

INTERNATIONAL CIVIL AVIATION ORGANIZATION



**REPORT OF THE FOURTEENTH MEETING
OF THE AFI PLANNING AND IMPLEMENTATION
REGIONAL GROUP (APIRG)**

(Yaounde, Cameroon, 23 – 27 June 2003)

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PART I

HISTORY OF THE MEETING

1. VENUE AND DATE

1.1 The fourteenth meeting of the AFI Planning and Implementation Regional Group (APIRG/14) was held in the conference room of Hilton Hotel in Yaounde, from 23 to 27 June 2003, at the kind invitation of the Republic of Cameroon.

2. OFFICERS AND SECRETARIAT

2.1 The meeting re-elected Mr. Mohamed Chérif of Tunisia as Chairman, Mr. Fidèle Manga Fouda (Cameroon) was elected as First Vice-Chairman and Mr. M. R. Alloo (Tanzania) was elected as Second Vice-Chairman. Mr. Chérif chaired all the sessions of the meeting. Paragraph 1.1 under Agenda Item 1 below also refers.

2.2 Mr. A. Cheiffou, ICAO Regional Director Dakar, served as the Secretary of APIRG. He was assisted by Mr. L. Mollel, ICAO Regional Director, Nairobi Office, Mr. V.D. Zubkov, Chief, Regional Affairs Office, Mr. H.P. Pretorius, Regional Affairs Officer from ICAO Headquarters and by the following Officers from Dakar and Nairobi Offices of ICAO:

Mr. H. H. Cissé	-	Regional Officer MET, Dakar
Mr. A. J. Kharuga	-	Regional Officer ATM, Nairobi
Mr. B. M. Sekwati	-	Regional Officer MET, Nairobi
Mr. L. W. Ndiwaita	-	Regional Officer AGA, Nairobi
Mr. A. Sene	-	Regional Officer CNS, Nairobi
Mr. J. C. Waffo	-	Regional Officer AGA, Dakar
Mr. P. Zo'o Minto'o	-	Regional Officer CNS, Dakar
Mr. K. Brou	-	Regional Officer ATM, Dakar

2.3 The discussions were conducted in English and French and the meeting documentation was issued in both languages. Translation and simultaneous interpretation services were provided under the supervision of Mr. J. Belinga, Translator/Reviser, ICAO WACAF Office, Dakar. He was assisted by Mr. A. Otou-N'Guini, Translator, ICAO Headquarters, Montreal, Miss F. Jouve, Translator, ICAO Office, Paris and three freelance interpreters. Mrs. P. A. Boimond-Basse, Administrative Officer, Dakar assisted the meeting on administrative matters.

2.4 The meeting was opened by the Honourable Minister of Transport of the Republic of Cameroon, Mr. John Begheni Ndeh. On behalf of the Government, he welcomed the participants to the meeting and expressed appreciation for the large turn out of delegates. He also thanked ICAO for choosing his country to host the fourteenth meeting of APIRG. He emphasized safety of air transport and the importance of international cooperation. He further highlighted the achievements of Cameroon in civil aviation, in particular investments in airports infrastructure (Cameroon has three international airports), the establishment of the Civil Aviation Authority of Cameroon and the ratification of most of the ICAO Conventions and protocols.

2.5 Before that, a welcome address was delivered by the Chairman of the Board of Directors of the Cameroon Civil Aviation Authority, Mr. Paul Pondi, wishing the delegates a pleasant stay in Yaounde. He stressed safety and security of air transport in Africa and the goals of Cameroon for peace and progress.

2.6 Mr. A. Cheiffou, Regional Director of the Western and Central African Office, Dakar, and Secretary of APIRG, welcomed the participants. He pointed out the major role played by Cameroon in the development of international civil aviation in Africa. He also emphasized the role played by APIRG in planning and implementing air navigation systems in Africa.

2.7 Mr. Cheiffou then reviewed progress achieved since the APIRG/13 Meeting in the AGA, COM, CNS, ATM, MET, AIS and SAR fields. He concluded by calling for strategies to overcome deficiencies in the air navigation field despite substantial progress achieved in recent years.

2.8 Mr. V.D. Zubkov, Chief of the Regional Affairs Office at ICAO Headquarters, Montreal, conveyed greetings of the President of the ICAO Council, Dr. Assad Kotaite, the Secretary General, Mr. Costa Pereira and the Representatives of the African States on the ICAO Council. Mr. Zubkov highlighted three issues of high political importance: follow-up on and expansion of USOAP and availability of financial and human resources to support APIRG and further development of international civil aviation in Africa.

2.9 The Chairman of APIRG expressed his appreciation to the Cameroon Authorities for their kind hospitality. He stressed the importance of civil aviation for the economic and social development of African States and the role of APIRG in planning and implementing air navigation facilities. Mr. Chérif also emphasized the need for the AFI States to prepare for the ICAO 11th Air Navigation Conference due in September/October this year.

2.10 The meeting noted with appreciation that all the available working papers, information papers, AFI Basic ANP and FASID, as well as the reference documents and reports of APIRG contributory bodies, had been placed on the ICAO web site of the regional offices concerned in accordance with the established procedures well in advance of the meeting as per Conclusion 12/27 (Disseminating of aeronautical and other information).

3. ATTENDANCE

3.1 The meeting was attended by one hundred seventy-two participants from 35 States, including 25 APIRG member States, 11 other States located in the AFI Region and the United States, as well as Observers from AFCAC, ASECNA, EUROCONTROL, the European Space Agency, IATA, IFALPA, IFATCA, INTELSAT and Roberts FIR.

3.2 The list of participants is given at Appendix A.

4. AGENDA

4.1 The meeting adopted the following agenda:

1. Election of Chairperson and Vice-Chairperson
2. Action by the Air Navigation Commission (ANC) and Council on the APIRG/13 Meeting Report
3. Review and follow-up of APIRG Conclusions and Decisions, including outstanding AFI/7 RAN Meeting recommendations

4. Air Navigation issues
 - 4.1 Aerodrome operations
 - 4.2 Communications
 - 4.3 Air traffic management
 - 4.4 Aeronautical meteorology
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 - 4.8.1 Management of air navigation services
 - 4.8.2 Aviation Safety Board
 - 4.8.3 Preparation for the Eleventh Air Navigation Conference
 - 4.8.4 Safety management system and quality assurance
5. Deficiencies in the Air Navigation field in the AFI Region
6. Human factors and manpower planning
7. Interregional coordination
8. Worldwide Air Transport Conference (March 2003)
9. Technical Co-operation
10. Terms of reference and working arrangements of APIRG.
11. Any other business.

5. CONCLUSIONS AND DECISIONS

5.1 APIRG records its actions in the form of Conclusions and Decisions with the following significance:

5.2 Conclusions

5.2.1 Conclusions deal with matters which, in accordance with the group's terms of reference, merit directly the attention of States or on which further action will be initiated by ICAO in accordance with established procedures.

5.3 Decisions

5.3.1 Decisions deal with matters of concern only to APIRG and its contributory bodies.

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PART II
REPORT ON AGENDA ITEMS

AGENDA ITEM 1: ELECTION OF CHAIRPERSON AND VICE-CHAIRPERSONS

1.1 The meeting elected its bureau as follows:

- Mr. M. Cherif - Chairman (Tunisia)
- Mr. F. Manga Fouda - First Vice-Chairman (Cameroon)
- Mr. M. R. Alloo - Second Vice-Chairman (Tanzania)

AGENDA ITEM 2: ACTION BY THE AIR NAVIGATION COMMISSION (ANC) AND COUNCIL ON THE APIRG/13 REPORT

2.1 The meeting noted the actions taken by the Air Navigation Commission (ANC) and Council on the APIRG/13 Report (Appendix B).

2.2 The meeting noted that, among the APIRG/13 conclusions on which the Council had taken specific actions, were Conclusions 13/23 (ICAO's position at ITU WRC-2003), 13/31 (Implementation of area control service), 13/33 (ACAS II transition period and exemption process in the AFI Region), 13/83 (Assistance for GNSS procedure design), 13/90 (AFI Basic ANP and FASID documents), 13/96 (Format of list of deficiencies) and 13/100 (Membership of APIRG).

2.3 With respect to the Council action on APIRG Conclusion 13/83, ASECNA reminded the meeting that it was willing to assist States and service providers to develop GNSS approach procedures (NPA, APV-1, APV-2).

AGENDA ITEM 3: REVIEW AND FOLLOW-UP OF APIRG CONCLUSIONS AND DECISIONS, INCLUDING AFI/7 RAN MEETING OUTSTANDING RECOMMENDATIONS

3.1 The meeting reviewed action taken on APIRG conclusions and decisions since its thirteenth meeting. It noted those on which actions had been completed and reaffirmed those which are still valid and action on them is continuing. The meeting also reviewed the outstanding actions on recommendations of the AFI/7 RAN Meeting (Abuja, 1997) referred to it at its eleventh meeting. It noted those on which actions had been completed and identified those which are still valid.

AGENDA ITEM 4: AIR NAVIGATION ISSUES**4.1 Aerodrome operations***Review of the Report of the Fifth Meeting of the Aerodrome Operational Planning Sub-Group*

4.1.1 The fifth meeting of the AOP/SG was held from 26 to 28 March 2003 in Dakar. Ten States and two international organizations participated. It acknowledged the status of implementation of aerodrome services, facilities and equipment and noted that, despite the significant progress made

by many States, as is indicated in the list of deficiencies, more efforts are required. The major issues were discussed further as follows:

Bird hazard control and reduction

4.1.2 Some States had made substantial efforts in bird hazard control and reduction. The workshops conducted by ICAO Regional Offices had achieved the desired results. Nevertheless, the meeting was of the view that some States were not as successful. Some of the reasons identified were non-existence of dedicated bird hazard control units at airports, the delegation of these activities including bird hazard committees to junior and/or inexperienced staff, insufficient involvement of the neighborhood communities and the implementation of measures without prior adequate ornithological and environmental studies. The meeting noted that some operators were reporting incidents of bird strikes to their airlines and consequently such incidents were not recorded at the airport of occurrence. The meeting therefore reiterated the relevance of its previous AFI/7 RAN Conclusion 4/1 and APIRG Conclusion 13/1 and further developed the following conclusion:

CONCLUSION 14/1: BIRD HAZARD CONTROL AND REDUCTION

That:

- a) States facing bird hazard problems conduct environmental and ornithological studies to make sure that dispersal and control methods selected are appropriate, efficient and cost effective. Cooperative approach by States for the conduct of these studies should be encouraged; and**
- b) aircraft operators be encouraged to report all bird strikes to the airport operator in order to trigger action at the airport level.**

Rescue and fire fighting services (RFFS)

4.1.3 The meeting was of the view that, as a result of the continued establishment of autonomous airport authorities and the progressive involvement of the private sector in the ownership of airports, substantial progress has been made in the implementation of the requirements as provided in the AFI ANP and Annex 14, Volume I with respect to RFFS.

4.1.4 However, several airports in the AFI Region which are located close to large bodies of water or swampy areas had neither the corresponding fire fighting and rescue equipment nor the appropriately trained personnel. In addition to planning for the procurement of these facilities, such States were encouraged to consider mutual agreements for assistance with other specialized institutions, agencies or local communities such as fishing communities, who are usually very familiar with these areas. On the issue of training, the meeting was informed that Ghana and ASECNA (at Douala, Cameroon) had developed training facilities that could be used by other States. Consequently, the meeting developed the following conclusion:

CONCLUSION 14/2: RESCUE AND FIRE FIGHTING IN A DIFFICULT ENVIRONMENT

That:

- a) **States ensure that airports close to large bodies of water or swampy areas are provided with appropriate rescue and fire fighting equipment and adequately trained personnel, if necessary by concluding mutual assistance agreements with specialized agencies; and**
- b) **ICAO develop and make available to States appropriate guidance material on rescue operations and equipment in a difficult environment.**

Aerodrome Emergency Plan (AEP)

4.1.5 The meeting observed from the summary of the status of implementation of this requirement in the AFI Region that some more work is required. States were reminded that, with the new requirement for aerodromes certifications becoming effective in November 2003, development of an AEP with a built-in mechanism for updating and a programme for regular testing shall become a prerequisite for consideration for certification. The meeting further took note that Ghana had acquired a disabled aircraft removal kit for a B747 type aircraft. Having noted that one of the main reasons for the inadequate implementation of this requirement was the absence of a designated authority responsible for coordinating the development the plan and its testing and updating, the meeting therefore developed the following draft conclusion:

CONCLUSION 14/3: DESIGNATION OF A NATIONAL COORDINATOR FOR AERODROME EMERGENCY PLANNING

That States designate an appropriate national coordinator for airport emergency planning responsible for ensuring regular updating and timely testing of emergency plans, with the assistance of a small committee.

Aerodrome certification

4.1.6 Slow progress is being made by States in preparation for the implementation of the requirement for aerodrome certification. The ICAO guidance manual has assisted a number of States. Some States have attended workshop organized in Dakar from 13 to 15 March 2003 under the auspices of ICAO and the meeting was informed that another workshop was scheduled to be held in Nairobi from 22 to 24 July 2003. The group was of the opinion that staff involved in the process of certification — in particular, aerodrome inspectors and auditors — should receive the appropriate training in order to ensure more consistency and objectivity. For purposes of maintaining uniformity, the training syllabi should be aligned to a standard training package to be developed by ICAO and made available to States. The meeting therefore developed the following conclusion.

CONCLUSION 14/4: CERTIFICATION OF AERODROMES

That :

- a) **States which have not done so take appropriate measures to develop an action plan aimed at implementing the requirement for aerodrome certification in accordance with Annex 14, Volume 1 paragraph 1.3; and**
- b) **States ensure that personnel that would be involved in the certification process — in particular, aerodrome inspectors and auditors — be provided with appropriate training.**

Impact of new larger aeroplanes (NLA) on aerodromes in the AFI Region

4.1.7 The meeting noted the discussions held by the sub-group when reviewing the report of the NLA/TF meeting held in Dakar from 24 to 25 March 2003. The meeting was informed that, so far, only South Africa (Johannesburg and Cape Town) and France, Ile de la Réunion (St. Denis) had received specific indications by airlines wishing to operate the NLA, in particular the A380 due to enter commercial operation in the first quarter of 2006. It was, however, agreed that additional surveys must be conducted in order to obtain a true picture of future needs.

4.1.8 The group noted the impact of the NLAs on aerodromes' physical characteristics and highlighted the need, for medium- and/or long-term planning, to carry out appropriate studies to assess current airports' capabilities to accommodate NLAs.

4.1.9 The meeting also noted the evaluation on the impact on the RFF requirements, in particular the rescue requirements, in view of the higher passenger capacity and the full loading on two decks. Similarly, the meeting agreed that such aircraft would require a review of the AEP, bearing in mind the higher passenger capacity and therefore casualty volumes, to ensure the facilities were correctly adapted and adequate resources were allocated, including suitable disabled removal equipments.

4.1.10 The meeting also acknowledged that operation of the NLAs would have a significant impact on terminal building and associated facilities and services, both on the airside and the landside, and that airports that would receive NLAs should carry out a careful evaluation to balance the acceptable levels of service to be provided to passengers with the cost considerations. In view of the above, the meeting developed the following conclusion:

CONCLUSIONS 14/5: IMPACT OF NEW LARGER AEROPLANES ON AERODROMES IN THE AFI REGION

That:

- a) States, assisted by ICAO, carry out a survey of the airlines' requirements in order to identify which airports are expected to receive operations of NLAs in the medium and long term. IATA should be requested to support and assist States in this regard;**
- b) States planning for new airports acquire, wherever possible, sufficient land for code 4F considerations and develop medium- and long-term master plans accordingly;**
- c) States continue to monitor developments in this matter in order to be aware of the appropriate Standards and Recommended Practices as developed and approved by ICAO for implementation;**
- d) States begin planning for appropriate training of RFFS personnel to meet NLA requirements;**
- e) airports identified to be considered for operation of the NLAs evaluate their infrastructure, services and human resources to determine what actions need to be taken to prepare them for these operations; and**
- f) States planning for the development of new airports consider the construction of some facilities required for code F aerodromes in the first phase (culverts, bridges, pavement foundations) in order to avoid demolitions and associated impact at a later date.**

4.2 Communications

Review of the Report of the Sixth Meeting of the Communications Sub-Group

4.2.1 APIRG analyzed the report of the sixth meeting of the Communications Sub-Group (COM/SG/6), which was held in Nairobi, Kenya from 24 to 26 September 2002.

Critical analysis of the AFTN

4.2.2 The meeting was informed of the critical analysis of the current AFI aeronautical fixed telecommunications network (AFTN) undertaken by the Communications Sub-Group, and agreed that the following limiting factors have been affecting the network in the region:

- a) non-implementation of the required AFTN main circuits in the AFI Plan, i.e. Algiers-Niamey, Brazzaville/Nairobi, Johannesburg/ASIA-PAC, Johannesburg/SAM and a number of tributary circuits;
- b) low availability rates of the existing circuits, at times far below the minimum requirement of 97% (AFI/7 Recommendation 9/3 refers);
- c) low transmission speed of the main circuits, i.e. Addis-Ababa/Nairobi, Addis-Ababa/MID, Addis-Ababa/Niamey, Alger/Casablanca, Cairo/MID, Cairo/Tunis, Johannesburg/Nairobi and Nairobi/ASIA;
- d) insufficient use of bit-oriented protocols;
- e) extensive use of analogue technology;
- f) excessive transit times, compared to the requirements of 5 minutes (for high priority messages) and 10 minutes (other messages);
- g) incompatibility between sub-regional satellite telecommunication networks utilizing four different space segments; and
- h) human factors.

Remedial actions

4.2.3 Based on the above limiting factors, the meeting identified the critical circuits and agreed on the following remedial actions:

Improvement of the AFTN networks

4.2.4 States and organizations concerned should implement APIRG Conclusions 12/13 on the upgrading of the transmission speed, 13/10 on the introduction of bit-oriented protocols and 13/12 on the organization of seminars/workshops on the aeronautical telecommunication network (ATN), including data transmission concepts and techniques.

Use of public data networks (PDN) and of integrated services digital networks for the implementation or upgrading of the main circuits

4.2.5 Noting that some States had developed public data networks (PDNs) and integrated services digital networks (ISDNs), the meeting suggested that recourse to such networks might be considered by States: a) when performance, availability and the cost-effectiveness ratio are demonstrably equivalent or higher than those of a dedicated circuit ; b) to overcome the temporary disruption of dedicated circuits; and c) when traffic does not justify the use of a dedicated circuit. It requested the Secretariat to undertake a survey on the availability and usage costs of PDNs and ISDNs in the AFI Region.

4.2.6 The meeting recalled AFI Recommendation 14/20 favourable, *inter alia*, to the use of public networks, provided that the cost-effectiveness ratio was positive, and was of the opinion that, when practicable, the use of such networks could be envisaged by States having difficulties in implementing their AFTN circuits, such as the main circuits Algiers/Niamey, Brazzaville/Nairobi, Johannesburg/ASIA/PAC and Johannesburg/SAM, or in improving their transmission speed, e.g. that of the low-speed main circuits Addis-Ababa/Nairobi, Addis-Ababa/Niamey, Addis-Ababa/MID, Alger/Casablanca, Cairo/Nairobi, Cairo/Tunis, Johannesburg/Nairobi and Nairobi/ASIA. The following decision and conclusion were adopted accordingly:

DECISION 14/6: SURVEY ON AVAILABILITY AND USAGE COSTS OF PDNs AND ISDNs

That the Secretariat conduct a survey on the availability and usage costs of PDNs and ISDNs in the AFI Region.

CONCLUSION 14/7: USE OF PDNs and ISDNs TO MEET AFTN REQUIREMENTS

That, when practicable, States consider using PDNs or ISDNs:

- a) when performance, availability and the cost-effectiveness ratio are demonstrably equivalent or higher than those of a dedicated circuit;**
- b) to overcome the temporary disruption of dedicated circuits; or**
- c) when traffic does not justify the use of a dedicated circuit.**

Incorporation of an existing bilateral circuit into the AFTN plan

4.2.7 The meeting was informed that the bilateral Cairo-Tripoli AFTN circuit was performing satisfactorily and decided that it should be incorporated into the rationalized AFTN plan for the AFI Region.

Implementation of AFTN requirements and monitoring of AFTN transit times

4.2.8 The meeting agreed on the requirements which have to be taken into account when implementing or assessing the circuits of the AFI rationalized AFTN, as reproduced in Appendix C to this report. It also reiterated the need for States to establish quarterly statistics on AFTN transit times on 23 January, 23 April, 23 July and 23 October for an improved monitoring of performances, using the reporting format shown in Appendix D to this report. The following conclusions were adopted:

CONCLUSION 14/8: IMPLEMENTATION REQUIREMENTS FOR THE AFTN CIRCUITS

That, in implementing the circuits required under the AFI rationalized AFTN plan, States take due account of the requirements contained in Appendix C to this report.

CONCLUSION 14/9 : AFTN TRANSIT TIME STATISTICS

That, in order to allow for the regular assessment of AFTN performance, States/organizations establish quarterly transit time statistics for their AFTN centres on 23 January, 23 April, 23 July and 23 October, using the reporting format reproduced in Appendix D to this report.

Use of the Internet for non-time-critical applications

4.2.9 The meeting agreed that States experiencing difficulties in the implementation or maintenance of their communication facilities should use the Internet when it is available to exchange data in the context of non-time-critical applications, subject to agreements on an appropriate level of service, to be negotiated with the Internet service providers. Also, the meeting was informed that the Air Navigation Commission, at the tenth meeting of its 162nd Session on 4 March 2003, agreed to the establishment of a study group, to be known as the *Aviation Use of the Public Internet Study Group (AUPISG)*, to assist ICAO in undertaking the necessary studies and developing guidelines on the use of the public Internet for aeronautical applications, taking due account of reliability, accessibility, integrity and security concerns. The following conclusion was formulated:

CONCLUSION 14/10: USE OF THE INTERNET

That, pending the development of ICAO guidelines on the use of the public Internet for aeronautical applications, States having difficulties implementing or maintaining facilities required in the AFI AFTN rationalized plan consider using the Internet when it is available, in particular for the exchange of data in the context of non-time-critical applications (e.g. flight regularity messages or administrative messages).

Review of deficiencies affecting the aeronautical fixed telecommunication network (AFTN) in the AFI Region

4.2.10 The meeting reviewed the performance and implementation status of the AFTN in the AFI Region and updated the list of AFTN deficiencies. States' efforts to maintain or increase the level of availability of AFTN circuits were noted. The meeting was informed that South Africa had installed a VSAT station of the CAFSAT network at Johannesburg, and that implementation of the AFI/SAM AFS circuits was awaiting installation of matching CAFSAT stations in Argentina and Brazil.

Review of the implementation status and performance of the direct speech communications network (ATS/DS) in the AFI Region, identification of deficiencies and remedial action for their elimination

4.2.11 The meeting reviewed efforts undertaken for the implementation of ATS/DS circuits since its last meeting (APIRG/13). It noted that 12 ATS/DS circuits had been implemented by 11 States, while 3 States had not implemented any of the 10 ATS/DS required circuits. Out of a total of 205 ATS/DS circuits required in the AFI air navigation plan (ANP), there were 54 unimplemented circuits, or 26.6% of the required circuits.

4.2.12 The meeting also updated the list of ATS/DS deficiencies in the AFI Region.

Communications between the Accra, Brazzaville, Dakar Oceanic, Kano, Kinshasa and Luanda FIRs

4.2.13 The meeting observed that there were serious communication problems between the Accra, Brazzaville, Dakar Oceanic, Kano, Kinshasa and Luanda FIRs, and agreed on the need for an ATS/COM coordination meeting of all interested parties to be held as soon as possible under the aegis of ICAO. The coordination meeting will be asked in particular to address the use of VSAT technology on the basis of the proposals formulated by the COM/SG/6 Meeting aimed at fulfilling the aeronautical fixed service requirements between those FIRs. The following conclusion was adopted:

CONCLUSION 14/11: ATS/COM COORDINATION MEETING BETWEEN THE ACCRA, BRAZZAVILLE, DAKAR OCEANIC, KANO, KINSHASA AND LUANDA FIRs

That ICAO arrange urgently an ATS/COM coordination meeting between all interested parties from the Accra, Brazzaville, Dakar Oceanic, Kano, Kinshasa and Luanda FIRs.

Developments and integration of satellite aeronautical telecommunication networks

4.2.14 The meeting was informed of the latest developments related to satellite aeronautical telecommunication networks of concern to the AFI Region, including the full digitization of the AFISNET network in Ghana, Nigeria, ASECNA and Roberts FIR, the incorporation of Burundi into the SADC network by ATNS, South Africa and ASECNA, the interconnection of the AFISNET and

SADC networks which allowed for the implementation of the main AFTN circuit between Brazzaville and Johannesburg, and a number of tributary circuits, the incorporation of South Africa into the CAFSAT network, and the good progress made as far as the NAFISAT project was concerned, as called for by APIRG Conclusion 13/15 and in which 9 out of 16 concerned States had already confirmed their participation.

4.2.15 The meeting recalled APIRG Conclusion 13/11 on the integration of sub-regional satellite aeronautical telecommunications networks (VSAT networks). On the basis of the information submitted by INTELSAT to the meeting on the IS 10-02@359° satellite and the advantages offered in terms of coverage and bandwidth, the group agreed on the consolidation of sub-regional VSAT networks on the said satellite, which should be operational in May 2004. Accordingly, it invited anew the VSAT networks' managing administrations and organizations to urgently arrange a meeting with INTELSAT, under the auspices of ICAO, in order to adopt a coordinated transition plan and related activities. The following conclusion was adopted:

CONCLUSION 14/12: PLANNING MEETING ON THE INTEGRATION OF SUB-REGIONAL VSAT NETWORKS

That, as a matter of urgency, a meeting between Intelsat and sub-regional VSAT networks' managing administrations and organizations be organized, under the aegis of ICAO, in order to finalize issues related to their integration and to agree on a coordinated transition plan.

Need for performance requirements relating to leased ATN services

4.2.16 The meeting noted that States increasingly called upon providers of commercial communication services and acknowledged the need to define a set of performance specifications and quality of service criteria of the networks for the benefit of ATS providers and aircraft operators when leasing ATN services (at sub-network or end-to-end levels) from communication service providers. It also noted that the establishment of the specifications was part of the work programme of the ICAO Panel on Aeronautical Communications (ACP).

Routing architecture and description of the ATN ground-to-ground network

4.2.17 The meeting noted that the work of the Communications Sub-Group on the aeronautical telecommunication network (ATN) was being pursued. It agreed that ATN implementation in the AFI Region might necessitate a major planning of the transition from the AFTN, and that it was necessary to have available precise information on the planning by States of ATN ground-to-ground applications (AIDC and AMHS). The following decision and conclusion were adopted:

DECISION 14/13: IMPLEMENTATION OF ATS INTER-FACILITY DATA COMMUNICATIONS (AIDC)

That the APIRG ATS/AIS/SAR Sub-Group collect the necessary information on schedules of implementation by States of ATS inter-facility data communications (AIDC).

CONCLUSION 14/14: INFORMATION ON THE PLANNING BY STATES OF THE IMPLEMENTATION OF THE ATS MESSAGE HANDLING SYSTEM (AMHS)

That the ICAO Secretariat conduct a survey on States plans for the implementation of the AMHS application to be supported by the ATN infrastructure.

Review of the implementation status and performance of the Aeronautical Mobile Service (AMS)

4.2.18 The meeting reviewed the implementation status and performance of the aeronautical mobile service in the AFI Region and updated the list of the AMS deficiencies.

Extension of the VHF coverage

4.2.19 The meeting acknowledged the efforts recently undertaken by States in the Antananarivo, Mauritius and Niamey FIRs and the plans which were being examined in the Brazzaville, Dakar Oceanic, Dar-es-Salaam, Entebbe, Luanda, Lusaka, Lilongwe, N'djamena and Niamey FIRs, aimed at extending the VHF coverage to ATS routes via remote VHF stations, in accordance with AFI/7 Recommendation 5/12. The meeting was also informed of the action being taken on the implementation of a VHF remote station from the Dakar Oceanic FIR to be installed in Cape Verde, and encouraged the States concerned to expedite the implementation process. The meeting was of the view that the diligent implementation of the existing projects would translate into significant progress and a major improvement to the AMS communications. It also noted that, upon a request from the Communications Sub-Group, the ICAO Secretariat was coordinating a survey aimed at publishing a chart on VHF coverage in the region.

4.2.20 In addition, the meeting reminded participants that States should coordinate the implementation of new aeronautical stations with ICAO Regional Offices in accordance with established procedures, in order to ensure that geographical separation criteria are duly taken into account.

Investigations on the deficiencies reported by operators

4.2.21 The attention of the meeting was drawn to the need for States to take action on the reports concerning communication deficiencies received from users and to nominate focal points in that respect. It also invited States to issue NOTAMs whenever a telecommunication facility is not fully operational.

IFALPA survey on the aeronautical mobile service communications

4.2.22 The meeting was appraised of a positive input made by IFALPA through a large-scale survey carried out in 2001 – 2002 on the aeronautical mobile service (AMS) communications (VHF, HF). It noted that the survey highlighted a relative reduction in the use of HF by some FIRs.

Aeronautical radio navigation service (ARNS)

4.2.23 The meeting acknowledged the progress made in the aeronautical radio navigation service (ARNS) since the last meeting (APIRG/13) (20 facilities had been implemented) and updated the list of deficiencies in the field.

Preparation for the WRC-2003 of the ITU

4.2.24 The meeting was informed of the preparatory work undertaken in the region in view of the World Radiocommunication Conference of the ITU in 2003 (WRC-2003) (Geneva, Switzerland, 9 June – 4 July 2003). It agreed that States should nominate focal points responsible for the coordination of subjects related to the WRCs of the ITU, although it acknowledged the fact that some of them had already done so; it was favourable to the establishment of a permanent liaison with State telecommunication regulatory authorities. The group also acknowledged the need to convene seminars on the radiofrequency spectrum regulations and management of the radio frequency spectrum in accordance with WRC-2000 Resolution 20. The following conclusions were adopted:

CONCLUSION 14/15: FOCAL POINTS FOR THE PREPARATION OF ITU WRCs

That States that have not already done so designate focal points from within their administrations for the preparation of ITU WRCs.

CONCLUSION 14/16: NEED FOR A PERMANENT LIAISON WITH STATE TELECOMMUNICATION REGULATORY AUTHORITIES

That Civil Aviation Administrations maintain a permanent liaison with State telecommunication regulatory authorities to build bridges and to facilitate the preparation of ITU WRCs.

CONCLUSION 14/17: SEMINARS ON THE REGULATIONS AND MANAGEMENT OF THE RADIO FREQUENCY SPECTRUM

That ICAO explore ways and means to implement ITU WRC-2000 Resolution 20 on the organization of seminars on the radiofrequency spectrum regulations and management.

Future work programme and composition of the Communications Sub-Group

4.2.25 The meeting adopted the future work programme and composition of the Communications Sub-group as proposed by COM/SG/6. The COM/SG work programme should also include the monitoring of the work being carried out by MIDANPIRG on the Egyptian NAVISAT project in coordination with the CNS/ATM/IC/SG, the harmonization of maintenance units working methods and coordination procedures, and the monitoring of aeronautical telecommunications.

4.3 Air traffic management

Review of the report of the seventh meeting of the ATS/AIS/SAR Sub-Group (ATS/AIS/SAR/SG/7)

4.3.1 The meeting was apprised on the report of the seventh ATS/AIS/SAR Sub-Group meeting (ATS/AIS/SAR/SG/7) which was held in ICAO ESAF Office, Nairobi from 14 to 18 October 2002. It considered the following major items.

Review of the ATS route network

4.3.2 The ATS/AIS/SAR Sub-Group considered in detail the overall status of implementation of the basic ATS route network, including RNAV routes contained in the ICAO AFI Air Navigation Plan (Doc 7474/27), Table ATS 1, Charts ATS 2 and ATS 3 in order to:

- a) identify additional route requirements;
- b) identify route segments requiring realignment;
- c) identify routes which can be deleted from the air navigation plan (ANP); and
- d) identify the non-implemented routes and establish target date(s) for their implementation.

4.3.3 The sub-group identified the requirement for two new ATS routes, namely:

- Geneina - Port Sudan (RNAV); and
- Cotonou - Malabo

4.3.4 The sub-group also prepared an implementation table for all the non-implemented routes and agreed that States be requested to implement those routes not later than the AIRAC date of 10 June 2004. In view of the foregoing, the following conclusions were formulated:

CONCLUSION 14/18: AMENDMENT TO AFI ANP TABLE ATS 1

That ICAO AFI ANP Table ATS 1 be amended to include a requirement for ATS routes:

- a) Geneina - Port Sudan (RNAV); and**
- b) Cotonou - Malabo.**

CONCLUSION 14/19: IMPLEMENTATION OF ATS ROUTES, INCLUDING RNAV ROUTES

That States that have not yet done so implement, as soon as possible and in any case not later than the AIRAC date of 10 June 2004, ATS routes in their FIR as shown in Appendix E to this report.

Implementation of air traffic control (ATC) service

4.3.5 The meeting noted with concern that the status of implementation of the area control service has been very slow and it accordingly considered necessary to extend the implementation target date to AIRAC 10 June 2004. Based on the foregoing, meeting formulated the following conclusion:

CONCLUSION 14/20: IMPLEMENTATION OF ATC SERVICE

That States that have not yet done so implement ATC service along all ATS routes contained in Table ATS 1 of the AFI Air Navigation Plan as soon as possible, but in any case not later than the AIRAC date of 10 June 2004 in the spirit of AFI/7 Recommendation 5/21.

Review of the report of the first meeting of the RVSM/RNAV/RNP Task Force

4.3.6 The meeting was apprised of the report of the RVSM/RNAV/RNP/TF meeting of 17 – 18 June 2002. This report was reviewed by the ATS AIS/SAR/SG at its seventh meeting; among the items covered was the development of an AFI RVSM/RNAV/RNP implementation strategy/action plan. The meeting was informed that, due to limited time available, it was not possible to complete all the tasks assigned. It was recalled that implementation of RVSM in AFI should be taken in a pragmatic manner, as there were other preceding associated CNS/ATM implementation issues which needed to be addressed, namely, the improvement of ATS/DS circuits, VHF coverage, ACAS, etc. It was also noted that RVSM had however been or was planned to be implemented in the interface areas of the other adjacent regions, i.e. the EUR/SAM Corridor (24 January 2002) and Egypt and the rest of the MID Region (23 November 2003). It was considered that, under the framework of the RVSM/RNAV/RNP TF, other selected airspaces could be identified. The meeting strongly felt that, before the introduction of RVSM in the continental AFI airspaces, due regard should be given to the development of an AFI RVSM/RNAV/RNP implementation strategy/action plan.

4.3.7 With regard to APIRG Conclusion 13/85 (Initial implementation of RVSM in the AFI Region), the meeting recognized that the Air Navigation Commission had noted the conclusion on the understanding that an evaluation of the requirement for RVSM and an implementation strategy — including a formal risk assessment and the establishment of a safety management process — would be made available to ICAO in order to ensure that an acceptable level of safety can be achieved and maintained. In view of the foregoing, the following conclusion was formulated:

CONCLUSION 14/21: IMPLEMENTATION OF RVSM IN THE AFI REGION**That:**

- a) **the RVSM Implementation Task Force finalize the development of a comprehensive implementation strategy/action plan, taking into consideration work so far done and that of the expert groups (RGSP Panel, NATSPG, EUROCONTROL, SAT meeting and MECMA), as well as the material at Appendix F, as soon as possible and not later than 31 December 2003;**
- b) **the implementation strategy/action plan be circulated to States and international organizations for comments, which should be received not later than 31 March 2004;**
- c) **States do their utmost to implement RVSM in selected airspaces by the AIRAC cycle date of January 2005, concurrently with the CAR/SAM Region; and**
- d) **a coordination meeting be convened in September 2004 to make a go/no-go decision regarding the implementation of RVSM.**

Review of the report of the second meeting of the Airspace Management Task Force (ASM/TF 2)

4.3.8 The meeting noted that the ATS/AIS/SAR Sub-Group had reviewed the ASM TF/2 Meeting Report concerning the ATS airspace organization in the region, covering in the agenda the following: airspace organization, establishment and identification of significant reporting points and the allocation of five-letter name code designators to the relevant significant points, implementation of 10-minute longitudinal separation and development of Chart ATM 1 for the FASID. It was noted that there was progress in the identification and designation of the five-letter name codes at airway crossing points. The meeting noted that the problem of implementation of RNAV route UM114 had not yet been resolved. The meeting was informed that the annual AFI Incident Analysis Working Group did not find any incident that could be attributed to the implementation of 10-minute longitudinal separation. Most incidents were attributed to inadequate ATS procedures or inefficient fixed or mobile communication. It was noted that the improved VHF coverage contributed to enhanced safety and capacity. The ATS coordination meetings hosted and held by ICAO Regional Offices for the improvement of air traffic service coordination between FIRs were noted with satisfaction. In view of the foregoing, the meeting adopted the following conclusions:

CONCLUSION 14/22: IMPLEMENTATION OF RNAV ROUTE UM114

That the Ghana ATS Authority implement and delegate to Kano/Lagos ATS Authorities the portion of UM114 within its airspace.

CONCLUSION 14/23: DELINEATION OF FIR BOUNDARIES

That ICAO convene a meeting between Algeria and Tunisia to harmonize the publication, in their respective AIPs, of the delineation of the FIR boundaries pursuant to AFI/7 Recommendations 5/1 and 5/9 and APIRG Conclusion 13/26.

CONCLUSION 14/24: IMPLEMENTATION OF 10-MINUTE LONGITUDINAL SEPARATION MINIMUM

That:

- a) States that have not already done so urgently implement the 10-minute longitudinal separation minimum, taking into cognisance the relevant requirements in APIRG Conclusion 3/43 and the provisions of ICAO PANS-ATM (Doc 4444/501) and AFI CNS/ATM System Plan (Doc.003);**
- b) ICAO amend Doc 7030 to harmonize with the provisions in the PANS-ATM (Doc 4444/501); and**
- c) ICAO, through its regional offices, ensure adequate coordination with the neighbouring regions that have not yet implemented the 10-minute longitudinal separation minimum, in particular the ASIA Region.**

CONCLUSION 14/25: DEVELOPMENT OF CHART ATM 1 (PART V – ATM OF THE AFI FASID)

That the SSR code allotment plan (Chart ATM 1 for Part V – ATM FASID) as contained in Appendix G to this report be published in the AFI FASID.

CONCLUSION 14/26: CLASSIFICATION OF AIRSPACES

That ICAO expedite the revision of the current airspace classification of airspaces with a view to reducing and simplifying them for uniform application.

Review of the report of the second meeting of the AIS Automation Task Force (AIS/MAP/TF/2)

4.3.9 The meeting was apprised of the report of the second meeting of the AIS/MAP Automation Task Force, which was held in Nairobi from 25 to 27 September 2002. The meeting noted with concern that the ICAO provisions relating to AIS/MAP, namely the production of the AIP in the new format, publication of WGS-84 information charts and production of World Aeronautical Chart-ICAO 1:1 000 000 have remained a problem in some States. The meeting was informed that assistance should be given to such States through a special implementation project (SIP). It was thus concluded:

CONCLUSION 14/27: DEVELOPMENT OF AIS/MAP SIP

That ICAO initiate a special implementation project (SIP) to assist States with the production of the AIP in the new format, publication of WGS-84 information charts and publication of World Aeronautical Chart-ICAO 1:1 000 000.

Review of the implementation of ICAO requirements in the field of search and rescue (SAR)

4.3.10 The meeting was apprised of the status of implementation of ICAO provisions relating to search and rescue services. It noted with concern that most of these provisions had remained unimplemented for many years and it was of the view that States should now be sensitized to the need to take remedial action. Furthermore, the meeting reiterated that assistance should be provided by ICAO in order to improve the provision of search and rescue services in the region. It was thus concluded:

CONCLUSION 14/28: ORGANIZATION OF REGIONAL SAR SEMINARS/WORKSHOPS

That ICAO organize regional SAR seminars/workshops in order to sensitize States to the need to take remedial action to implement the ICAO provisions relating to SAR.

4.3.11 The meeting noted with appreciation that the ICAO/AFCAC project had been initiated to address these issues and that the States concerned should continue to support this initiative.

Outstanding issues

4.3.12 The meeting noted that the relevant operational issues related to CNS/ATM have fully been considered by the CNS/ATM/IC/SG.

4.3.13 The meeting noted the provisions relating to, among others, ATS contingency planning, ATS incident reporting and analysis and ATS auditing and proficiency maintenance have been adequately addressed. However, it was deemed necessary that the ICAO Regional Offices concerned continue their efforts in urging the States to implement those provisions.

ATM safety management systems

4.3.14 The meeting recalled that the ICAO provisions in Annex 11 and the PANS-ATM (Doc 4444) relating to ATM safety management would become applicable on 27 November 2003. It was recalled that this subject would be adequately addressed by the Eleventh Air Navigation Conference. The meeting then developed the following conclusion:

CONCLUSION 14/29: ATM SAFETY MANAGEMENT SYSTEMS

That, in order to enhance safety, security and efficiency in air navigation services, States that have not done so expedite the implementation of relevant ICAO provisions relating to safety management systems, taking into account the provisions of Annex 11, 2.26 and the PANS-ATM (Doc 4444).

“Single Sky” concept in Air Traffic Management in the AFI Region

4.3.15 The meeting was apprised of the outcome of the first meeting of the Africa-Indian Ocean ATS providers (Dakar, 26 – 28 November 2002) and the Almadies (Dakar) Declaration adopted by AFI ATS providers. It particularly considered the concept of a “single sky” for Africa to be achieved through a gradual process including the following steps:

- a) harmonization of air traffic management systems and procedures, including human resource and training plans and programmes;
- b) rationalization of areas of service;
- c) establishment of cooperative arrangements between ATS providers;
- d) eventual consolidation of cooperative models for the provision of air traffic services, taking into consideration cost/benefit aspects, elimination of discontinuities in quality of service and system availability and the need to maintain a flexible system, responsive to user requirements.

4.3.16 In this connexion, it was recalled that the Eleventh AN Conference would be addressing as part of its work a global ATM operational concept which may one day include the “single sky” policy. The meeting was of the opinion that this subject should be pursued cautiously and that ICAO should be requested to provide appropriate guidance. The meeting was informed that, in line with use of “single sky”, it would be prudent to use the existing ICAO terminology, i.e. “global air traffic management”. In view of these discussions it was concluded:

CONCLUSION 14/30: “SINGLE SKY” CONCEPT IN AIR TRAFFIC MANAGEMENT IN THE AFI REGION

That :

- a) **the vision of the AFI Region on the “single sky” be aligned with ICAO concept of “global air traffic management”; and**
- b) **ICAO develop the definition of the “single sky” concept and provide to the States of the AFI Region guidance material and the orientation for a progressive implementation of the “single sky” in Africa, taking into account the global ATM operational concept.**

4.3.17 The meeting noted with concern that the implementation of ICAO provisions relating to the carriage and operation of ACAS and SSR transponders continues to pose a problem to some States and that may compromise safety. It was considered necessary to provide guidance to States relating to these provisions. The meeting was informed that ICAO was pursuing this issue and that sufficient guidelines would be provided in due course. In view of the foregoing, it was concluded :

CONCLUSION 14/31: CARRIAGE AND OPERATION OF AIRBORNE COLLISION AVOIDANCE SYSTEM (ACAS) AND PRESSURE-ALTITUDE REPORTING TRANSPONDERS

That States that have not done so expedite the implementation of mandatory carriage and operation of ACAS II and carriage and operation of pressure-altitude reporting transponders by aircraft in conformity with ICAO Annex 6, Part I, paragraphs 6.18 and 6.19, Annex 6, Part II, paragraph 6.13.1, Annex 10, Vol. IV, Doc 8168, Volume I, Part VIII and the PANS-ATM (Doc 4444), Chapter 8, paragraph 8.5.

ATS coordination meeting

4.3.18 In the course of the discussions, Sudan requested that ICAO organize an ATS coordination meeting with adjacent States to facilitate the establishment of ATS Letters of Agreement.

COSPAS-SARSAT system

4.3.19 Referring to decisions of the COSPAS-SARSAT Council on the phase-out of the processing by COSPAS-SARSAT of emergency beacons transmitting on 121.5 MHz, the AFCAC delegation called the attention of the meeting to the consequences of such a decision on SAR services in Africa. AFCAC further stressed the need for AFI States to take all the necessary actions in order to ensure a smooth transition towards the new COSPAS-SARSAT alerting system. It was noted that the system would be based exclusively on 406 MHz emergency beacons as of 2009.

4.4 Aeronautical meteorology

Review of the Report of the Sixth Meeting of the Meteorology Sub-Group (MET/SG/6)

Introduction

4.4.1 Under this agenda item, APIRG reviewed the report of the MET/SG/6 held in Nairobi from 21 to 23 May 2002.

WAFS in the AFI Region

4.4.2 The meeting noted the follow-up action by ICAO and the SADIS Provider State concerning APIRG Conclusion 13/63 on the training on the use of GRIB and BUFR codes. It also noted that two seminars had been organized for AFI States by the Dakar and Nairobi Regional Offices, in March 2002 and February 2003, respectively.

4.4.3 The meeting was also of the view that there was a need for States to acquire the latest version of workstation software relating to the use of GRIB and BUFR codes. The following conclusion was formulated:

CONCLUSION 14/32: NEED FOR LATEST VERSION OF WORKSTATION SOFTWARE

That States in the AFI Region be encouraged to acquire the latest version of workstation software from their respective workstation suppliers for the use of GRIB and BUFR codes.

4.4.4 The meeting was informed of the transfer of the responsibilities of the regional area forecast centre (RAFC) Dakar, to the world area forecast centre (WAFC) London, effective since 2 January 2002, and the transfer of the responsibilities of RAFC Nairobi, effective 13 May 2002. The meeting noted the closure of all AFI RAFCs pursuant to APIRG Conclusion 12/33.

4.4.5 The meeting also reviewed the membership list of AFI States to the SADISOPSG and noted that the members are: Côte d'Ivoire, Kenya, Senegal, South Africa and ASECNA. The mandatory cost recovery of the SADIS service was also discussed and the following conclusion concerning the principles for the AFI representation in the SADISOPSG was formulated:

CONCLUSION 14/33: COMPOSITION OF THE SADIS OPERATIONS GROUP (SADISOPSG)

That:

- a) members of the SADISOPSG be appointed only from States that are users of the service and hence participate in the mandatory cost-recovery scheme; and**
- b) in accordance with this principle, the AFI members in the SADISOPSG be Côte d'Ivoire, Kenya, Senegal, South Africa and ASECNA.**

Follow-up of the SADISOPSG/6 Meeting

4.4.6 The SADISOPSG/6 meeting held in Paris 28 May to 1 June 2001 had adopted EUR OPMET update procedures. Since these procedures had proved to be efficient, the meeting was invited to propose that similar procedures be developed and introduced in the AFI Region. The following conclusion was therefore formulated:

CONCLUSION 14/34: APPLICATION OF EUR OPMET UPDATE PROCEDURES IN THE AFI REGION

That a procedure similar to the EUR OPMET update procedure be developed and introduced in the AFI Region.

SADIS Strategic Assessment Tables

4.4.7 In accordance with APIRG Decision 12/35, the SADIS strategic assessment tables for the AFI Region have been updated by the meeting and sent to the SADIS Provider State as required.

AFI Meteorological Bulletins Exchange (AMBEX) Scheme

4.4.8 The meeting noted that, following the approval by the ICAO Council and, by delegated authority, the Air Navigation Commission (ANC), of APIRG Conclusion 13/66, the Secretariat has revised the AMBEX Handbook and introduced METAR exchanges, as well as general improvements to the content of the handbook. The meeting agreed to the changes introduced and the following decision was formulated:

DECISION 14/35: INTRODUCTION OF METARs IN AMBEX EXCHANGES

That States in the AFI Region be invited to implement METAR exchanges as contained in the AMBEX Handbook (6th edition).

4.4.9 The meeting discussed the requirements for trend forecasts and aerodrome forecasts (TAFs) of Port-Gentil, Gabon. As METARs and trend forecasts issued by the MET centre at Port-Gentil are required by users, the meeting decided to include this centre in the AMBEX exchanges and in FASID Table MET 1A for trend forecast requirements. The following decision was formulated:

DECISION 14/36: INCLUSION OF PORT-GENTIL IN AMBEX EXCHANGES AND FASID TABLE MET 1A FOR TREND FORECASTS

That the aerodrome of Port-Gentil be included in AMBEX exchanges and in AFI FASID Table MET 1A.

Provision of tropical cyclone and volcanic ash advisories for the AFI Region

4.4.10 The meeting recognized that volcanic ash and tropical cyclones continue to be a threat to aircraft operations and agreed that States should endeavour to have personnel continually trained on the requirements of Annex 3 SARPs and associated procedures and ensure that communication facilities are operational at all times.

Deficiencies in the MET field

4.4.11 The meeting reviewed and updated the list of deficiencies based on the uniform methodology approved by the Council for the identification, assessing, tracking and reporting of deficiencies of air navigation systems in the AFI Region.

New challenges facing AFI meteorological services

4.4.12 The meeting discussed the major challenges facing the majority of the AFI meteorological services, in particular autonomous management, cost recovery and the introduction of quality assurance.

4.4.13 The meeting noted that efforts were being made to overcome the difficulties and so face the challenges. In fact, the meeting was aware that the First Meeting of Directors General of Civil Aviation (DGCA/1) for Western and Central Africa, held in Abuja, Nigeria from 19 to 21 March 2002, had pointed out these difficulties and proposed appropriate solutions for AFI meteorological services. These solutions are related to cost recovery and the establishment of autonomous entities for the management of meteorological services. Along the lines of the DGCA/1 Meeting recommendations, the meeting formulated the following conclusions:

CONCLUSION 14/37: COST RECOVERY OF AERONAUTICAL METEOROLOGICAL SERVICES

That, when establishing a cost-recovery system for aeronautical meteorological services, States in the AFI Region use relevant ICAO and WMO documents and cooperate with airports, air navigation services and other aeronautical partners, including users.

CONCLUSION 14/38: SEMINARS ON COST RECOVERY OF AERONAUTICAL METEOROLOGICAL SERVICES

That WMO, in coordination with ICAO, organize seminars on cost recovery of aeronautical meteorological services for States requiring them.

CONCLUSION 14/39: AUTONOMOUS ENTITIES AND METEOROLOGICAL SERVICE FOR AIR NAVIGATION

That States in the AFI Region, when considering the establishment of autonomous entities to manage their air navigation services, take due account of the provision of meteorological service to air navigation.

4.4.14 The meeting emphasized the need for adequate and highly trained aviation meteorology personnel for efficient management of AFI aeronautical meteorological services in consideration of quality management. It was recognized that aeronautical meteorological services should stress quality assurance. The following conclusion was thus formulated:

CONCLUSION 14/40: QUALITY MANAGEMENT

That States in the AFI Region give priority to implementation of a quality management system (ISO 9000 series of standards) in order to improve meteorological service for international air navigation.

Manpower survey in the MET field

4.4.15 As a follow-up of Recommendation 10/26 of LIM AFI (COM/MET/RAC), 1988 and Recommendation 14/17 of AFI/7, 1997 concerning the study of training available for aeronautical meteorological personnel in the AFI Region, it was proposed that the Dakar and Nairobi Regional Offices carry out the study within the limit of their available budgets. The following conclusion was formulated :

CONCLUSION 14/41: STUDY OF TRAINING AVAILABLE FOR AERONAUTICAL METEOROLOGICAL PERSONNEL IN THE AFI REGION

That, as a follow-up action on recommendation 10/26 of LIM AFI (COM/MET/RAC) 1988 and recommendation 14/17 of AFI/7, 1997, the Dakar and Nairobi Regional Offices carry out a study of training available for aeronautical meteorological personnel in the AFI Region.

4.4.16 The DGCA/1 Meeting had emphasized the importance of the seminars on ATS/MET/pilot coordination organized in the AFI Region and called for such seminars to be pursued. The APIRG meeting supported the call for the continuation of such seminars. The following conclusion was formulated:

CONCLUSION 14/42: SEMINARS ON ATS/MET/PILOT COORDINATION

That ICAO, in coordination with WMO, organize seminars on ATS/MET/pilot coordination for the AFI Region.

4.4.17 The meeting discussed the development of the meteorology component of the AFI CNS/ATM implementation plan and decided to create a task force to deal with this important subject. The following decision was formulated:

DECISION 14/43: METEOROLOGY CHAPTER FOR THE AFI CNS/ATM IMPLEMENTATION

That a task force, including experts in the ATM, CNS and MET fields from Kenya, Nigeria, Senegal, South Africa, United Kingdom, ASECNA and IATA, be established to develop the meteorology component of the AFI CNS/ATM implementation plan along the lines given at Appendix H to this report.

Follow-up action by ASECNA

4.4.18 The meeting noted the follow-up actions carried out by ASECNA on various meteorological subjects, in particular the AMBEX, WAFS and SADIS, for which ASECNA could provide to interested AFI States maintenance and training on SADIS operation.

4.5 CNS/ATM planning/implementation

Review of the Report of the Fourth Meeting of the CNS/ATM/IC Sub-Group

4.5.1 The APIRG reviewed the report of the Fourth meeting of the CNS/ATM Implementation Coordination Sub-Group (CNS/ATM/IC/SG/4), which was held in Dakar from 10 to 14 March 2003.

Consideration of the NAVISAT satellite system

4.5.2 The meeting considered a status report of the CNS/ATM/IC Sub-Group on its review of the NAVISAT multi-mission satellite system proposed by Egypt, and was apprised of a proposal for the establishment by APIRG of a working group on the NAVISAT. The group was advised that MIDANPIRG had established a working group on the NAVISAT. It agreed that there was no need to establish a new contributory body and noted that the CNS/ATM/IC Sub-Group would monitor and review, with the assistance of the Communications Sub-Group, the work being carried out by MIDANPIRG.

CNS/ATM implementation activities in the AFI Region

4.5.3 The meeting noted that RNP 10 and RVSM had been implemented in the EUR/SAM Corridor, and that there were plans to achieve implementation of RVSM in the South Atlantic simultaneously with the CAR/SAM Region in January 2005, as well as implementation of random RNAV routing.

4.5.4 South Africa informed the meeting on the establishment and *modus operandi* of its National CNS/ATM Committee in accordance with APIRG Conclusion 13/74 – *Establishment of national CNS/ATM bodies and designation of focal points of contact*. APIRG further noted that 23 States had designated their CNS/ATM focal points and that the Secretariat had recently followed up this item with the remaining States.

Status of implementation of the AFI CNS/ATM Plan

4.5.5 APIRG reviewed and updated the status of implementation of the AFI CNS/ATM Plan in all ten areas of routing. The meeting made the following remarks:

- a) VHF coverage is generally above 70%, reflecting the on-going efforts in several States. This could be further improved if projects in FIRs Kinshasa, Lilongwe, Luanda and Lusaka were implemented;
- b) by March 2003, only 17 States had published the AIC on the mandatory carriage of ACAS II; and
- c) area control service in upper airspaces was relatively good, reflecting the recent advances in VHF coverage.

Surveillance Plan for the AFI Region

4.5.6 The meeting reviewed the initial results of the study assigned to ASECNA and IATA on the development of criteria to be used for the categorization of TMAs and aerodromes. The proposed criteria define three categories for TMAs and aerodromes, respectively, and the associated surveillance.

4.5.7 Following discussions, the meeting suggested that the sub-group further consider the role of primary radar in defining the surveillance facilities in TMAs.

4.5.8 ASECNA provided to the meeting information on a surveillance mean using multi-lateration of SSR transponder emissions being developed in Europe. APIRG took note for further consideration by the CNS/ATM/IC/SG.

GNSS implementation matters

4.5.9 The meeting was briefed on the implementation of RNAV (GNSS) approach and landing procedures in South Africa, and of B-RNAV in Tunisia. ASECNA made a report on trials of APV 1 approaches at Dakar and on the implementation of GNSS-based non-precision approaches in its member States.

4.5.10 France informed APIRG of its evaluation of several types of GNSS approaches and expressed its support for the implementation of an SBAS system in the AFI Region.

4.5.11 IATA and Cape Verde provided information on their respective projects on RNAV (GNSS) procedures.

4.5.12 The US Delegate stressed the enormous benefits that GPS can provide to AFI States, especially those with limited or non-existent navigation infrastructure. He called attention to the agreements made by delegates at the ICAO GNSS Planning Meeting in Nairobi in November 2002

and requested input from and participation by the States and international organizations in preparing for a follow-up meeting/training seminar in Dakar later in 2003.

4.5.13 The following conclusion was adopted:

CONCLUSION 14/44: USE OF GNSS FROM EN-ROUTE TO NPA

That States authorize the use of GNSS from en-route to NPA and develop the relevant procedures.

GNSS test bed trials

4.5.14 The group discussed the implementation of the GNSS test bed in the AFI Region as well as the implementation of the GNSS strategy.

4.5.15 The meeting noted that ASECNA, in accordance with APIRG Conclusion 12/48 and on behalf of the AFI Region, had submitted in April 2002, through the regional organizations (ECOWAS, CEMAC, COMESA and SADC), a project document for funding of GNSS implementation from contributions of the Africa/Caribbean/Pacific - European Commission Cotonou Agreement. In this regard, the delegate representing the European Commission and the European Space Agency informed the meeting of their willingness to support the GNSS implementation in the AFI Region.

4.5.16 Furthermore, the meeting was informed that the European Space Agency has made available to the AFI test bed programme four reference stations to be used successively in Central, Southern and Eastern Africa.

4.5.17 The APV 1 tests in Central Africa were started just prior to the meeting, with flights done by ASECNA in Nigeria, Gabon, Equatorial Guinea and Cameroon. Delegates participating in APIRG/14 were given an opportunity to fly in the test aircraft. The meeting was informed of the preparatory activities for the installation of the test bed in Southern Africa. Sudan expressed its interest in supporting the test bed in Eastern Africa. The meeting encouraged States to participate in the test bed programme and adopted the following conclusion:

CONCLUSION 14/45: STATES' SUPPORT FOR THE FUNDING OF GNSS IMPLEMENTATION

That States:

- a) **request their regional organizations (CEMAC, COMESA, ECOWAS, SADC) to support the funding request submitted to the European Union (EU) for GNSS implementation in the AFI Region; and**
- b) **provide full support of the activities related to the implementation of the GNSS test bed in the AFI Region.**

Implementation of the AFI GNSS strategy

4.5.18 The meeting then considered the implementation of the AFI GNSS strategy. In this regard, participants were of the view that the next phase was for the AFI Region to proceed to an operational SBAS system. The meeting then formulated the following conclusion:

CONCLUSION 14/46: IMPLEMENTATION OF A GNSS SBAS OPERATIONAL SYSTEM**That:**

- a) a GNSS SBAS operational system be implemented in the AFI Region as an extension of the EGNOS, starting with the deployment of a pre-operational system; and
- b) in view of the above, States take the necessary steps for the publication of APV GNSS SBAS-based procedures.

DECISION 14/47: GNSS IMPLEMENTATION TASK FORCE**That:**

- a) the GNSS Study Group be renamed the GNSS Implementation Task Force; and
- b) the work programme of the GNSS Implementation Task Force include the implementation of the GNSS SBAS operational system (Conclusion 14/42).

4.5.19 The meeting reviewed and adopted a proposal from the CNS/ATM/IC Sub-Group to amend Table CNS 3 of the AFI FASID with the introduction of GNSS planning elements.

4.5.20 APIRG was informed of the outcome of the thirteenth meeting of the Obstacle Clearance Panel (OCP/13) regarding the development of PANS-OPS provisions for operations based on GNSS. The meeting adopted the following conclusions:

CONCLUSION 14/48: ASSISTANCE WITH GNSS PROCEDURES DESIGN

That ICAO contact EUROCONTROL, the FAA, the French DGAC, ASECNA, ATNS and the Dutch RLD in order to:

- a) continue their support and organize seminars /workshops on the PANS-OPS provisions for GNSS-based operations; and
- b) provide assistance to States with GNSS-based approach procedures design.

CONCLUSION 14/49: GNSS LEGISLATION

That States in the AFI Region be reminded of the need to review their national regulations to include provisions relating to aircraft and operator approval/certification, as well as operating procedures for GNSS en-route and non-precision approach (NPA) operations.

Review and update of the AFI CNS/ATM Implementation Plan (Doc 003)

4.5.21 The meeting reviewed proposals for amending the AFI CNS/ATM Implementation Plan (Doc 003). In doing so, the group agreed to reduce the number of areas of routing in the plan from ten to six. The routing areas are:

Routing areas	Description
AR1	Europe - South Atlantic (EUR/SAT) oceanic routes
AR2	Atlantic Ocean interface between AFI, NAT and SAM
AR3	Europe - Eastern Africa routes including the area of the Indian Ocean (EUR/AFI East)
AR4	Europe - Southern Africa routes (EUR/AFI South) including Continental Southern Africa routes
AR5	Continental Western Africa routes including coastal areas
AR6	Trans-Indian Ocean area interface with ASIA/PAC Region

4.5.22 The meeting agreed to three implementation coordination groups as follows:

- a) SAT Group: AR1 and AR2
- b) Continental AFI ICG: AR3, AR4 and AR5
- c) Indian Ocean ICG: AR6.

4.5.23 The meeting further agreed that the existing AFI/EUR interface meetings should continue and provide the CNS/ATM/IC Sub-Group with their inputs.

4.5.24 The meeting agreed to amend Doc 003 to reflect the changes in the definition and number of routing areas. It also agreed that the timelines at Appendix F of the current edition of Doc 003 should be published separately as Volume II of Doc 003 and be entitled *Status of Implementation of the AFI CNS/ATM Plan*. The following conclusion was adopted:

CONCLUSION 14/50: UPDATE OF THE AFI CNS/ATM IMPLEMENTATION PLAN (DOC 003)

That:

- a) **The AFI CNS/ATM Implementation Plan (Doc 003) be amended to reflect the changes in the definition and number of areas of routing; and**
- b) **Appendix F of the current edition of Doc 003 be published separately as Volume II of Doc 003 entitled *Status of Implementation of the AFI CNS/ATM Plan*.**

Note: The amended Doc 003 will be posted to the ICAO website (www.icao.int).

4.6 **Summary of the activities of the AFI Traffic Forecast Group (AFI TFG)**

4.6.1 The meeting was informed of the terms of reference for the AFI TFG and noted that the group had met three times since November 1998, during which it had deliberated and consolidated its traffic forecasting responsibilities. APIRG also considered and approved the future work programme with an amendment to include an item on aircraft equipage.

4.7 **ANP/FASID**

4.7.1 The meeting was presented with amendments to the AFI Basic ANP for approval by APIRG. These amendments relate to the CNS and MET fields and will be posted to the ICAO web site. In the CNS field, consideration was given to the inclusion of various AFTN circuits and GNSS elements. In the MET field, the proposed amendments take into account Amendment 72 to Annex 3 and the fact that the responsibilities of all regional area forecast centres in the AFI Region have been transferred to the world area forecast centre in London. The following conclusion was formulated:

CONCLUSION 14/51: AMENDMENT TO AFI ANP/FASID DOCUMENTS

That amendments proposed in the CNS and MET fields be reflected in the AFI ANP/FASID documents and posted to ICAO's web site (www.icao.int).

4.8 **ICAO Universal Security Audit Programme (USAP)**

The group welcomed the information that a significant amount of preparatory work required for the establishment and implementation of the ICAO Universal Security Audit Programme (USAP) has been completed by ICAO and that the programme has been successfully launched with an audit that took place in Uganda in November 2002. The group noted that several AVSEC auditor training courses have been planned.

CONCLUSION 14/52: ICAO UNIVERSAL SECURITY AUDIT PROGRAMME (USAP)

That AFI States nominate suitable candidates for training, and certification including short-term secondments to conduct USAP audits.

4.8.1 Management of air navigation services

4.8.1.1 The meeting noted the analysis made by ASECNA related to types of airspace and methods of their management in the AFI Region:

- a) airspace management by a single State;
- b) airspace management involving many States; and
- c) airspace management involving many FIRS.

4.8.1.2 The analysis underlined the preceding associated conditions for establishing a model of cooperative airspace management that could lead to the implementation of the single sky concept.

4.8.2 Aviation Safety Committee

4.8.2.1 APIRG took action on APIRG Conclusion 13/91 regarding the establishment of an aviation safety committee in Africa tasked with mobilizing additional efforts to overcome deficiencies and improve air safety in the AFI Region. For that purpose APIRG reviewed a proposal for the establishment of a mechanism for air navigation safety instead of one single body for the whole region. The mechanism favoured a sub-regional approach based on already existing institutions.

4.8.2.2 The meeting noted that some air safety committees already existed in other regions, but was of the opinion that it was preferable to design a mechanism better suited to the realities of the AFI Region for the sake of cost-efficiency. It appeared to the group that the meetings of the Directors General of Civil Aviation which had recently become formalized would be the best forum for the establishment of the mechanism, under the aegis of ICAO. The DGCA meetings would consistently and regularly place on their agendas an item related to the overcoming of deficiencies, and thus would be tasked with the air navigation safety mechanism. They would thus serve as a catalyst for efforts undertaken by ICAO, States, international organizations and financial entities in order to give rise to synergy which would be favourable to the prompt solution of identified deficiencies.

4.8.2.3 The meeting also took into consideration the action taken by States and regional and international organizations, such as IATA, which established a team for the strengthening of safety to address the deficiencies related to ICAO Annexes 1, 6 and 8 and a group on ATS incidents, which represented a complementary mechanism to the one envisaged.

4.8.2.4 Finally, the meeting recommended that, with respect to the operation of a prospective mechanism, sincerity and transparency should prevail in the identification and elimination of

deficiencies and that emphasis be laid on systems analysis, preferably to coercive or legal action. The following conclusion was therefore adopted:

CONCLUSION 14/53: ESTABLISHMENT OF A MECHANISM FOR AIR NAVIGATION SAFETY IN THE AFI REGION

That, acknowledging the need for the reduction and elimination of deficiencies in the AFI Region:

- a) **ICAO establish a mechanism for air navigation safety in Africa;**
- b) **the mechanism come within the scope of the formalized meetings of the Directors General of Civil Aviation of the region and be placed under the aegis of ICAO;**
- c) **the DGCA meetings consistently and regularly place on their agendas an item on the identification, updating and resolution of deficiencies; and**
- d) **the DGCA meetings be tasked with the air navigation safety mechanism, including the following :**
 - i) **to evaluate, validate, monitor and follow-up those deficiencies in the AFI Region which are classified as urgent (U) and develop appropriate remedial action to be taken. To this effect, the DGCAs will receive from ICAO the updated lists of urgent (U) deficiencies well in advance and from stakeholders through the ICAO Regional Offices;**
 - ii) **to promote the timely corrective actions to be taken by concerned States at the highest level in order to resolve specific deficiencies in their respective areas of responsibility; and**
 - iii) **to assist, through the relevant ICAO Regional Office, an individual State, a group of States or an executing body in identifying resources to resolve an urgent deficiency through advocacy of relevant high-level government officials, regional institutions, bilateral/multilateral cooperation and/or donor organizations.**

4.8.3 Eleventh Air Navigation Conference (AN-Conf./11)

4.8.3.1 APIRG noted that the Council of ICAO had approved the convening of the Eleventh Air Navigation Conference in Montreal from 22 September to 3 October 2003. In relation to Agenda Item 1.3 of the conference — “The need for a global air navigation plan” — APIRG noted that the Secretariat was currently developing an electronic data base that would contain ATS routes and facilities/services as reflected in the Basic ANP and FASID. The group did not support the option of having one global air navigation plan/process instead of the present practice of several regional plans/processes.

4.8.3.2 AFCAC invited a number of States and organizations to attend a working group meeting aimed at drafting working papers on items of high importance to the AFI Region. States were invited to provide input to the members of the working group. With the importance of the conference in mind, the group drafted the following decision.

DECISION 14/54: ELEVENTH AIR NAVIGATION CONFERENCE

That States in the AFI Region:

- a) **take the necessary steps to attend the Eleventh Air Navigation Conference (AN-Conf/11); and**
- b) **support AFCAC in its coordination effort with regard to the development of working papers to be presented to the conference.**

4.8.4 *Safety and quality management systems*

4.8.4.1 The meeting reviewed a proposal on the need to introduce a safety management system (SMS) and a quality management system (QMS) in the air navigation plan. It acknowledged the fact that the need arose from the information contained in various ICAO documents concerning the improvement of safety, and noted that some States and service providers had already incorporated the concepts into their management; the practice would have to be extended to the whole region and to all safety-related areas. However, the meeting indicated that, as the subject was new to States, ICAO should assist in the familiarization and sensitization to the concept through the convening of regional seminars and workshops. The meeting finally agreed on the establishment of a reduced task force to provide States in the region with guidance material and model safety and quality management systems. It thus developed the following conclusion:

CONCLUSION 14/55: ESTABLISHMENT OF A SAFETY AND QUALITY MANAGEMENT TASK FORCE

That :

- a) ICAO establish a task force on a safety management system (SMS) and quality management system (QMS) in the AFI Region;**
- b) the task force be responsible for providing guidance material and models to States;**
- c) the following States and organization be members of the task force:**
 - Cameroon (Coordinator);**
 - Nigeria;**
 - Senegal;**
 - South Africa;**
 - Tunisia; and**
 - ASECNA; and**
- d) ICAO arrange for regional seminars/workshops on the safety and quality management systems.**

AGENDA ITEM 5: DEFICIENCIES IN THE AIR NAVIGATION FIELD IN THE AFI REGION

5.1 General

5.1.1 The meeting noted with appreciation that the deficiencies had been listed by State and by field, as requested at APIRG/13. The meeting further agreed that States should take the necessary action to review the list and advise the regional offices of any changes.

5.1.2 The meeting agreed that the critical deficiencies should be identified separately and brought to the attention of the Air Navigation Commission and Council for immediate action. These deficiencies were reflected in the list of AFI deficiencies in the Air Navigation field and posted to the ICAO web site (www.icao.int).

5.2 Deficiencies in the AOP field

5.2.1 In the AOP field, following the establishment of more and more autonomous airport authorities in the AFI region, significant progress had been made in solving deficiencies requiring infrastructure rehabilitation, such as runways and taxiways, aerodrome fencing, airfield lighting, power supply, etc., as can be noted through the completed or ongoing works at Abidjan (Côte d'Ivoire), Addis Ababa (Ethiopia), Bamako (Mali), Lusaka (Zambia), Dar-es-Salaam (Tanzania) Djerba and Tunis (Tunisia), Douala (Cameroon), Kano and Lagos (Nigeria), N'djamena (Chad) and Ouagadougou (Burkina Faso). Bird hazard committees have been created, bird hazard control

programmes established and scaring equipment acquired in many airports prone to bird strikes (Entebbe, Ouagadougou, N'Djamena, Lome, Dakar, Bamako, etc.). More and more exercises are organized with ICAO Regional Offices' assistance with a view to validating or updating emergency plans (Niamey, Cotonou, Abidjan, Lome, etc.). During discussions on deficiencies, the meeting acknowledged that one of the reasons for inadequate implementation of corrective actions was the fact that some of the autonomous authorities did not have the necessary decision-making autonomy. Consequently, the meeting developed the following conclusion:

CONCLUSION 14/56: ESTABLISHMENT OF AUTONOMOUS AUTHORITIES

That, when autonomous authorities are established, governments ensure that they are given management, financial and decision-making autonomy in order to facilitate the allocation and fast mobilization of resources for the elimination of air navigation systems deficiencies.

5.3 Deficiencies in the Aeronautical Telecommunications field

5.3.1 The following table shows the progress achieved in the elimination of aeronautical telecommunications deficiencies in the AFI Region since APIRG/11 (1998), and the tangible efforts that have been made and are still to be made by States in this respect. The updated list of deficiencies in this field is available on the ICAO website (www.icao.int).

APIRG Meetings	Number of Deficiencies			
	AFTN	ATS/DS	AMS	ARNS
APIRG/11 (1998)	31	59	19	75
APIRG/12 (1999)	20	45	14	64
APIRG/13 (2001)	14	53	14	60
APIRG/14 (2003)	10	50	9	40

5.3.2 The meeting formulated the following conclusion:

CONCLUSION 14/57: ELIMINATION OF DEFICIENCIES IN THE FIELD OF AERONAUTICAL TELECOMMUNICATIONS

That, as a matter of urgency, States and organizations mentioned in the list of deficiencies affecting aeronautical fixed services (AFS), aeronautical mobile services (AMS) and aeronautical radio navigation services (ARNS) implement available solutions for the elimination of reported deficiencies.

Cooperative approach to management and maintenance of aeronautical telecommunications infrastructure

5.3.3 The meeting emphasized the necessity for harmonized maintenance working methods and coordination procedures in order to improve efficiency in addressing deficiencies affecting aeronautical telecommunications, and confirmed the need for a cooperative approach between States in this field. It therefore urged States to refer to LIM AFI Conclusion 10/13 (1988) and AFI/7 Recommendations 14/3 (sub-paragraphs e) and i)), 14/4 and 14/8 whenever they implement cooperative structures. The meeting also considered communications monitoring forms developed by ASECNA and decided that they should be further analyzed by the Communications Sub-Group. It also requested that the harmonization of maintenance units' working methods and coordination procedures and the monitoring of aeronautical telecommunication facilities be included in the Communications Sub-Group's work programme.

5.4 Deficiencies in the ATS/AIS/SAR field

5.4.1 While reviewing the deficiencies in the ATS/AIS/SAR field, the meeting noted the advance in the implementation of the ICAO/AFCAC technical cooperation programme in the field of SAR. In particular, the meeting appreciated the start of the SAR evaluation programme, as well as the setting up of training sessions. Furthermore, the meeting noted with satisfaction that the programme made provision for training sessions to be organized in English and French during the second half of 2003. It was further noted that a seminar on the funding of SAR services was scheduled for 2004. The following conclusion was then developed:

CONCLUSION 14/58: ICAO/AFCAC SEARCH AND RESCUE TECHNICAL COOPERATION PROGRAMME

That States:

- a) **support AFCAC and ICAO in their efforts to improve search and rescue (SAR) services in the AFI Region;**
- b) **attend the SAR training sessions organized in the framework of the project; and**
- c) **participate in the SAR evaluation programme.**

AGENDA ITEM 6: HUMAN FACTORS AND MANPOWER PLANNING

6.1 The group noted the progress to date on the human resource planning and training needs, as well as a special implementation project approved by the ICAO Council to conduct a Human Resource Planning Seminar in the Eastern and Southern African Region during the fourth quarter of 2003. With regard to the proposal to initiate a regional training planning process through a contributory body to the AFI Planning and Implementation Regional Group, it was felt that a continued lack of specialized manpower and resources in the region may hinder the progress in this regard. The group invited IATA and AFCAC to participate in the future work on this important

subject. In addition, APIRG requested ICAO to provide results of the regional training trial in the CAR/SAM Region for future consideration.

AGENDA ITEM 7: INTERREGIONAL COORDINATION

Informal meetings for the improvement of air traffic services over the South Atlantic (SAT)

7.1 The meeting noted with appreciation the activities and tangible achievements reached since APIRG/13 through the informal meetings for the improvement of air traffic services over the South Atlantic (EUR/SAM Corridor) (SAT/10, Dakar, 10 – 13 December 2001 and SAT/11, Johannesburg, 17 – 21 February 2003). It particularly noted the successful implementation of RNP 10 in October 2001 and RVSM in January 2002, and the integration of the CAFSAT network nodes in Morocco (Casablanca FIR, 2003), Senegal (Dakar oceanic FIR, 2001), South Africa (Johannesburg oceanic FIR, 2003) and Cape Verde (Sal oceanic FIR, 2001). Attention was drawn to the need to continue RNP 10 and RVSM post-implementation safety assessments on a regular basis in order to consolidate these significant achievements.

Coordination between the AFI and EUR Regions

7.2 The meeting was informed of the work undertaken on the “Single Sky” concept in the European Region and the potential consequences it could entail for the ATS route network at the EUR/AFI interface area. Recalling the experience gained from the implementation of RVSM and on-line data interchange (OLDI) standards in Europe, the meeting recommended close coordination between the AFI and EUR Regions on this particular issue of a Single European Sky.

7.3 After an exchange of views, the meeting agreed on formulated the following conclusion :

CONCLUSION 14/59: NEED FOR CONTINUED SUPPORT TO INTERREGIONAL COORDINATION

That States and ICAO continue to provide their support to the coordination mechanism established between the regions in order to consolidate the achievements and to increase efficiency in addressing interface issues.

AGENDA ITEM 8: FIFTH AIR TRANSPORT CONFERENCE (MARCH 2003)

8.1 APIRG noted that the Fifth Air Transport Conference produced a wide-ranging and comprehensive package of results which should help to guide States and ICAO in the liberalization process. It was recalled that the conference reached definitive results on nearly all its agenda items and did not request a major programme of further policy and guidance developments. The group noted that the conference had recognized that economic regulation of air transport was a rapidly evolving subject area and, given that the cycle of recent air transport conferences had been every eight to ten years, there would likely be specific issues emerging for attention by ICAO in the

interim. It was noted that the conference had proposed an active programme of monitoring and exchange of information with States, together with a reorientation of the Organization's work on economic regulation, specifically to liberalization. It was agreed that this programme would entail considerable effort.

CONCLUSION 14/60: FIFTH AIR TRANSPORT CONFERENCE

That States note the outcome of the Fifth Air Transport Conference and implement the conclusions as soon as practical.

AGENDA ITEM 9 : TECHNICAL CO-OPERATION PROGRAMME IN AFRICA

9.1 The group noted that six project documents had been prepared on the basis of existing cooperative groups of States. In Western and Central Africa, the first Cooperative Development of Operational Safety and Continuing Airworthiness Programme (COSCAP) project document was signed at the end of February 2003 for a group of eight States. Two more project proposals had been endorsed at the ministerial level, for likely commencement this year. In Eastern and Southern Africa, the East African Community (EAC) was adopting the COSCAP approach and had approved the draft project at a Ministers' meeting in March 2003. With regard to Southern Africa Development Community (SADC), a COSCAP project had been endorsed by SADC's Civil Aviation Committee at its recent meeting in May 2003. Where their implementation was under way, the COSCAP projects had proven to be successful mechanisms through which a considerable amount of training was offered, practical and harmonized tools developed and improved oversight procedures and techniques introduced. In this connexion, the meeting developed the following conclusion:

CONCLUSION 14/61: COOPERATIVE DEVELOPMENT OF OPERATIONAL SAFETY AND CONTINUING AIRWORTHINESS PROGRAMME (COSCAP) MECHANISM

That States in Africa that have not done so consider making use of the Cooperative Development of Operational Safety and Continuing Airworthiness Programme (COSCAP) mechanism to address the deficiencies highlighted in the ICAO Universal Safety Oversight Audit Programme (USOAP) and to ensure sustainability of achievements.

International Financial Facility for Aviation Safety (IFFAS)

9.2 APIRG was presented with an update on the International Financial Facility for Aviation Safety (IFFAS) and noted that it would operate within the existing ICAO legal regime and with complete independence from ICAO's Regular Programme Budget, deriving its resources from voluntary contributions made by ICAO Contracting States and international organizations. APIRG noted that only Universal Safety Oversight Audit Programme (USOAP)-identified deficiencies, and no deficiencies identified by PIRGs, would be eligible for assistance from IFFAS.

AGENDA ITEM 10: TERMS OF REFERENCE AND WORKING ARRANGEMENTS OF APIRG*Increasing the efficiency and effectiveness of PIRGS*

10.1 APIRG noted the concerns expressed with regard to the role and activities of planning and implementation regional groups (PIRGs) and considered it necessary to revise the terms of reference of APIRG (Appendix I). To be more cost-effective, APIRG was convened approximately every 18 to 24 months. With regard to the size of the APIRG report, the meeting noted that the ANC, after the review of the GREPECAS/11 Report, had recommended to Council that it would be more valuable to receive the complete report, including all the appendices and guidance material, for its better appreciation.

10.2 To increase the effectiveness of APIRG, it was agreed to restructure and reduce the number of subgroups to ATM, CNS, MET and AOP. In addition, and in line with the development of the air traffic management concept at the global level, it was proposed that the MET component of ATM be addressed by the ATM Sub-Group; a decision on this will be made at a later date.

10.3 It was recalled that the APIRG reviews the Air Navigation Plan for the entire AFI Region. With regard to deficiencies, and their recurrence, the group recalled that the APIRG identifies and maintains lists of reported deficiencies and that it was the ultimate responsibility of States to take the remedial action required to eliminate deficiencies and not the responsibility of the PIRG.

10.4 Accordingly, the meeting formulated the following conclusion:

CONCLUSION 14/62: REVISED TERMS OF REFERENCE OF APIRG**That:**

- a) **the proposed revised terms of reference of the AFI Planning and Implementation Regional Group (APIRG), contained in Appendix I to the APIRG/14 Report, be endorsed;**
- b) **the APIRG sub-groups be restructured and reduced to four, namely: ATM, CNS, MET and AOP; and**
- c) **the APIRG Handbook be amended accordingly.**

10.5 The terms of reference, work programmes and composition of the current APIRG subsidiary bodies are given at the appendices as follows:

AOP/SG	:	Appendix J
COM/SG	:	Appendix K
ATS/AIS/SAR/SG	:	Appendix L
MET/SG	:	Appendix M

CNS/ATM/IC/SG : Appendix N*Membership of APIRG and its subsidiary bodies*

10.6 The group was informed that applications had been received by the Secretary of APIRG from Chad and Sudan to be members of the group. The following conclusion was adopted:

CONCLUSION 14/63: MEMBERSHIP OF APIRG

That the ICAO Council approve the applications of Chad and Sudan for membership in APIRG.

DECISION 14/64: MEMBERSHIP TO APIRG SUBSIDIARY BODIES

That the memberships of Sudan in the COM Sub-Group, of the World Meteorological Organization (WMO) in the MET Sub-Group and Ghana and Zimbabwe in the ATS/AIS/SAR Sub-Group be approved.

AGENDA ITEM 11: ANY OTHER BUSINESS

11.1 The meeting expressed concern at the significant volume of APIRG documentation which generates excessive paperwork and extra work for the Secretariat and host State for the reproduction and distribution of working papers. The meeting was of the opinion that it would be necessary to enhance APIRG working methods in order to speed up and facilitate its work by simplifying the distribution of documents. In this connection, it indicated that, in future, APIRG members should be equipped with computer tools/equipment and Internet facilities that would enable them to have access to documents from the ICAO web site. In any event, the appendices to working papers from sub-groups, which constituted the most bulky documentation, would not be distributed during the meeting. Consequently, the following conclusion was developed:

CONCLUSION 14/65: FACILITATING OF APIRG WORK

That the concerned administrations provide APIRG members with the necessary computer tools and Internet facilities to access ICAO's web site for an efficient work participation.
