INTERNATIONAL CIVIL AVIATION ORGANIZATION

Third Meeting of APIRG Infrastructure and Information Management Sub Group (IIM/SG/3)
(Virtual Meeting, 12-14 October 2020)

Agenda Item 4: Status of the implementation of the regional projects adopted by APIRG

: Report on progress made by the Radio Navigation & GNSS project team

(Presented by Cameroon, Navigation project Team Leader)

SUMMARY
This paper presents paper reports on the progress made by the Radio Navigation & GNSS Project team of the IIM. It gives information about the working methods of the project team as well as work done so far.   **Action by the meeting is at paragraph 3**
REFRENCE(S):   ▪ Report of the 2nd meeting of IIM SG (APIRG IIM SG/2)   ▪ APIRG 22 report
Related ICAO Strategic Objective (s): A – Safety, B – Air Navigation Capacity and Efficiency, D – Economic Development of Air Transport, and E – Environmental Protection.   **Related ASBU KPIs & B0 Modules: B0-APTA, B0-FRTO, B0-CDO, B0-CCO, PFF-CNS**

1. INTRODUCTION

1.1   Following the change of working method of APIRG into project approach, a number of project teams were formed and approved by APIRG, including the Radio Navigation & GNSS project team.

1.2   The objectives of the team were to, in the framework of the technologies Roadmap for Navigation defined in the GANP and the AFI strategy, assist States in the implementation of Aeronautical Navigation Service by the effective implementation of:

- Aeronautical conventional Radio Navigation Systems (VOR, DME ILS);
- Global Navigation Satellite systems (GNSS-core and augmented), in accordance with the operational requirements of ICAO Annex 10 Volumes I Annex 11 Air Traffic Service and the relevant supporting guidance documents (Doc 8071 Manuel on Testing of Radio Navigation Aid, Doc 9849 Global Navigation Satellite System (GNSS) Manual.

1.3   The scope of our work was identified as, the provision of aeronautical Radio Navigation and Global Navigation Satellite Systems to aircraft to cover all Airspaces and all phases of flights.

1.4   The project team is composed of ANS experts from the following States and organizations: Cameroon, Côte d'Ivoire, Senegal, Kenya, Mauritania, South Africa, Uganda, IATA and ASECNA.

2. DISCUSSION

2.1   The work of the project team has mainly been by electronic mail and telephone exchanges.
        In the scope of this project, it was found necessary to carry out a survey of existing radio navigation
        and GNSS infrastructure in the AFI region. In view of this, the team has so far, finalized a
        questionnaire, which would assist in obtaining relevant data to be used as a reference in the project.
        The questionnaire is attached.

2.2   The questionnaire would, among other things, enable us to gather information on the deployed radio
        navigation and GNSS infrastructure, i.e. VOR, DME, ILS, ABAS, GBAS, SBAS, and assist in the
        identification of the availability and reliability of these systems in the region.

2.3   Moreover, the radio navigation and GNSS project team has taken cognisance of an important project
        led by ASECNA. The following documents related to the referenced project are proposed as
        information papers
        -   SBAS for Africa and Indian Ocean
        -   Benefits of SBAS services in Africa

2.4   The challenges faced by the project team are mainly related to:
        -   effective participation and availability of experts to assist with project deliverables; and
        -   the project baseline questionnaire to be sent to AFI States.

3. ACTION BY THE MEETING

3.1   The meeting is invited to:
        -   Take note of the information provided in this paper, in particular the progress of the project.
        -   Note the challenges encountered by the project team and provide any recommendations for
            consideration.
        -   Encourage states/ANSPs to kindly provide responses to the questionnaire as soon as possible
            for the team to make progress.
        -   Request ICAO (ESAF and WACAF) regional offices to assist in circulating and receiving the
            questionnaires from all possible respondents.

3.2   **Draft Conclusion/Decision 3/xxxx**: **Radio Navigation and GNSS infrastructure in the AFI
region
That;**
        -   Secretariat to send the project baseline questionnaire to AFI States
        -   States to confirm the list of project members and verify availability/validity of their designated experts
            and to provide feedback on the project questionnaire
        -   states/ANSPs to provide responses to the questionnaire as soon as possible for the team to make
            progress.

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