



ICAO

**Twenty –Third Meeting of the AFI Planning and Implementation Regional Group  
(APIRG/23)**

(Virtual meeting, 24-26 November 2020)

**OUTCOMES OF THE THIRD MEETING OF THE APIRG INFRASTRUCTURE AND  
INFORMATION MANAGEMENT SUB-GROUP (APIRG IIM SG/3)**

(Presented by the Chairperson of the APIRG IIM/SG)

<b>SUMMARY</b>
<p>This paper presents the outcomes of the Third meeting of the APIRG Infrastructure and Information Management Sub Group (APIRG IIM SG/3) for consideration by APIRG/23.</p> <p><b>Action by the meeting is at paragraph 3:</b></p>
<p><b>REFERENCE(S):</b></p> <ul style="list-style-type: none"> <li>▪ Doc 7300, <i>Convention on the International Civil Aviation</i></li> <li>▪ Doc 9750, <i>Global Air Navigation Plan</i></li> <li>▪ Doc 7474, <i>Air Navigation Plan — Africa-Indian Ocean Region</i></li> <li>▪ Report on the Second meeting of the APIRG Infrastructure and Information Management Sub Group APIRG IIM SG/2</li> <li>▪ Report on the Third meeting of the APIRG Infrastructure and Information Management Sub Group APIRG IIM SG/3</li> </ul>
<ul style="list-style-type: none"> <li>▪ <b>Related ICAO Strategic Objective(s):</b> <b>A – Safety, B – Air Navigation Capacity and Efficiency, D – Economic Development of Air Transport, and E – Environmental Protection.</b></li> <li>▪ <b>Related ASBU KPIs &amp; B0 Modules:</b> All applicable to AIM, CNS and MET</li> </ul>

## 1. INTRODUCTION

1.1 The Third meeting of the APIRG Infrastructure and Information Management Sub-Group (IIM/SG/3) was held virtually from **12 to 14 October 2020**.

1.2 The meeting was attended by two hundred and fifteen (215) participants comprising representatives of thirty-one (**31**) States, five (**5**) Air Navigation Service Providers (ASECNA, ATNS, GCAA, KCAA, SODEXAM) and two (**2**) international airlines association (AFRAA & IATA). Discussions were conducted in English and French languages with simultaneous interpretation.

1.3 The meeting, conducted in the English and French languages with simultaneous interpretation, adopted and discussed eight (08) agenda items as reflected in its Report as presented in **Appendix A** to this Working Paper.

## 2 DISCUSSION

**Review of the Conclusions/Decisions of the Second meeting of the  
APIRG Infrastructure and Information Management Sub-Group (APIRG IIM SG/2)**

2.1 The meeting reviewed the status of implementation of the Conclusions and Decisions of the Second Meeting of the APIRG IIM Sub Group held in Dakar, Senegal from 09 to 11 July 2018 and noted that while some conclusions were successfully implemented, others are still to be completed. The meeting therefore urged States/Organizations to undertake the effective implementation of the outstanding conclusions and decisions of the APIRG IIM SG 2<sup>nd</sup> and previous meetings.

**Review of the outcome of the APIRG/22<sup>nd</sup> meeting**

2.2 The meeting was presented with the Conclusions and Decisions of APIRG/22 meeting held in Accra, Ghana from 29 July to 2 August 2019 with focus on those addressing the areas pertaining or linked to AIM, CNS and MET.

***AIM Matters***

2.3 In the area of Aeronautical Information Management AIM the meeting was provided with an update on the AIM Project to support States in the implementation of quality management system (QMS) in a digital/electronic AIM environment through the establishment of an “*AIM Go-Team for the AFI Region*”.

The meeting was informed that a project document was currently under review in order to be submitted to the AFI Plan Steering Committee for further consideration.

***CNS Matters***

2.4 The meeting reviewed the outcome of the APIRG/22 meeting pertaining to the area of Aeronautical Communication, Navigation, Surveillance and Spectrum (CNS) and commended the good progress of the implementation of AIDC, AMHS and ADS-B space in AFI Region.

2.5 The meeting discussed different initiatives by States and from industry. In this regard, the meeting agreed on the need to integrate the implementation of those Regional initiatives in the framework of APIRG project approach.

2.6 The meeting discussed also the sustainability of aeronautical infrastructure and information systems, and noted the needs to continue and reinforce the cooperation and harmonization in planning and speeding up implementation, operation and monitoring of interconnected systems.

***MET Matters***

2.7 The Secretariat presented the outcome of the APIRG/22 meeting in the area Aeronautical Meteorology (**MET**) which gave emphasis to the need for coordination under MET Project 2 and informed the meeting that Senegal had effectively appointed two experts to take the role of the Project Team Coordinators for MET Project 2.

2.8 The meeting was further briefed of the APIRG/22 discussions pertaining to the dissemination of meteorological information in the ICAO Meteorological Information Exchange Model (IWXXM). In this regard, a summary of an AFI IWXXM workshop conducted from 15-16 September 2020 was provided to the meeting. The workshop highlighted the importance of the global document adopted by the ICAO MET Panel (**METP**) in 2016 entitled- “*Guidelines for the Implementation of OPMET Data Exchange using IWXXM*”, document that should be kept aggregated in a version under development to cover regional requirements.

***Coordination between AAO and IIMSGs***

2.9 The meeting was informed that APIRG/22 addressed technical issues related to the IATA survey on Aeronautical Mobile Service (AMS) and implementation of Performance Based Communication and Navigation (PBCS) and therefore noted the need to increase the liaison between the two APIRG AAO and IIM Sub Groups. In this regard, Project Team Coordinators (PTCs) were encouraged to regularly review their project document, with the aim to identify and act upon IIM project linkage with AAO Projects and circulate a linkage matrix amongst Projects Teams in order to prevent duplication and ensure harmonization of the implementation of ASBU modules and threads.

***Funding of IIM Projects***

2.10 The meeting was also informed that APIR 22 discussed issues related to the mechanisms and opportunities of funding IIM Projects and took note of the summary of the requirements of the African Development Bank (AfDB) in its contribution to APIRG/22;

**Status of implementation of the AFI IIM Regional projects adopted by APIRG**

***Aeronautical Information Management Projects***

2.11 Under this Agenda Item, the meeting was provided with the status of implementation of AIM Projects presented by **Kenya**, the PTC of AIM Project 1- *Assessment and development of QMS applied to AIM in AFI States* and **ASECNA** on behalf of **Benin**, PTC for AIM Project 2- *Implementation of Aeronautical Information Exchange Systems (AIXM) (AFI)*.

The Teams has developed the project (Project Description, Project Organization, project Questionnaire...) and planned activities associated with deliverables for the 2021-2023 period, conducted a survey to establish the levels of compliance and implementation of AIM-QMS.

The meeting was reminded that as a technical matter involving interoperability concerns, the successful implementation of AIXM requires the effective participation of a set of experts sufficiently representative of the region.

2.12 During this meeting there was not any report on AIM Project 3- *Implementation of the provision of electronic terrain and obstacle data (e-TOD)* in the AFI Region, since the appointed PTC from **Nigeria** did not attend the meeting and did not give any information on the project. The corrective action in this regard is envisage in Conclusion 3/05: *Operationalization of the APIRG IIM SG COM Project 2 and AIM Project 3* of the IIM/SG 3<sup>rd</sup> meeting.

***Aeronautical Communication Navigation Surveillance and Spectrum Infrastructure and Systems***

**COMMUNICATION Projects**

2.13 The meeting was updated on the work carried out by Projects Teams in the of Aeronautical Fixed and Mobile Services. This update was provided by **Mali** PTC COM Project 1-*Implementation of Ground/Ground Communication (ATS/DS, AIDC, VoIP)*; **South Africa** PTC COM Project 3-*Implementation of Air/Ground communication (HF/VHF voice data, CPDLC)*; **ASECNA** on behalf of **Togo** PTC for COM Project 4-*Integrated Aeronautical Telecommunication Infrastructure*; **Côte d'Ivoire** for COM Project 5-*Assesment of cyber safety and resilience of the ANS system in the AFI Region*.

2.14 The Team coordinators presented to the meeting the status of progress (Development of baseline documents, completion of the development of the survey questionnaire ...) the work assigned to the Projects identified the challenges and informed on them intend future actions.

During this meeting there was not any report on COM Project 2-*Implementation of Ground/Ground communication (AFTN, AMHS)*, since the appointed PTC from Nigeria did not give any information on the project.

### **NAVIGATION Project**

2.14 The meeting was provided by the PTC appointed by **Cameroon** with the update on the Navigation Project. The Team reported to have finalized the development of a questionnaire aiming to gather information on the deployed radio navigation and GNSS infrastructure, and to assist in identifying the availability and reliability of these systems in the AFI region.

### **SURVEILLANCE Project**

2.15 **Ghana** PTC of Surveillance project, reported to the meeting the effective completion of the development of the survey questionnaire aimed to gather information on the deployed surveillance infrastructure as well as access the possibility of sharing surveillance data between neighboring States.

2.36 The PTC reported on initiative for Surveillance Data Sharing in the airspaces along the Gulf of Guinea among Four (4) ANSPs namely, ASECNA, Ghana Civil Aviation Authority (GCAA) Nigeria Airspace Management Agency (NAMA) and The Roberts FIR. The four ANSPs have signed some initial Memorandum of Cooperation (MoC) and have a roadmap for implementation. This Roadmap has also been affected by the COVID-19 pandemic. Though this initiative does not cover the entire AFI, region, it is the belief that the experiences gained by such an initiative can be shared with other states in the hope that it would encourage them to follow suite.

### **SPECTRUM Project**

2.16 The progress of the aeronautical Frequency Management Project – SPEC project including the scope and the actions conducted, was presented to the meeting by **Uganda**, PTC of the project. The meeting noted the challenges faced by the SPEC Project Team members and identified a need to review the draft Terms of Reference, Project Description and the Project planning document.

2.17 The meeting was then informed about the ITU preparatory work plan for WRC-23 (4 topics & 19 agenda items), the outcome of the 1<sup>st</sup> ATU Preparatory Meeting for the WRC-23 and noted the key lessons learnt from WRC-19, the work plan and leadership of ATU to WRC-23 and ATU strategic plan elements including AU COVID-19 action as well as the outcome of the 10<sup>th</sup> ICAO Frequency Spectrum Management Panel Working Group (FSMP WG/10) meeting held from 17- 26 August 2020, to discuss the draft ICAO position for the International Telecommunication Union World Radiocommunication Conference 2023 (ITU WRC-23).

### **AERONAUTICAL METEOROLOGY Project**

2.18 The PTCs for MET Project 1, from **South Africa** and MET Project 2 from **Senegal** presented the activities of their Projects and on the draft Terms of References that had been developed. The presentation from MET Project 1 also highlighted the low level of participation by States in the 2019 AFI Regional SIGMET tests and emphasized the importance of States' participation in the 2020 SIGMET Tests.

2.19 In addition, the meeting also noted the decision made by the ICAO METP/4 pertaining to the WMO guideline for MET Quality Management System (QMS) implementation.  
Decision 3/16: *Adoption of the MET Project 1 and MET Project 2 Terms of Reference and their Projects deliverables for 2021-2022*

### ***Challenges and hurdles***

The main challenges noted by the meeting in the conduct of the project have been identified as but not limited to the following:

- a) Challenges already identified by APIRG /22;
- b) Limited involvement of experts nominated to the groups as well as the lack of response to questionnaires by some States;
- c) Lack of awareness of Team members about subject matters (Cyber safety and resilience of ANS, AMHS, VoIP, AIDC ...);
- d) Technical network connectivity challenges (via Teleconference, GoToMeeting, Skype)

2.20 The meeting invited the Secretariat to disseminate the documents and invited States to respond to the questionnaire in a timely manner and to take the necessary measures for the effective and active attendance of their experts in the APIRG IIM Projects activities

### **Air Navigation Planning, Deficiencies and Reporting in the AIM, CNS and MET Areas**

#### ***Air Navigation Planning e-ANP in the AIM, CNS and MET Areas***

2.21 The Secretariat reminded the meeting of APIRG21 which shared the outcomes of the 2017 Regional Awareness Seminar on the AFI Air Traffic Management (ATM) Volcanic Ash Contingency Plan (VACP) and also APIRG Conclusion 21/35 which urged States to develop and conduct Volcanic Ash exercises using the guidance contained in Appendix F of ICAO Doc 9766 (Handbook on the International Airways Volcano Watch (IAVW)).

#### ***Air Navigation Deficiencies and Reporting in the AIM, CNS and MET Areas***

2.22 The Secretariat presented an overview of his most recent developments pertaining to the AFI Air Navigation Deficiency Database (AANDD) following the discussions during the APIRG22 meeting on the AANDD and the minimum reporting requirements for all air navigation areas. The report included the activities embarked on by the Secretariat to identify the minimum reporting areas for all air navigation disciplines i.e. AIM, CNS, MET, AGA and ATM.

2.23 To shed more light on the required information on the air navigation deficiencies and reporting in the AIM, CNS and MET areas, the meeting was presented with the minimum reporting requirements in the AIM, CNS and MET areas by the Secretariat. The Secretariat also indicated that a workshop will be conducted to sensitize States on these minimum reporting requirements as well as the operation of the AANDD web interface. It was also noted with apprehension, that some States had not appointed focal points for the AANDD.

#### ***Other Air Navigation Issues***

2.24 In this area States and Organizations provide the meeting with initiative that are being conducted at regional or sub regional level

South Africa (through the South African National Space Agency -SANS) designated as Regional Space Weather Centre for the provision of space weather information to national and regional Air Navigation Service Providers (ANSPs) and operators was requested to lead a IIMSG MET Project to deal with tasks related to Space Weather.

IATA presented the African Indian Ocean (AFI) Aeronautical Information Management Action Group (AIM AG), a multi-stakeholder collaborative forum for the purpose of identifying deficiencies and challenges in the AFI aeronautical information and through collaborative engagement between parties develop and implement recommendations and remedial actions.

2.25 ASECNA provided to the meeting an update on Regional Projects on AFI Aeronautical CNS Infrastructure, Systems and Spectrum. In this regard improvement was reported in the implementation of CNS infrastructure including VSAT Networks modernization and interconnection (AFISNET, CAFSAT, NAFISAT/ SADC.2.

Initiative of cooperation were reported such as Cooperation in the Gulf of Guinea (between ASECNA, GCAA, NAMA and the Roberts FIR); AFI North West Area (ANWA) Cooperation; SNMC; ASECNA/ATNS MoU.

Progress in implementing new CNS infrastructure such as AMHS and AIDC implementation with inter regional connection, ASECNA ADS-B project that encompasses ground and space based ADS-B and ASECNA “SBAS for Africa & Indian Ocean” project which is at preoperational step.

2.26 The meeting took note of the information and encouraged States/Organizations to expedite the implementation of the aeronautical CNS infrastructure and information services to achieve a seamless AFI Airspace and to strengthen cooperation for improvement of the aeronautical CNS infrastructure and systems.

The detailed report of the third meeting of the APIRG IIM/SG is presented at **Appendix A** to this Working Paper and the draft conclusion attached at **Appendix B**.

### **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 third meeting of the APIRG IIM/SG;
- b) Approve the Report of APIRG IIM SG/3 together with its Appendices; and
- c) Review and approve the Draft conclusions as presented in **Appendix B**

\*\*\*\*\*END\*\*\*\*\*