



ICAO

SNMC/25 WP 08

INTERNATIONAL CIVIL AVIATION ORGANIZATION

WESTERN AND CENTRAL AFRICA OFFICE

Twenty-fifth Meeting of the AFI Satellite Network Management Committee (SNMC/25)
(Freetown, Sierra Leone, 18-22 December 2017)

Agenda Item 5: Outcomes of APIRG 21st Meeting

Regional Projects with impact on AFISNET

(Presented by the Secretariat)

SUMMARY

This paper presents the outcome of APIRG 21st meeting with focus on the AFI Regional Projects which may have an impact on AFISNET infrastructure, AFISNET operation and maintenance.

Action by the meeting is at paragraph 3:

REFERENCE(S):

- Doc 9750, *Global Air Navigation Plan 5th Edition*
- Report on APIRG IIM/SG meeting
- Summary of Conclusion/Decision of APIRG/21

Related ICAO Strategic Objective(s) and ASBU Performance Improvement Areas and ASBU B0 Modules:

Strategic Objective(s): A – *Safety*, B – *Air Navigation Capacity and Efficiency*,

ASBU PIAs & B0 Modules: All applicable to AIM, ATM & MET and CNS systems

1. INTRODUCTION

1.1 The APIRG 21st Meeting held in Nairobi Kenya from 9 to 11 October 2017 reviewed under its Agenda Item 3-*Performance Framework for Regional Air Navigation Planning and Implementation*, the outcome of the First meeting of the APIRG Infrastructure and Information Management Sub Group (**APIRG IIM SG/1**) in the areas related to aeronautical Communication, Navigation, Surveillance (**CNS**) and Spectrum; Aeronautical Information Management (**AIM**); Aeronautical Meteorology (**MET**).

1.2 The meeting was reminded that the requirements governing planning an implementation of Aeronautical infrastructure and systems services and spectrum provision were identified by the 7th meeting on the AFI Regional Air Navigation service held in Abuja, Nigeria, from 12 to 23 May 1997, the provision of the Special AFI RAN 8th Meeting, Durban South Africa 24-29 November 2008 (Doc 9930, SP AFI/08) and the AFI Regional Plans revised by further APIRG meetings.



2. DISCUSSION

2.1 APIRG/21st meeting reviewed the regional Projects identified by the Infrastructure and Information Management /Sub Group (**IIM/SG**) and approved by the APIRG Projects Coordination Committee (**APCC**) in the matter of Aeronautical Information Management, Aeronautical Communication, Navigation and Surveillance, Aeronautical Spectrum and Aeronautical Meteorology aimed at fulfilling the Air Navigation Service requirements, in line with the AFI Air Navigation regional Priorities and Targets, and the related ICAO ASBU prioritized modules identified by the AFI Region.

2.2 Fourteen (**14**) Regional Projects were identified and approved respectively three (**03**) AIM Projects, nine (**09**) CNS & Spectrum projects and Two (**02**) MET Projects. The meeting also noted the appointment of Project Teams (**PTs**) members and the assignment of Projects Teams Coordinators (**PTCs**).

2.3 In the area of Aeronautical Communication, the regional projects have all a link with AFISNET since they are dealing with service directly supported by the networks.

2.3.1 **IIMSG COM Project 1 & IIMSG COM Project 2** are related to Aeronautical Fixed Service delivering Ground/Ground Communication such as Air Traffic Service /Direct Speech (**ATS/DS**), Air Traffic Service Interfacilities Data Communication (**AIDC**), Voice over Internet Protocol (**VoIP**), Aeronautical Fixed Telecommunication Network (**AFTN**), Air Traffic Service Message Handling System (**AMHS**).

2.3.2 **IIMSG COM Project 3** aims at supporting Aeronautical Mobile Service (**AMS**) by enabling the provision of long range remotely VHF coverage for voice and future datalink.

2.3.3 **IIMSG COM Project 4** plans to implement an AFI Integrated Aeronautical Telecommunication Infrastructure with the aim to achieve interoperability among the AFI aeronautical VSAT networks, develop and implement AFI ATN backbone, provide a common IP based managed network service across the AFI region and an efficient support to operational data and potentially voice communications.

2.3.4 **IIMSG COM Project 4** addresses the issue on Cyber Safety and Resilience for the Air Navigation System widely developed under WP 09.

2.4 The Regional Navigation and Surveillance projects identified to be implemented in the region are candidate to the resources available on AFISNET for data transmission and sharing (Augmented GNSS Data, Surveillance (SSR & **ADS-B**) data sharing, interconnection of **ADS-C** systems).



2.5 In the area of Aeronautical Information Management (**AIM**) and Aeronautical Meteorology (**MET**) the regional IIM SG AIM Project 2 has been developed to implement Aeronautical Information Exchange Systems (**AIXM**) while the exchange of Meteorological data such as OPMETs will demand an increased capacity of the transmission channels. Therefore, AFISNET being the main medium for these exchanges needs to be upgraded with consideration of the increasing capacity and time sensitive operational requirements.

2.6 AIM/CNS and MET services being provided to support Air Traffic Management (**ATM**), linkages should be found between some ATM projects with AFISNET with regard to the requirements for the provision of Air Navigation Service (**ANS**).

2.7 The APIRG Infrastructure and Information Management Sub Group (**IIM SG**) and the Airspace and Airport Operation Sub Group (**AAO SG**) are working in this direction to refine the requirement and clearly identify the linkages between projects. In so doing the impact of the APIRG project on the regional aeronautical satellite networks will be completely identified.

The list of APIRG IIM SG Project will be attached as Appendices to the report of APIRG/21 which is under finalization.

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 importance of AFISNET in the AIM/ATM & MET services provision in the region;
- b) Review the detailed Regional Projects, identify the common areas of interest to AFISNET and consider the impact of these project in there-engineering process of AFISNET
