Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched telephone line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated within the REDDIG equipment.

OPERATION LICENSE FOR VSAT STATION

Complete the procedures to obtain the operation license for the local VSAT station.

URUGUAY*AFTN*

Programme new AFTN ports in the message switch and connect them to the MUX FRAD CX950 B multiplexer of the REDDIG node, whose ports are duly identified. The number of ports is two:

SUMU	SBCT/SBBR
SUMU	SAEZ

ATS SPEECH CIRCUITS

Programme the ACC VCCS speech circuit switching system, which allows the controller in the ATC console position to access voice communication services, so that each console position may have the dedicated and switched ATS speech circuits that are consistent with the operations of the Montevideo control centre.

Make the respective connections between the VCCS, through its interphases to the external trunk circuits, and the MUX FRAD CX950 B multiplexer of the REDDIG node, whose ports are duly identified.

Dedicated ATS circuits

The dedicated ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer are:

SUMU	SAEZ
SUMU	BAIRES
Carrasco APP	BAIRES
Carrasco APP	SAEZ

SUMU SBCT

Switched ATS circuits

The switched ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer will provide the following connections:

SUMU SAEZ/SARE
 SUCA/SUMU SAEZ/SABE
 SUMU SBRF

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer, whose ports are duly identified.

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. Since there is no ISDN service available, a dedicated circuit must be implemented. See connection in Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched telephone line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated within the REDDIG equipment.

VENEZUELA

AFTN

Programme new AFTN ports in the message switch and connect them to the MUX FRAD CX950 B multiplexer of the REDDIG node, whose ports are duly identified. The number of ports is six:

SVMI SYGC
 SVMI SOCA
 SVMI SMPM
 SVMI SPIM
 SVMI SEGU
 SVMI SKED
 SVMI SBRF

ATS SPEECH CIRCUITS

Programme the ACC VCCS speech circuit switching system, which allows the controller in the ATC console position to access voice communication services, so that each console position may have the switched and hot-line ATS speech circuits that are consistent with the operations of the Maiquetía control centre.

Make the respective connections between the VCCS, through its interphases to the external trunk circuits, and MUX FRAD CX950 B multiplexer, whose ports are duly identified.

Dedicated ATS circuits

The dedicated ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer are:

SVMI SKED
SVMI SBMN
SVMI SKED/SKEC

Switched ATS circuits

The switched ATS circuits to be programmed in the VCCS and connected from the VCCS to the FRAD CX950 B multiplexer will provide the following connections:

SVMI SKED/SKCC
SVMI SYGC

ADMINISTRATIVE NETWORK VOICE COMMUNICATIONS

Connect the respective telephones at the locations assigned by the Aeronautical Administration for administrative communications to the FRAD CX950 B multiplexer, whose ports are duly identified.

BACK-UP NETWORK CIRCUIT

Each REDDIG node should include a connection to the ISDN public network (Project RLA/98/01 page 3.27) for automatic traffic routing to another REDDIG node in case of failure of the main circuits. Since there is no ISDN service available, a dedicated circuit must be implemented. See connection in Appendix C.

SWITCHED TELEPHONE LINE (PSTN)

Implement a switched telephone line (PSTN) (Project RLA/98/01 page 3.39) to be used exclusively to support the network management system for operations such as remote maintenance. Modems are contemplated within the REDDIG equipment.

LICENSE OPERATION FOR VSAT STATION

Complete the procedures to obtain the operation license for the local VSAT station.

- END -

APPENDIX

Draft Regional Strategy for the Resolution of Deficiencies

1. Objective

1.1 This strategy for the identification, evaluation, classification and resolution of the deficiencies that affect air navigation services will be applied by the Regional Office, in coordination with the States, for the establishment of a Coordinated Action Plan and the respective follow-up and reporting tools for the resolution of the most critical deficiencies that affect the implementation of the Air Navigation Plan and the application of the corresponding SARPs. When applying the strategy, the following should be taken into account:

- a) Pursuant to the directives of the Council, and as a regular function, the Regional Office must keep a list of concrete deficiencies that exist in the SAM Region, adopting the necessary measures for the collection of information in order to identify, evaluate and classify deficiencies, assigning the corresponding priorities, in keeping with the uniform methodology approved by the Council.
- b) The deficiency report format will be that defined in the methodology approved by the Council. Under the Corrective Measures/Description column, a detailed description of the Coordinated Action Plan with the State for the resolution of deficiencies will be provided.
- c) The Regional Office will submit to GREPECAS the “U” deficiencies to be dealt by the Regional Group, together with an executive summary of the most relevant actions taken by the Regional Office/States for the resolution of deficiencies types “A” and “B” (GREPECAS Conclusion 10/60). The Regional Office, through the GREPECAS reports and the action taken by the Council/Air Navigation Commission on “U” deficiencies, will coordinate the corresponding Coordinated Action Plan with the States.

1.2 This strategy must be considered by the Regional Office and the States as a matter of high priority for the resolution of deficiencies.

2. Regional strategy

2.1 Identification, evaluation and classification of deficiencies

2.1.1 The Regional Office, for the identification, evaluation and classification of deficiencies will use mainly the following sources:

- a) regular correspondence with the States;
- b) visits to the States (mission reports);
- c) air navigation meetings of all types (formal and informal);
- d) users, through IATA, IFALPA, etc; and

- e) reports on aircraft incidents/accidents.

2.1.2 Each air navigation area of the Regional Office, after examining the deficiency, will assign the corresponding priority. The Regional office will advise the State about this matter as a first step for the establishment of the corresponding coordinated action plan.

2.2 **Records of deficiencies kept by the Regional Office**

2.2.1 The Regional Office will keep the following types of deficiency records:

- a) regular files, in hard copy, as part of the information records
- b) database

2.2.1.1 Regarding the files other than the General File on Deficiencies LT 1/19, each air navigation area (AGA, AIS, ATM, CNS, MET, SAR) must open the corresponding file.

2.2.1.2 As a matter of urgency, a database shall be developed that, in keeping with the format contained in the methodology approved by the Council, delivers different types of reports, namely:

- a) reports on all deficiencies, by State
- b) reports on deficiencies in specific areas, by State
- c) others

2.2.1.3 Each air navigation area of the Regional Office will be responsible for maintaining that part of the database of its competence, which will be accessed by the person responsible in each area. Likewise, each air navigation area will be responsible for the management and updating of the files and for the follow-up of the Action Plans Coordinated with the States. Each area, based on the records and in coordination with the Office Director, will prepare the deficiency reports for internal follow-up and for their presentation to the air navigation meetings within and outside the Region and to GREPECAS.

2.3 **Resolution of deficiencies**

2.3.1 Once the deficiency has been identified, evaluated, and classified according to the corresponding priority, the Office, based on the review made by each air navigation area, will begin coordinations with the State in order to establish the corresponding Coordinated Action Plan for solving the deficiency. This coordinated action plan must contain a summary of, at least, the following information:

- a) *What* action and *how* will it be implemented by the State/States involved in the implementation of the solutions to the deficiency.
- b) *When* (date) is it more likely that the action and procedures to be carried out to solve the deficiency, in keeping with a) above, will become effective.
- c) If possible, resources (personnel and budget) committed for the resolution of the deficiency.
- d) Financing source (own State's resources, others); and

- e) Recommendations to improve service provision (for example, the application of datalink instead of speech circuits for ATS coordination).

Note: This Coordinated Action Plan can also be established at the air navigation meetings or during visits to the States.

2.3.2 For purposes of the work to be carried out by the Regional Offices, the following mechanisms must be considered as tools for coordination, follow-up and reporting of deficiencies:

- a) official visits to the States by Regional Office staff
- b) official correspondence with the States
- c) air navigation meetings (formal and informal).

2.3.3 As indicated in 2.2.1.3, each air navigation area of the Regional Office will be responsible for the follow-up of the Coordinated Action Plans agreed by the States. In keeping with the classification and priority assigned to the deficiency, these follow-up actions must be carried out on an on-going basis so as not to lose the momentum generated by the establishment of the cited plan. In this sense, and in coordination with the Director, each Regional Official, based on the coordination with the States and in keeping with their regional vision, should consider annual objectives measurable against the resolution of deficiencies. For instance, a percentage value could be assumed for the resolution of a certain type of deficiency in the region or in some States or State in particular. In doing so, the Regional Official should establish and implement an appropriate work plan, preferably supported by a project management tool.

Air navigation meetings to support the resolution of deficiencies

2.3.4 For each air navigation area, the Regional Office will schedule at least one implementation meeting per year. These meetings will deal, *inter alia*, with all matters that are deemed necessary for the resolution of deficiencies under a specific agenda item of the meeting. In order to guarantee this support mechanism, the Regional Office must make sure that the States are fully committed to the holding of these implementation meetings and to participating with delegates with ample decision-making power.

2.3.5 The Regional Office will be in constant coordination with the States with respect to the implementation of the coordinated action plans. The Meetings of Civil Aviation Authorities will be the events of highest institutional hierarchy to which the Regional Office will submit a detailed report of the status of implementation of the coordinated action plans, with a view to defining actions aimed at strengthening the mechanisms for the implementation of such plans.

Official visits to the States

2.3.6 One of the main objectives of the official visits to the States by the staff of the ICAO Regional Office will be the resolution of deficiencies, based on the Coordinated Action Plan. During the visit, the ICAO staff will assist the State in furthering the application of the cited plan. The visit will also be used to identify other deficiencies for subsequent review, in keeping with the aforementioned procedures.

Other mechanisms to strengthen the implementation of solutions to deficiencies

2.3.7 The Regional Office, in coordination with the States, may agree to other possible mechanisms for establishing measures for the resolution of deficiencies. In this respect, ICAO tools include the mechanism offered by its technical cooperation, the special implementation projects of the Council, seminars and workshops.

**OUTSTANDING CONCLUSIONS ISSUED BY THE MEETINGS OF CIVIL AVIATION
AUTHORITIES OF THE SAM REGION (RAAC)**

**CONCLUSION 5/4 COORDINATION BETWEEN CIVIL AVIATION AUTHORITIES AND
GEOGRAPHIC INSTITUTE AUTHORITIES**

That civil aviation administrations:

- a) in close coordination with the geographic institutes responsible for national cartography, establish plans for effectively implementing the WGS-84; and
- b) send in due time the implementation schedules resulting from the plans cited in the previous paragraph to the ICAO Regional Office.

CONCLUSION 5/5 HARMFUL PROLIFERATION OF GESs

That, through GREPECAS, the ICAO SAM Regional Office promote:

- a) a coordinated region-wide effort to ensure that the AMSS includes the optimum number of GESs; and
- b) the means to furnish services, placing emphasis on shared facilities.

CONCLUSION 6/5 ACCESSION TO THE REGIONAL SAFETY OVERSIGHT SYSTEM

The Sixth Meeting of Civil Aviation Authorities of the SAM Region encourages the States that have not yet adhered to the Regional Safety Oversight System to do so as soon as possible, by signing the relevant agreement with LACAC.

**CONCLUSION 6/8 DEVELOPMENT OF SCENARIOS FOR THE PROVISION OF
FACILITIES AND SERVICES**

That the Regional Office, through GREPECAS, develop scenarios for the evaluation of issues related to the implementation, administration and operation of CNS/ATM systems, including their economic, institutional and political impact.

CONCLUSION 6/15 SUPPORT TO THE PAN-AMERICAN CIVIL AVIATION INSTITUTE

The Sixth Meeting of Civil Aviation Authorities of the SAM Region, recognising the need to provide management-level training to the personnel from civil aviation entities, agrees to provide its full support to the development of the activities of the Pan-American Civil Aviation Institute “Assaid Kotaite”, expediting the participation of the professionals required as speakers for the courses it organises, and making use of the training programmes it fosters.

CONCLUSION 6/16 PERSONNEL AND FINANCIAL LIMITATIONS

To encourage States to:

- a) participate in the ICAO associated experts programme (short-term secondment of national officials, paid by the State under an agreement with ICAO, in those areas in which the Office has insufficient human resources to meet the needs of the Region; and
- b) continue supporting the meeting programme of the SAM Office and, thus, reduce their cost.

CONCLUSION 6/19 IMPLEMENTATION OF ATS INCIDENT INVESTIGATION PROGRAMMES IN THE SAM REGION

That:

- a) States in the SAM Region that have an ATS incident investigation programme in place do their utmost to improve the procedures used; and
- b) States that have not yet done so, establish an ATS incident investigation programme in order to determine and identify the causes of such incidents, take the necessary corrective measures, and thus avoid a decline of safety and efficiency levels.

CONCLUSION 7/1 STRENGTHENING OF AIR TRANSPORTATION IN THE SOUTH AMERICAN REGION

Civil Aviation Authorities of the SAM Region are urged to:

- a) encourage cooperation between sub-regions in the field of air transportation, encouraging the integration of the Fortaleza and the Andean Community of Nations (CAN) agreements, in order to reach an agreement on increased flexibility for the South American region;
- b) encourage internal and external coordination among the bodies representing the new actors (aeronautical authorities, regulatory bodies, airport operators and airlines);
- c) promote the establishment of national strategies for implementing the agreements reached by the Ministers;
- d) provide all their support to the forum of ministers of the air transportation subsector within the framework of LACAC, as a mechanism for strengthening regional air transportation;
- e) support the coordination between the specialized bodies and any new initiatives that may arise, in order to continue supporting international cooperation and avoiding the duplication of efforts; and
- f) promote the harmonization of economic standards and regulations for air transportation, with emphasis on the development of CNS/ATM systems and the corresponding multinational services and facilities.

CONCLUSION 7/2 AVIATION SECURITY (AVSEC) COORDINATION

ICAO and LACAC are urged to carry out the necessary coordination to avoid duplication of work in the AVSEC area.

CONCLUSION 7/3 MEASURES TO IMPROVE AVIATION SECURITY (AVSEC)

Civil aviation authorities are urged:

- a) to the extent of their possibilities, to take action aimed at maintaining effective control systems that permit a balance between facilitation and security.
- b) for future work, to take into account the coordination and cooperation that should exist among the States of the Region, considering the economic limitations for purchasing equipment, that will permit dealing with new and emerging threats.
- c) to implement measures consistent with the level of threat of each State, taking into account that not all are in the same situation.
- d) To foster preventive measures aimed at “passenger identification”, promoting the creation of a regional database, using means such as mechanical reading or biometric identification passports.
- e) To encourage the standardization of standards at the regional level, and the exchange and/or joint acquisition of equipment.
- f) To clearly identify the training needs of States, and foster training with experts from the same region.
- g) To support the active participation of the “global aviation war risk aeronautical plan” sponsored by ICAO.
- h) Orient their representatives at the ICAO Council, in order that they act jointly when making decisions on civil aviation Security, according to the Civil Aviation interests of the SAM Region.

CONCLUSION 7/4 SUPPORT FOR THE IMPLEMENTATION OF RNAV ROUTES

That the Civil Aviation Authorities of the SAM Region are encouraged to pay the highest level of support in the commitments made inside the implementation plans established by the GREPECAS mechanism and the programmed works in regards to the Regional Project RLA/98/003, in order to culminate for a successful execution of the implementation plans for the RNAV routes.

CONCLUSION 7/5 HIGH LEVEL REGIONAL GROUP OF EXPERTS.

That:

- a) The terms of reference and work program for the high level regional Group of experts to study the viability of the implementation of the CNS/ATM systems, that are referred in Conclusion 6/9 of the RAAC/6 Meeting are the ones indicated in the Appendix B; and
- b) The ICAO Regional Office coordinate with the States the first meeting of the Group, once GREPECAS produces the corresponding studies about the multinational installations/services.

CONCLUSION 7/7 AGREEMENT FOR THE TECHNICAL AND ADMINISTRATIVE MANAGEMENT OF THE REDDIG

That the Regional Project RLA/98/019 and ICAO, as the project executing organization, when drafting the REDDIG Technical Management and Administration Agreement, use the relevant parts of the guidelines on the establishment of multinational facilities and services developed by the CAR/SAM/3 RAN meeting and updated by GREPECAS.

CONCLUSION 7/8 DEVELOPMENT OF A RVSM IMPLEMENTATION PLAN IN THE STATES OF THE SAM REGION

SAM States are urged to elaborate a national RVSM implementation plan within the framework of the CAR/SAM Regional RVSM implementation program that contemplates the administrative, economic, institutional and technical/operative aspects required for its execution.

CONCLUSION 7/10 GREATER SUPPORT BY THE STATES FOR THE TASKS TO BE DEVELOPED BY GREPECAS.

That the administrations in order to make a greater contributions to the work to be developed by GREPECAS, adopt as their own the assigned tasks to their nominated experts to the mechanism and contribute the necessary contributions in support of its expert in order that the tasks assigned be developed within the time established in the work program of the respective organism of GREPECAS' mechanism.

CONCLUSION 7/11 COORDINATION FOR THE SUPPORT OF ICAO'S POSITION IN THE ITU CRM-2003

The Civil Aviation Authorities are urged to:

- a) Make possible all of the necessary efforts to coordinate with the communication sector authorities in order to obtain their support to the ICAO position for the next ITU World Radio Telecommunications Conference (CRM-2003);

- b) Consider the participation of representatives of their administration within the State's delegation to the Conference; and
- c) Once the coordinations referred to in the previous paragraphs a) and b) have been made, inform the Regional Office on the obtained results.

CONCLUSION 7/13 DEFICIENCIES IN THE VARIOUS FIELDS OF AIR NAVIGATION IN THE SAM REGION

That the aeronautical authorities:

- a) review the deficiencies included in Appendix C to this part of the report which correspond to their State, and identify the appropriate corrective (technical/operational/financial/organizational) measures to solve them; and
- b) based on a), prepare an Action Plan and send it to the ICAO SAM Regional Office by 31 October 2002.

CONCLUSION 7/14 AERODROME CERTIFICATION

Civil aviation authorities are urged to:

- a) Develop, if they have not done so yet, an intensive programme to meet the requirements of Amendment 4 to Annex 14, Volume I, as soon as possible;
- b) Participate in aerodrome certification training programmes, so that their staff may receive training in the conduction of aerodrome certification processes and the analysis of Aerodrome Manuals and Safety Management Systems;
- c) Be prepared for the aerodrome audits that will start in 2004;
- d) Implement Safety Management Systems at their aerodromes before 24 November 2005, in order to meet the requirements of Amendment 4 to ICAO Annex 14, Volume I.
- e) Carry out actions aimed at complementing the instructions contained in ICAO Doc 9774, searching for an effective international harmonization in the aerodrome certification process.

CONCLUSION 7/15 ATS QUALITY ASSURANCE PROGRAMMES

That the SAM States:

- a) based on the guidance material for ATS quality assurance programmes approved by the CAR/SAM Regional Planning and Implementation Group, implement a quality assurance programme at ATS units and designate the person responsible who will also be the focal point and coordinator of the programme;
- b) Inform the ICAO SAM Regional Office about such designation; and

- c) Participate actively at all events that seek to disseminate, provide training in, and implement ATS quality assurance programmes.

CONCLUSION 7/17 COORDINATION AMONG THE REPRESENTATIVES OF THE SAM STATES BEFORE THE ICAO COUNCIL

That the Civil Aviation Authorities of those States of the SAM Region holding representation before the ICAO Council, encourage their representatives to carry out continued co-ordinations among them, on the various issues discussed at the Council, aimed at establishing joint positions on civil aviation matters, according to SAM States' common interests.