



ICAO

APCC/6 - WP02.B

INTERNATIONAL CIVIL AVIATION ORGANIZATION  
WESTERN AND CENTRAL AFRICAN OFFICE

Sixth Meeting of the Africa-Indian Ocean Planning and Implementation Regional Group  
Projects Coordination Committee (APCC/6)

(Virtual, 11 October 2021)

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**Agenda Item 2: Performance Framework for Regional Air Navigation Planning and Implementation**

**Outcomes of the Fourth Meeting of APIRG Infrastructure and Information Management Sub-group (IIM/SG4)**

*(Presented by IIM/SG Chairperson)*

Summary

This paper presents the outcomes of the Fourth Meeting of the APIRG Infrastructure and Information Management Sub Group (APIRG IIM/SG4), held virtually from 31 August to 3 September 2021 for consideration by APCC/6.

The Sub-Group elected Mrs. Anne Njeri Gitau (from Kenya) and Mr. Issoufou Abdoulaye (from Niger) as Chairperson and Vice-Chairperson of the Sub-Group respectively.

Following the adoption of the agenda, the Sub-Group reviewed the status of implementation of IIM/SG3 Conclusions/Decisions as well as the APIRG/23 Conclusions/Decisions applicable to the IIM/SG.

The meeting reviewed the status of implementation of the IIM Projects adopted by APIRG. The provisions of the sixth edition of the Global Air Navigation Plan (GANP) were also discussed, including Air Navigation Deficiencies and Minimum Reporting Areas in the AIM, CNS and MET.

The Sub-group lastly reviewed its Terms of Reference (TOR).

Action by the meeting is **at paragraph 3:**

**REFERENCE(S):**

- Doc 7300, Convention on International Civil Aviation, 1944
- Doc 9750, Global Air Navigation Plan
- Doc 7474, Air Navigation Plan — Africa-Indian Ocean Region
- Report of the Fourth meeting of the APIRG Infrastructure and Information Management Sub Group (APIRG IIM/SG4)

**Strategic Objective(s):** This working paper relates to the Strategic Objectives: **A** – Safety, **B** – Air Navigation Capacity and Efficiency, **D** – Economic Development of Air Transport, and **E** – Environmental Protection.

## 1 INTRODUCTION

- 1.1. The Fourth meeting of the APIRG Infrastructure and Information Management Sub-Group (IIM/SG4) was held virtually from 31 August to 3 September 2021.
- 1.2. Two hundred ninety (290) participants from thirty-two (32) States, five (5) Air Navigation Service Providers (ASECNA, ATNS, GCAA, KCAA, and SODEXAM), International Airlines Association (IATA), International Federation of Air Traffic Controllers' Associations (IFATCA) and ICAO Regional Offices for Western and Central Africa (WACAF) and Eastern and Southern Africa (ESAF) attended the meeting.

## 2 DISCUSSION

- 2.1. The meeting discussed nine (09) agenda items as reflected in the Report of the Meeting presented in Appendix 1 to this Working Paper.
- 2.2. The meeting elected Ms. Anne Njeri Gitau, Manager Aeronautical Information Management from Kenya and Mr. Issoufou Abdoulaye, ANS Inspector from Niger as Chairperson and as Vice Chairperson of IIM Sub-Group respectively.
- 2.3. The meeting reviewed Conclusions and Decisions of the APIRG/23 meeting pertaining to the Sub-group. Also the status of implementation of IIM Projects was discussed. The meeting noted with concerns that some conclusions of APIRG/23 are still pending and called States /Organizations to take actions as required to address them. Regarding Projects, the meeting noted with satisfaction, the development of the IIM Projects Log Frame to assess and report on the activities of Projects, but noted that Projects are still facing critical challenges including the lack of coordination, the lack of participation of experts to the Projects activities. The Meeting urged States /Organization to consider that outstanding activities as a critical situation.
- 2.4. The meeting was updated on the outcomes of the survey questionnaires developed by Project Teams and noted with concerns the lack of responses by States /Organizations. The meeting made proposal to explore for alternative mechanism to help States reporting on their implementation activities.
- 2.5. Twenty-two (22) draft Conclusions/Decisions were adopted by the IIM/SG4 meeting. The paper will present to the APCC Conclusions/Decisions that require the APCC/APIRG's attention.

*Election of the Chairperson and Vice-Chairperson of the Sub-Group*

2.6. The meeting recalled the APIRG Procedural Handbook provisions and proceed with the election of the Sub-Group Chair and/or Vice-Chair. The meeting formulated the following Decision accordingly.

**Decision 4/01 Election of the Chairperson and Vice-Chairperson of the Sub-Group**

**That;**

**In order to guide the work of the Sub-Group, Ms. Anne Njeri Gitau from Kenya and Mr. Issoufou Abdoulaye from Niger are elected respectively as Chairperson and Vice Chairperson of the IIM Sub-Group.**

*Update on the Regional Projects implementation**IIM/SG Projects Masterplan*

2.7. The meeting reviewed the outcome of the Decision 23/24 of APIRG/23 and commended the work done by the Sub-Group regarding the development of the IIM Masterplan to track the IIM Projects activities and provide quarterly reports. The meeting took note of the development of the Log Frame for IIM projects and highlighted some challenges, mainly related to project activities and expected results. The following decision was formulated:

**Draft Decision 4/02 Approval of the IIM Projects Log frame**

**That;**

**In order to provide the IIM/SG Projects Teams with a tracking framework for all IIM Projects and a reporting mechanism for all activities of the approved IIM Projects, the Log Frame proposed by the Masterplan Project team is endorsed.**

*States Reporting on Planning and Implementation*

2.8. The meeting was informed that Projects questionnaires were circulated to States. To date, few States effectively responded to the questionnaires. The meeting recognized that the low level of data availability from States on their planning and implementation of air navigation services is a challenge for the AFI Region. In order to overcome this issue, the meeting tasked the Secretariat to explore other mechanisms as alternative to surveys. The following decision was formulated accordingly.

**Draft Decision 4/04 Increasing the number of States reporting on the Sub-group activities**

**That;**

**In order to improve data availability on States planning and implementation of activities in technical areas, the secretariat to explore other mechanisms as alternative to surveys.**

2.9. Furthermore, the meeting identified and acknowledged the role of the National Continuous Monitoring Coordinator (NCCMC) in the field of Safety Oversight, and agreed that, the nomination of a National Coordinator for Planning and Implementation (NCPI) as well as Focal Points for each Technical area would facilitate the coordination of the activities of APIRG and its subsidiary bodies. The meeting formulated the following Conclusion

**Draft Conclusion 4/05 States Focal points in the technical areas**

**That,**

**In order to facilitate the coordination of APIRG and its subsidiary bodies activities, States to nominate a National Coordinator for Planning and Implementation (NCPI) as well as focal points in the areas of AIM, CNS, MET and communicate their details to ICAO Regional Offices by December 2021.**

***Aeronautical Information Management (AIM)***

2.10. The meeting was provided with reports on the progress made by AIM Project 1 - Assessment and development of QMS applied to AIM and AIM Project 2 - Implementation of Aeronautical Information Exchange Systems (AIXM), but did not receive any report on AIM Project 3 on the Implementation of the provision of electronic terrain and obstacle data (e-TOD) in the AFI Region. The meeting called upon Nigeria, coordinator of AIM Project 3, to confirm its willingness to continue leading this project and to nominate a qualified expert for the coordination of the project.

***Aeronautical Communication Navigation Surveillance and Spectrum Infrastructure and Systems (CNS)***

2.11. The meeting was updated on the progress made by the CNS related Projects and noted with satisfaction, the significant progress made by the IIM COM Project 5 with regard to the deliverables provided, which include amongst others, assessment of potential cyber threats to ANS, Initial Analysis of existing cybersecurity and cyber resilience frameworks, and development of the AFI ANS Cyber safety and resilience framework. The meeting unfortunately, did not receive any report on COM Project 1 -Implementation of Ground/Ground communication (ATS/DS, AIDC, VoIP) and COM Project 4 - Implementation of interoperable seamless telecommunication infrastructure. The meeting formulated the following conclusion:

**Draft Conclusion 4/06 Coordination of IIM Projects**

**That;**

**To ensure proper coordination and implementation of the Projects with coordination challenges,**

- a) Nigeria, Mali and Togo to confirm their willingness to continue leading the projects AIM 3, COM 2, COM 1, and COM 4 respectively and to nominate qualified expert to coordinate these projects by 31 December 2021;**
- b) The Secretariat to proceed with their replacement if no response is received from the concerned States**

*Aeronautical Meteorology (MET)*

- 2.12. The meeting noted the progress made by the MET Project 1 related to the Implementation of en-route weather phenomena information (SIGMET), (QMS/MET) service, in the AFI region. Some achievements were made regarding the implementation of QMS, the conduct of the AFI Regional SIGMET tests and the development regarding the update of the AFI SIGMET Guide and SIGMET Trial Procedures. The meeting gave emphasis to the need to accelerate the finalisation of the update of the AFI SIGMET guide and its availability on the ICAO website. The meeting formulated the following decision:

**Draft Decision 4/07    AFI SIGMET Guide and SIGMET Trial Procedure**

**That;**

**To assist States/Organisations in providing SIGMET information in accordance with ICAO SARPs and operational procedures, MET Project 1 to review and finalize the AFI SIGMET Guide and the AFI SIGMET Trial procedure and submit it to the next APIRG Meeting.**

- 2.13. The meeting discussed the cost estimation of MET Project 1 which include the onsite missions/workshops/Trainings for approximately USD 83 871.74, and online workshops/trainings estimated at USD 58 730.64. The total cost of the project is estimated at USD 142,602.38.
- 2.14. The meeting also noted the challenges related to the low rate of response to the questionnaires and the lack of implementation by Meteorological Watch Offices (MWO) of recommendations provided in the AFI annual SIGMET Test reports.
- 2.15. Furthermore, the meeting raised the need to assess competency of Aeronautical Meteorological Personnel within the AFI region. The following decisions were formulated accordingly:

**Draft Decision 4/08    Project Costing for IIM/SG MET**

**That,**

**In order to facilitate the MET Project funding, the IIM/SG4 endorses the project costing for IIM MET Project 1.**

**Draft Decision4/09    Aeronautical Meteorological Personnel Competency Assessment**

**That,**

**In order to improve States aeronautical meteorology personnel competency, IIM/SG MET Project 1 in coordination with States, to develop a process for assessing the competency of Aeronautical Meteorology Personnel within the AFI region**

- 2.16. The meeting was given an update on the status of the implementation of the IWXXM model in the AFI region, and moreover discussed the matter related to the translation of TAC OPMET data to IWXXM

format and noted concerns regarding the provisions of the translation services, specially, the lack of translation agreements. The meeting therefore formulated the following conclusion:

**Draft Conclusion 4/11 Traditional Alphanumeric Code to IWXXM translation agreements**

**That,**

**In the framework of the dissemination of OPMET data in the IWXXM format in the AFI Region:**

- a) **States data producer having their TAC data converted into IWXXM by another State on their behalf, to ensure that a bi-lateral or regional agreement be signed for such circumstances:**
- b) **RODBs/IROGs Dakar and Pretoria to put in place a formal regional plan by 30 November 2021 to support the implementation of the IWXXM in the Region and formalize a bilateral agreement to conduct the IWXXM operationalization tests between the two IROGs and their corresponding ROC; and**
- c) **The Secretariat to record the regional plans for follow-up purpose, maintain the list of agreements and make it available on the ICAO public website.**

2.17. The meeting was informed on the progress made by the MET Project 2, including actions undertaken in line with the APIRG/23 Conclusion 23/28 related to the Development of Volcanic Ash Contingency Plans and the conduct of Volcanic Ash exercises in the AFI Region. The meeting noted that a workshop was conducted on the volcanic ash exercise, and the AFI Volcanic Ash Contingency Plan (AFI VACP) was reviewed for approval. The meeting agreed on the following decision :

**Draft Decision 4/12 Approval of AFI Volcanic Ash Contingency Plan**

**That,**

**In order to provide States/Organizations with standardized guidelines and procedures for the provision of information to airlines and en-route aircraft before and during a volcanic eruption, the draft AFI ATM Volcanic Ash Contingency Plan, Edition 2021 (AFI VACP, Ed 2021) is endorsed.**

2.18. Furthermore, the meeting was updated on the ongoing activities related to the preparation of the volcanic ash exercise to be conducted in the AFI region by the end of the year. In this regard, the meeting reviewed the draft operational guidance and directives on the volcanic ash exercise. Following the discussions on the matter, the meeting agreed on the following:

**Draft Conclusion 4/13 AFI Volcanic Ash Exercise Operational Instructions and Directives**

**That, in the framework of the conduct of the volcanic ash exercise in the AFI region,**

- a) **The IIM/SG MET Project 2, in coordination with the AFI Volcanic Exercise Leader State, finalize the AFI Volcanic Ash Exercise Operational Instructions (AFI VOLCEX OPINS)**

and the Volcanic Ash Exercise Directives by 30 October 2021 for endorsement by APIRG/24; and

- b) The Secretariat, to coordinate with Democratic Republic of Congo, Kenya, Ethiopia and Eritrea to obtain their Volcano Observatories Contact details as per the guidance provided in ICAO Doc 9766 Handbook of IAWV, by 30 October 2021.

2.19. The meeting discussed the report on the progress made by the MET Project 3 related to the Implementation of Annex 3 provisions relating to Space Weather requirements within the AFI Region. The project documents (Terms of Reference and Project, Scope, objectives, tasks ...) were developed. A Project survey questionnaires was developed and circulated to States and Projects implementation activities are ongoing. The following decision was formulated:

**Draft Decision 4/14 Adoption of the MET Project 3 Terms of Reference and the Project deliverables for 2021-2022**

**That the proposed MET Project 3 Terms of References and its associated project deliverables are adopted.**

***Implementation of ASBU Modules***

***Provisions of the sixth edition of the GANP***

2.20. The meeting was updated on the sixth edition of the Global Air Navigation Plan (GANP) and provided with details on the ASBU modules pertaining to AIM, CNS and MET, with emphasis on the necessity for the AFI region to assess the priority modules and elements of Block 1 for implementation.

2.21. Taking note of the important changes introduced through the sixth edition of the GANP, the meeting identified the need for the AFI Region to align the Regional Air navigation Plan to the GANP. In this regard, the meeting agreed on the following draft Decision.

**Draft Decision 4/15 Alignment of the Regional Air Navigation Plan with the 6th Edition of the GANP**

**That;**

**In order to ensure consistency between the AFI Regional air navigation plan and the GANP:**

- a) **The Secretariat to conduct a workshop to update States on the provisions of the sixth edition of the GANP;**
- b) **The IIM/SG Projects teams to identify the applicable modules of ASBU Block 1 for the AFI region, and submit with the related prioritization to the secretariat by 31 December 2021; and**
- c) **The IIM/SG secretariat to coordinate with the AAO/SG secretariat to develop a draft revised Regional Air Navigation implementation Plan for integration in the eANP Volume III.**

- 2.22. The meeting requested the IIM Projects Teams to align their projects references with ASBU Groups, Threads and Modules of the GANP. For this purpose, the following draft decision was formulated.

**Draft Decision 4/16                      Alignment of IIM Projects ASBU references to the GANP**

**That;**

**In order to incorporate changes introduced by the 6th Edition of the GANP and its impact on the regional and national Plans, IIM PTCs to align project references to the sixth Edition of the GANP Groups, Threads and Modules by 31 December 2021.**

***Incorporation of Research, Development and Innovation (RDI) in APIRG work programme***

- 2.23. The meeting discussed the introduction of Research, Development and Innovation (RDI) in aviation. It was emphasized that there is a need to align research amongst the AFI States aviation stakeholders to prepare for the future, share relevant experiences so that members are aware of the potential benefits. After discussions, the meeting formulated the following Decision:

**Draft Decision 4/17                      Incorporation of Research, Development and Innovation (RDI) in APIRG work programme**

**That In order to assist AFI States in addressing the implementation of operational requirements and ASBU modules elements, the work programmes of APIRG and its auxiliary bodies be amended to include activities related to Research, Development and Innovation (RDI).**

***Air Navigation Deficiencies***

***Minimum Reporting Areas in AIM, CNS and MET***

- 2.24. Participants were updated on the ongoing works to improve the AFI Air Navigation Deficiencies database, with the purpose to make the system more user friendly and to fit the operational needs. The training of States/Organizations focal points will be conducted once the new version of the system is released.
- 2.25. The meeting discussed the revised list of Minimum reporting areas considering the Basic Building Blocks (BBB) and ASBU Modules with priority 1 in the AFI Region. The meeting endorsed this revision through the following draft decision.

**Draft Decision 4 /18                      Endorsement of the revised minimum reporting Areas**

**That;**

**In order to support the implementation of the Uniform Methodology for the identification, assessment and reporting of deficiencies, the revised minimum reporting areas are endorsed.**

2.26. The meeting noted with concerns, the high level of unavailability of OPMET data following the presentation of the Reports from the two Regional OPMET Data Banks (RODBs) Dakar and Pretoria. Consistent with the Conclusion 20/43 of APIRG/20 related to Action plan to remove air navigation deficiencies in the MET field and Conclusion 21/24 of APIRG/21 related to the Availability of OPMET Data at AFI OPMET Data Banks, a workshop conducted by the Secretariat in June 2021 to discuss this issue, tasked a group of experts to develop a remedial action plan that was reviewed by the Sub-group. The meeting formulated the following Conclusion, calling for the implementation of the said remedial action plan:

**Draft Conclusion 4/19 Measures to improve the availability of OPMET data in the AFI Region**

**That to address safety issues related to the unavailability of OPMET data:**

- a) **States/Organizations to implement measures provided in the OPMET availability Action Plan and report quarterly to the Secretariat;**
- b) **The Secretariat to coordinate the implementation of the OPMET availability Action Plan and provide support where necessary.**

2.27. The meeting was reminded of the new provisions related to the Global Reporting Format (GRF) and the resulting implications on Table MET II-2 of Part V of the AFI eANP Volume II. Table MET II-2 currently includes a requirement for the Aerodrome MET Office to provide the state of the runway as supplementary information in METAR/SPECI although the implementation of the GRF related provisions removes this requirement. In addition, the meeting noted with concern that in order to improve the provision of the required observations and forecasts by the Aerodrome MET Offices, a number of AFI States are required to update their information contained in Table MET II-2. After discussions, the meeting formulated the following Conclusion.

**Draft Conclusion 4/20 Review of the MET Table II-2 to Part V of the AFI eANP Vol II**

**That, In order to improve the provision of the required observations and forecasts by the Responsible Aerodrome MET Offices, States to submit to the Secretariat proposals for amendment of their Table MET II-2 in the eANP volume II Part V.**

***Continuation of the CODEVMET AFI Project***

2.28. The meeting was informed of the revision of the CODEVMET AFI Project in order to ensure its relevancy with respect to challenges faced by States. The main objectives of the revised project being to assist States in improving their MET Service Oversight functions, assist MET Service Providers in complying with ICAO SARPs and implementing the quality management system in MET.

2.29. The meeting was also informed that the revised CODEVMET AFI project documents and annexes were approved by the SC/2 Meeting to guide its implementation in early 2022. The IIM/SG4 meeting formulated the following conclusion:

**Draft Conclusion 4/21 Continuation of the CODEVMET AFI Project**

**That, In order to improve States Safety Oversight activities in MET, States /Organizations to support the implementation of the Project related to the Cooperative Development of Aeronautical Meteorological Service in the AFI Region (CODEVMET AFI)**

***Review of the Terms of Reference and Work Programme of the Sub-Group***

7.1. The meeting reviewed, updated and adjusted the Terms of Reference and work programme of the APIRG IIM Sub-Group. In particular, the meeting updated the working method of the Sub-group by including the requirement of the Conclusion 23/17 of APIRG/23 Meeting, calling for the APIRG IIM/SG Chair and Vice-chair to convene quarterly PTCs coordination meetings to assess the progress made and identify the challenges as a permanent activity. The meeting also revised and completed the work programme of the Sub-group. The following decision was formulated:

**Draft /Decision 4/22: Terms of Reference of the APIRG IIM/SG**

**That,**

**To complement the working method of the sub-group with regard to periodic coordination by the Chair and Vice-Chair of the IIM/SG of APIRG, the updated Terms of reference of the IIM/SG is endorsed.**

**3 ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) Take note of the information presented in this working paper, highlighting the work achieved by the fourth meeting of the APIRG IIM/SG;
- b) Provide guidance as required for the finalization of APIRG/24 WP on the Report of IIM/SG/4;
- c) Consider the establishment of the AFI Volcanic Ash exercise Steering Group and its Terms of Reference as per Appendix 2 to this working paper and submit to APIRG/24 for approval;

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