

INTERNATIONAL CIVIL AVIATION ORGANIZATION

AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP EIGHTEENTH MEETING (APIRG/18) Kampala, Uganda (27 – 30 March 2012)

Agenda Item 3.6:Aeronautical Meteorology (MET)

REVIEW OF THE REPORT OF THE TENTH MEETING OF THE METEOROLOGY SUB-GROUP (MET/SG/10)

(Presented by Secretariat)

SUMMARY

This paper presents the report of the Tenth Meeting of the MET/SG. The Sub-Group reviewed action taken on various conclusions and decisions of the APIRG. The meeting also discussed matters relating to the WAFS in the AFI Region, the recommendations of the AFI OPMET Management Task Force Second and Third Meetings, provision of SIGMET, tropical cyclone and volcanic ash advisories for the AFI Region, the list of deficiencies in the MET field and challenges facing AFI meteorological services.

Action by the meeting is at paragraph 3.

REFRENCE(S):

- APIRG/17 Report
- MET/SG/10 Report
- IVATF/2 report
- IVATF/3 report
- WAFSOPSG/6 Report
- SADISOPSG/16 Report
- AFI OPMET MTF/2 Report
- AFI OPMET MTF/3 Report

Related ICAO Strategic Objective(s): A, C

1. INTRODUCTION

1.1 The Tenth Meeting of the Meteorology Sub-Group (MET/SG/10) was held at the premises of the ICAO Western and Central African Office (WACAF), Dakar, Senegal, from 29 June to 1 July 2011. The meeting was attended by twenty four (24) participants from eleven States and two international/regional organizations. The list of participants is in **Appendix A** to this report.

2. DISCUSSION

2.1 **Review of APIRG Conclusions and Decisions**

2.1.1 The group reviewed, noting progress made so far, its previous Conclusions and Decisions and on those adopted by APIRG and Recommendations developed at the Special AFI RAN meeting held in 2008. The Status of implementation is provided in **Appendix B to this report.**

2.1.2 The Sub-group noted that five States had not yet implemented SADIS as per Conclusion 10/31 of APIRG/10 meeting. The meeting then formulated the following conclusion:

DRAFT CONCLUSION 18/XXX: RECEIVING WAFS PRODUCTS AND RELATED OPMET INFORMATION THROUGH SADIS

That, the following five States in the AFI region: Burundi, Eritrea, Sao Tome E Principe, Sierra Leone and Liberia which have not yet implemented SADIS, endeavor to address this deficiency in accordance with Conclusion 10/31 of the APIRG/10 meeting.

2.2 WAFS in the AFI Region

2.2.1 Under this agenda item, the Sub-Group reviewed the status of the implementation of the World Area Forecast System (WAFS) in the AFI Region on the basis of the reports from the sixth meeting of WAFS Operations Group (WAFSOPSG/6) and the sixteenth meetings of the Satellite Distribution System for information relating to air navigation (SADIS) Operations Group (SADISOPSG/16) provided by the United Kingdom as an integral part of the ICAO aeronautical fixed service (AFS). The meeting also reviewed the detailed information provided by the World Area Forecast Centre (WAFC) London on the recent and forthcoming developments in the WAFS and SADIS.

2.2.2 The Sub Group noted that the Sixteenth Meeting of the SADISOPSG held in ICAO Paris Office from 23 to 25 May, 2011, discussed a number of issues including the SADIS Strategic Assessment Tables. It further noted that the group agreed to dissolve the SADIS Strategic Assessment Team and in future, the team's related reports will be included in the Management Report prepared annually by the SADIS Provider State (SADISOPSG/16 Decision 16/11 refers), and therefore there is no longer a need for review and update by the MET SG with respect to the AFI Region.

2.2.3 The meeting was further informed that the Secure SADIS FTP Service had been implemented on November 2010. The meeting noted that the project delivered the new service on time and within budget and meets the requirements of ICAO Doc 9855 - *Guidelines on the Use of the Public Internet for Aeronautical Applications*. In this regard, the Sub-group encouraged those users who have not already done so to arrange to obtain Secure SADIS FTP log on credentials from the SADIS Manager.

2.2.4 The Sub-group was further informed that the WAFC London GRIB2 Upper Air Forecast data was made available on SADIS FTP on 2 March 2010 and via Secure SADIS FTP from 17 November 2010. WAFS Aviation GRIB2 was made available on the SADIS 2G service from 18 November 2010 (excluding the provision of CB, icing, and turbulence data, though these parameters are available via SADIS FTP and Secure SADIS FTP for trial and evaluation purposes only).

2.2.5 The Sub group appreciated that the satellite-based infrastructure of SADIS will be retained until at least 2015. However, in order to determine the future need and following a survey, an ad hoc team was formed to follow up and make recommendations.)., The Sub-group then encouraged AFI State to be responding to surveys/questionnaires on this subject to ensure noting and consideration of their opinions..

2.2.6 The group noted that SADIS FTP service was extended to end of November 2012 due to slow take up by secure SADIS FTP before complete replacement by the latter. The meeting then encouraged SADIS users to migrate to secure SADIS FTP in good time.

2.2.7 The meeting encouraged SADIS users in AFI Region to apply for WAFS Internet File Service (WIFS) accounts to be used only for backup/contingency purposes and Primary data should continue being obtained from SADIS

2.2.8 In view of the above information, the meeting agreed to formulate the following conclusion:

DRAFT CONCLUSION 18/XXX: IMPLEMENTATION OF THE WAFS IN THE AFI REGION

That, SADIS States/Users in the AFI Region:

- a) who have not already implemented Secure SADIS FTP, arrange to obtain Secure SADIS FTP log on credentials from the SADIS Provider State;
- b) take action to obtain GRIB2 compatible visualization software from their workstation suppliers;
- c) keep up to date with developments in future requirements of a SADIS satellite broadcast beyond 2015 and respond in a timely fashion to any future surveys/questionnaires on this subject in order to ensure their opinions are noted and considered;
- d) apply for WAFS Internet File Service (WIFS) account(s) through the ISCS/WIFS Provider State for use in backup/contingency circumstances;
- e) review the published workstation evaluation reports in order to assess which systems best meet their needs; and
- f) make all efforts to migrate to Secure SADIS FTP before 30 November 2012 or risk losing access to the Internet-based provision of SADIS.

2.3 Review of the Recommendations of AFI OPMET Management Task Force Second and Third Meetings (MTF/2 and MTF/3)

2.3.1 The Task Force held its second meeting (MTF/2) in Johannesburg, South AfricaSeptember 2010 and its third meeting (MTF/3) in Dakar, Senegal in June 2011. On considering the reports of the two meetings, the MET/SG endorsed eleven Conclusions and four Decisions of the OPMET MTF.

Review of the AMBEX Scheme

2.3.2 In addition to the two MTF Reports, the Sub-Group recalled Conclusion 17/56 of APIRG/17 meeting, calling for the implementation of OPMET exchange requirements and inter-regional OPMET gateway (IROG) functions by both Dakar and Pretoria RODBs. The exchange would include new OPMET data types, OPMET bulletin format, regional exchange, interregional exchange and exchange of OPMET through SADIS, all of which are described in the 7th edition of the AMBEX Handbook.

2.3.3 In order to harmonize the monitoring of OPMET data in the AFI region, the AFI OPMET monitoring procedures should be implemented on a regular basis using the procedures in the AMBEX Handbook. In this regard, the MTF/2 formulated Recommendation 2/3 and Decisions 2/4 and 2/5. Given the information above, the Sub-Group formulated the following Conclusion:

DRAFT CONCLUSION 18/XXX: SCHEDULE OF THE AFI OPMET MONITORING

That, Dakar and Pretoria RODB Provider States:

- a) implement an automatic OPMET data monitoring scheme using procedures in Chapter 12 and Appendix F of the AMBEX Handbook on quarterly basis (March 31, June 30, August, 31 and December 31 of each year)
- b) distribute the monitoring statistics to the Chairman of the Task Force and the Secretariat;
- c) perform regular 24 hour simultaneous monitoring starting at 0000 UTC on the first Wednesday of every month; and
- d) Implement the above tasks with effect 1 January 2012.

2.3.4 Regarding the development of time validation criteria to implement OPMET monitoring statistics, the meeting reiterated that the time validation criteria be developed in accordance with the provisions in ICAO Annexes 3 and 10. Consequently, the meeting adopted the criteria developed by the EUR OPMET Data Management Group (DMG) for the EUR Region. The criteria would be aligned with the AFI Air Navigation Plan (ANP) and included in the AFI AMBEX Handbook.

2.3.5 The Sub-group recalled that Dakar and Pretoria RODBs were assigned IROG functions and inter-regional OPMET gateway responsibilities for the AFI region. The meeting noted that backup procedures were being developed for the AFI RODBs. Considering the recommendations of the MTF/2 and MTF/3 meetings and considering the need to improve the telecommunication link between Dakar and Pretoria, the Sub Group meeting formulated the following Decision and Conclusion:

DRAFT DECISION 18/XXX: DEVELOPMENT OF BACK UP PROCEDURES FOR THE AFI RODBS

That, a Core Team of experts consisting of Members from Kenya, Madagascar, Senegal, South Africa and ASECNA be established to develop back up procedures for the AFI RODBs.

DRAFT CONCLUSION 18/XXX:

IMPLEMENTATION OF AN AFTN CIRCUIT BETWEEN DAKAR AND PRETORIA RODBS TO SUPPORT BACK-UP CONTINGENCY CAPABILITIES

That Dakar and Pretoria RODB Provider States;

- a) investigate the best possible way to implement a backup circuit between the two RODBs for the implementation of the backup procedures between the RODBs, in time for the MTF/4 meeting; and
- b) implement reliable telecommunications facilities to support back-up procedures for the AFI RODBs.

2.3.6 The Sub-Group considered the recommendations formulated by MTF/2 and MTF/3 meetings regarding amendment to the AMBEX Handbook and associated Appendixes and formulated the following decision:

DRAFT DECISION 18/XXX: AMENDMENT TO THE AMBEX HANDBOOK

That,

- a) Appendixes A and B to the AMBEX Handbook be updated by the MET/SG Secretariat to reflect AFTN addresses for the IROG's Bangkok, Jeddah and Rio de Janeiro; and
- b) the amended AMBEX Handbook given in <u>Appendix C</u> to this report, be:
 - 1) endorsed as the AMBEX Handbook Seventh Edition, Amendment 2;
 - 2) published by the MET/SG Secretariat.

2.3.7 The meeting was informed of data exchange procedures of EUR Regional OPMET Centre (ROC) Toulouse with adjacent ROCs including AFI IROGs and also of the annual SIGMET monitoring exercises undertaken in Europe. Following these and analysis of the monitoring results some actions are undertaken aimed at improving data exchange. Some centres outside the EUR region are also invited to verify the good reception of SIGMET and VAA.

2.3.8 The meeting was further informed that the MTF/3 meeting proposed that the two AFI IROGs be sending to Toulouse, bulletin headers they wish to receive or the data they wish to receive and that they also be sending their routing table to the EUR addresses. It was therefore anticipated that this would give a better situation for dissemination of information between the IROGs and ROC Toulouse and between their AoR, in accordance with the AFI and EUR regional air navigation plans.

2.3.9 The meeting was further informed that for harmonization and coherency of OPMET exchange between ICAO AFI and EUR regions, the AFI IROGs and Toulouse ROC should review and exchange their OPMET routing tables. In this regard, Recommendations 3/10 and 3/11 were formulated from the above information. The Sub-Group then endorsed the following Conclusion:

DRAFT CONCLUSION 18/XXX:

SIGMET MONITORING AND OPMET ROUTING

That,

- a) the two AFI RODB Provider States be invited to monitor the reception of SIGMET during the regular (twice yearly) EUR Region SIGMET tests and report;
- b) the two AFI IROGs and ROC Toulouse exchange their routing tables and verify the coherency of these tables;
- c) the AFI IROGs be invited to review their current routing tables, the status of OPMET reception, and if necessary, update the routing tables; and
- d) ICAO invites AFI States to solve OPMET production and routing issues.

2.3.10 The Sub-group noted from the report of the MTF/3 meeting that Algiers Bulleting Compiling Center (BCC) had not implemented most of the AMBEX scheme. The meeting advised Dakar RODB to coordinate with Algiers BCC to solve this issue.

Development of OPMET data Catalogue for the AFI ICD

2.3.11 The meeting recalled that the Conclusion 17/59 of APIRG/17 Meeting called for the implementation of the interface control document (ICD) for AFI OPMET database access procedures and a draft data catalogue as given in <u>Appendix D</u> to this report, adapted from the EUR OPMET DMG as was proposed to RODB Managers for finalization. In this regard, the Sub-group decided to urge AFI RODB Managers to finalize the AFI OPMET data catalogue given in the <u>Appendix D</u> to this report, in time for the MTF/4 meeting. The Meeting then formulated the following conclusion:

DRAFT CONCLUSION 18/XX:

IMPLEMENTATION OF AFI OPMET DATA CATALOGUE

That, the OPMET data catalogue given in the <u>Appendix D</u> to this report, be implemented by States in the AFI Region after finalization by Dakar and Pretoria RODB Provider States as the AFI OPMET data catalogue.

SIGMET and Advisories

2.3.12 The meeting noted that the SIGMET Advisory trials organized by the Meteorological Warning Study Group (METWSG) are aimed at enhancing the issuance of SIGMET information in the AFI Region. It further noted that South Africa as one of the hosts of the Regional SIGMET Advisory Centre (RSAC) for the period of the trial has a tool called Geocentric Information Briefing (GIB) which generates SIGMET advisories in both text and graphical format. The tool was also capable of generating advisory messages for the entire AFI Region. In this regard, the meeting endorsed the following conclusion:

DRAFT CONCLUSION 18/XXX: PROVISION OF SIGMET ADVISORY INFORMATION BY PRETORIA RODB DURING AFI SIGMET TESTS

That, the facilities made available by Pretoria RODB Provider State during the SIGMET advisory trial, be used to assist ICAO WACAF and ESAF regional offices during WS SIGMET tests for the AFI region.

Note: France who also provided such facility during the SIGMET advisory trial may also propose such assistance for test purposes.

2.3.13 The meeting recalled that APIRG/17 had urged ICAO regional offices of Dakar and Nairobi to update the AFI SIGMET guide to include details of VA and TC test procedures. In addition, Decision 2/16 of AFI OPMET MTF/2 recommended that Appendix J to the AFI SIGMET Guide be updated. In this regard, the meeting agreed to formulate the following decision:

DRAFT DECISION 18/XXX: AMENDMENT TO THE AFI REGIONAL SIGMET GUIDE

That, the amendment to the SIGMET Guide given in <u>Appendix E</u> to this report, be endorsed as the AFI Regional SIGMET Guide Ninth Edition, Amendment 2.

2.3.14 In view of a lack of implementation by a number of States in the AFI Region of SIGMET information, the Sub-group noted the need to sensitize concerned authorities on the importance of continuous monitoring of hazardous meteorological conditions which would necessitate SIGMET issuance by meteorological watch offices. The Sub group then formulated the following conclusion:

DRAFT CONCLUSION 18/XXX MEASURES TO IMPROVE THE ISSUANCE OF SIGMET IN THE AFI REGION

That, The ICAO Dakar and Nairobi Regional Offices sensitize meteorological authorities in the AFI Region on the importance of continuous monitoring, by meteorological watch offices, of hazardous meteorological conditions that would warrant the issuance of SIGMET information in their respective areas of responsibility.

Improving AFI OPMET data availability and Management

2.3.15 On the issue of request for information from non AOP aerodromes, the Sub-group was informed of the need to avoid repetitive State letters on identical requests and the need for the SADISOPG Secretariat to keep track on the requests made and to ensure that a State that had refused the provision of OPMET information from their non-AOP aerodromes is not approached before three years had elapsed. The SADISOPSG will in this regard maintain a master list to be placed on the SADISOPSG website related to States' willingness to provide OPMET information from non-AOP aerodromes as displayed in **Appendix F** to this report. -. The MET/SG then formulated the following conclusion in this regard.

DRAFT CONCLUSION 18/XXX:

REVISION OF OPMET DATA REQUIREMENTS

That:

- a) information related to the requirements of OPMET data from non-AOP aerodromes as given in <u>Appendix F</u> to this report, be submitted by ICAO Dakar and Nairobi Regional Offices to the concerned States for approval, before amending the AFI FASID MET Table 2A and Annex 1 to the SADIS User Guide (SUG); and
- b) the non-AOP aerodromes as listed in <u>Appendix G</u> to this report, be deleted from AFI FASID MET Table 2A.

2.3.16 The meeting was further informed that required OPMET bulletins from Accra, Conakry, Freetown, Kano, Kinshasa, Lagos, Luanda and Monrovia are received at Dakar RODB with an availability rate of below 30%. To improve the availability of the bulletins the meeting agreed to formulate the following draft conclusion:

DRAFT CONCLUSION 18/XXX: IMPROVEMENT OF OPMET AVAILABILITY FROM AFI STATES AERODROMES

That, efforts be made by the concerned States to improve the availability at Dakar RODB, of required OPMET from Accra, Conakry, Freetown, Kano, Kinshasa, Lagos and Luanda.

2.3.17 The MET/SG was informed that in the short term (up to 2013), ICAO was planning for the introduction of *enabling clauses* in Annex 3 to use table-driven data representation in extensible mark-up language (XML) for OPMET (METAR/SPECI, TAF and SIGMET) on a bilateral basis as part of Amendment 76 to Annex 3 (applicable in November 2013). Consequently, the implementation of the use of XML for OPMET should therefore only be initiated on bilateral basis before the planned MET/AIM Divisional Meeting in 2014 expected to endorse the transition plan which would have its first milestone in 2016 (Amendment 77 to Annex 3). It was noted that there would be ample time after the Divisional Meeting to undertake the necessary regional planning.

2.3.18 With regard to the information provided above, the meeting endorsed the following decision:

DRAFT DECISION 18/XXX: PREPARATION OF AFI XML TRANSITION PLAN

That, the preparation of the AFI XML Transition Plan be deferred until the adoption of Amendment 76 to Annex 3 (July 2013) at the earliest.

2.3.19 Regarding dissemination of OPMET, the meeting expressed deep concern that OPMET and other aviation MET products were available on some Internet websites without any restrictions (only user name and password needed).

2.3.20 The meeting was made aware that it is indicated in ICAO Annex 3 - *Meteorological Service for International Air Navigation* Appendix 10, Section 2 that the use of the Aeronautical Fixed Service and the Public Internet is permissible. In addition, the meeting was further reminded that it is the responsibility of the meteorological authority to determine what and how meteorological service will be provided to meet the needs of international air navigation, as per paragraphs 2.1.3 and 2.1.4 of ICAO Annex 3. However, use of public Internet need also comply with ICAO Document 9855 - *Guidelines for use of Public Internet for Aeronautical Applications*. Further, WAFSOPSG/5 Conclusion 5/9 indicated that OPMET data and WAFS forecasts distribution through ISCS/SADIS services, if only used for flight planning, can be considered non-time critical and therefore can be accessed through the public Internet. The Sub-group urged users of aviation data to be careful and ensure that all data is obtained is only from an authorized source.

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

2.4.1 The Sub-group recalled that the MET Divisional Meeting (2002) formulated recommendation 1/12 b), *Implementation of SIGMET requirements*, which called, inter alia, for the relevant planning and implementation regional groups (PIRGs) to conduct periodic tests on the issuance and reception of SIGMET messages, especially those for volcanic ash.

2.4.2 Concerns by the users for the timely reception of SIGMET information had prompted the need to improve awareness on the critical and important nature of SIGMETs. In order to maintain the International Airways Volcano Watch (IAVW) and International Tropical Cyclone Watch (ITCW) Systems ready-for-action, regular exercises involving the advisory centres and the Meteorological Watch Offices (MWOs) under their areas of responsibility should be performed.

2.4.3 In this regard, Conclusion 16/56 of APIRG/16 adopted the procedures for conducting such exercises in the region and Conclusion 17/82 of APIRG/17 suggested measures to improve the issuance and dissemination of SIGMETs. Three (3) types of SIGMET Tests, incorporating the suggested measures, were conducted in 2010 and 2011 during the month November of the respective year.

2.4.4 The reports on the results of the above tests were distributed to all AFI MWO Provider States in January 2010 and 2011. The short term recommended actions were implemented by the MWO concerned after the distribution of the test report, and those needing medium to long term implementation are presented in <u>Appendix H</u> to this report for review and appropriate action by the meeting. The meeting was further informed that Robertsfield and Kinshasa MWOs were not issuing any SIGMET and agreed that steps should be taken to enable assistance to be provided by neighboring States until such time that these MWOs are in a position to issue SIGMET as required. In this regard, the Sub-group formulated the following conclusions:

DRAFT CONCLUSION 18/XXX: ISSUANCE AND DISSEMINATION OF SIGMET

That:

- a) The ICAO Dakar and Nairobi Regional Offices concerned take the required measures to:
 - 1. visit the listed 21 MWO Provider States which have never issued any SIGMET during AFI SIGMET Tests; and
 - 2. identify the main deficiencies in implementing MWO functions and provide assistance in overcoming the said deficiencies;
- b) Robertsfield and Kinshasa MWOs to consider bilateral arrangements between adjacent MWOs (i.e. Dakar and Brazzaville MWOs respectively) for the provision of SIGMET information on behalf of the States concerned before removing the telecommunication/ organizational deficiencies as a matter of urgency considering the fact that this is a safety related issue.

DRAFT CONCLUSION 18/XXX: REMOVING OPERATIONAL SHORTCOMINGS IN SIGMET PROVISION

In order to remove operational shortcomings in SIGMET provision, it is requested that:

- a) Kano, Mogadishu, N'Djamena, Sal and Casablanca MWOs use the priority indicator FF to disseminate SIGMETs;
- b) Casablanca, Kano, Dakar and Sal MWOs and all MWOs not listed in Column 6 of Appendix A to the AFI SIGMET Guide, avoid issuing any WC SIGMET during the TC Tests;
- c) Antananarivo, Casablanca, Kano, Niamey, Brazzaville, Sal, Mauritius, Johannesburg, Accra, Mogadishu, N'Djamena, Gaborone and Nairobi MWOs issue SIGMET Tests on the required time period, no more than 10 minutes, after the issuance of the advisory tests;
- d) Pretoria RODB applies the procedure described in Appendix J to the AFI SIGMET Guide in order to avoid confusing real SIGMETs with SIGMET Test messages;
- e) Johannesburg, Gaborone, Casablanca, Mauritius, Niamey, and Dakar MWOs consider to include a line of 12 "TEST" at the end of the SIGMET test message; and
- f) All MWOs use the correct SIGMET format (as prescribed by Annex 3 Appendix 6 Table A6-1) when preparing the SIGMET message by including:
 - 1. a correct validity period;
 - 2. a correct weather phenomena description;
 - **3.** the ICAO indicator of the corresponding FIR at the beginning of the main text of the SIGMET;
 - 4. a hyphen at the end of the line containing the validity period;
 - 5. the MWO ICAO indicator just after the validity period and;
 - 6. the word "VALID" just before the validity period.

2.5 Deficiencies in the MET field

2.5.1 The List of deficiencies in the MET field was reviewed and updated based on the uniform methodology approved by the Council for identification, assessing, tracking and reporting of deficiencies of air navigation systems. The review also took into account remedial action from States concerned and inclusion of additional deficiencies identified since APIRG/17 Meeting.

2.5.2 The updated list deficiencies in the MET field adopted by the Sub-group is at **Appendix I**

2.5.3 The meeting was pleased to learn from France that during EUR METG/20 meeting, IATA had expressed its deep appreciation on the significant increase of availability of AFI OPMET data in the EUR region. That appreciation was also extended to the two AFI IROGs and to the AFI States who contributed to the dramatic improvement.

2.6 New challenges facing AFI Meteorological Services

2.6.1 The Sub-group was briefed on the report of the Core Team of Experts established by Conclusion 17/84 of APIRG/17, to collect and study information on the impact of the global Air Traffic Management operational concept on the provision of Aeronautical Meteorological Services in the AFI Region.

2.6.2 The meeting was informed that in view of the emerging continuous work initiated by the monitoring of the AFI volcanic ash contingency plan exercises, the Core Team of Experts suggested to upgrade the team to a MET/ATM Task Force with the terms of reference as given in **Appendix J** to this report, in order to perform an annual AFI volcanic ash exercise as a starting point and continue to collect and study regional information on the impact of ATM operational concept on MET. In this regard, the Sub-group agreed to formulate the following Decision which will be discussed with the APIRG ATM/AIS/SAR Sub-group:

DRAFT DECISION 18/XXX: ESTABLISHMENT OF THE AFI MET/ATM TASK FORCE

That:

- a) an AFI MET/ATM Task Force be established with the terms of reference and work programme, as presented in <u>Appendix J</u> to this report; and
- b) the Core Team of experts established through Decision 17/84 of APIRG/17, be abolished and replaced by the AFI MET/ATM Task Force.
- *Note:* The AFI MET/ATM TF will consist of specialists in ATM, CNS and MET.

2.6.3 The meeting recalled that in response to the unprecedented disruptions to commercial air traffic in Europe caused by the eruption of Iceland's Eyjafjallajökull volcano in April 2010, ICAO had established an International Volcanic Ash Task Force to drive the development of a global safety risk management framework and urge regional implementation groups (PIRGs) to improve existing regional volcanic ash contingency plans and establish new plans where such plans do not exist.

2.6.4 The meeting was aware that within and adjacent to AFI Region are areas of potential volcanic activities which, when active, can affect flight operations in the AFI Region. The AFI Volcanic Ash Contingency Plan (VACP) sets out standardized guidelines for alerting of aircraft when eruptions occur, and procedures to be followed.

2.6.5 In this regard, the draft volcanic ash contingency plan presented in **Appendix K** to this report was adapted from the EUR/NAT contingency plan in coordination with the APIRG ATM/AIS/SAR Sub Group.

2.6.6 The Sub Group was informed that the second meeting of the International Volcanic Ash (VA) Task Force (IVATF/2) scheduled for July 2011 would provide useful material for the implementation of regional VA contingency plans. The Sub group then agreed that the draft contingency plan in Appendix K should be updated by the Secretariat in line with the outcome of the IAVTF/2 and IAVWOPSG/6 meetings and agreed by the sub-group by correspondence. The Sub Group then requested the MET/SG Secretariat to review and update the draft volcanic ash contingency plan and submit to the members of the sub-group for agreement through correspondence, taking into consideration the outcome of the third meeting of the International Volcanic Ash Task Force (IVATF/3). Further to the review of the regional VACP Template by IVAT/3 meeting (16 – 17 February 2012), the MET/SG Secretariat reviewed

and updated the draft AFI VACP that were circulated to the members of the subgroup for agreement. In this regard, the following Conclusion was formulated:

DRAFT CONCLUSION 18/XX: ESTABLISHMENT OF THE AFI VOLCANIC ASH CONTINGENCY PLAN

That:

- (a) the ATM/AIM/SAR and the MET Sub-Groups finalize development of the AFI Volcanic Ash Contingency Plan; and
- (b) the Plan be provided to States for implementation, without awaiting the next meeting of APIRG.

2.6.7 For a better understanding and involvement of AFI States in the VACP, it was considered desirable to convene regional awareness seminars in coordination with the ATM/MET TF. The Group formulated the following Conclusion:

DRAFT CONCLUSION 18/XXX: AWARENESS SEMINARS ON THE AFI AIR TRAFFIC MANAGEMENT VOLCANIC ASH CONTINGENCY PLAN

That ICAO Dakar and Nairobi Regional Offices through the ATM/MET Task Force, be invited to convene regional awareness seminars on the AFI ATM Volcanic Ash Contingency Plan in view of;

- a) Make all aviation stockholders in the AFI region aware of ATM VACP;
- b) Support its implementation;
- c) Propose further improvements to the plan.

Note: It is suggested that seminars be convened in 2012 and conducted in both English and French.

2.6.8 The WMO representative gave a presentation to the meeting on the future training and competency requirements for aeronautical meteorological personnel, emphasizing that top level would be made mandatory by December 2016.

2.7 Regional meteorological procedures

2.7..1 The Sub-group reviewed the MET procedures pertaining to the AFI ANP/FASID as proposed by WAFSOPSG/6 meeting which was held in Dakar from 21 to 24 March 2011. The MET/SG Secretariat was requested to initiate proposals for amendments to the AFI Air Navigation Plan (Doc 7474) as per the changes shown in **Appendix L to this paper**.

2.8 Terms of reference, work programme and composition of the MET/SG

2.8.1 The MET/SG noted the composition of the Sub-group and its terms of reference shown in **Appendix M** to this report. The Sub-group recalled that the terms of reference reflected the overall tasks

of the Sub-group and needed to be revised only when major changes are introduced to the MET/SG programme and that any change would have to be subjected to a draft conclusion to be endorsed by APIRG. In this respect, it was agreed that there was no need to amend the terms of reference at the meeting.

2.8.2 The MET/SG reviewed its work programme in line with the ICAO Business Plan. The review considered the work programme for 2011 to 2015 and the executive summaries for each recurrent task.

2.8.3 The Sub-Group endorsed the changes proposed and formulated the following decision:

DRAFT DECISION 18/XXX: FUTURE WORK PROGRAMME OF THE MET/SG

That, the work programme of the MET/SG be updated as shown in Appendix M.

2.8.4 To improve participation of the Sub-group members to the meetings, the Sub group urged Members of the MET Sub-Group who are unable to attend a MET/SG meeting, to notify the Chairperson and the Secretary accordingly, otherwise the corresponding States shall lose their membership to the MET Sub-Group whenever their designated Members are absent twice consecutively without a written explanation to the Chairperson of the Sub-Group.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information in this paper; and
- b) decide on the draft decisions and conclusions proposed for the group's consideration.
