

**INTERNATIONAL CIVIL AVIATION ORGANIZATION**
**Fifth Meeting of the APIRG Infrastructure and Information Management Sub-Group  
(IIM/SG5)**
*(Virtual, 26 - 29 July 2022)*
**Agenda Item 3.1: Status of implementation of applicable ASBU elements**
**WP3.1C4 Summary of achievements of IIM COM PROJECT.4: Integrated  
Aeronautical Telecommunication Infrastructure**
*(Presented by Togo)*

<b>SUMMARY</b>
<p>This working paper outlines the progress of IIM SG COM 4 project “Integrated Aeronautical Telecommunication Infrastructure”.</p> <p>Action by the meeting in paragraph 3</p>
<p><b>REFERENCE(S):</b></p> <ul style="list-style-type: none"> <li>▪ APIRG/24 Report</li> <li>▪ IIM PTCs Coordination Meetings Reports</li> </ul>
<p>Relates <b>ICAO Strategic Objectives: A – Safety; B – Air Navigation Capacity and Efficiency</b></p>

**1. INTRODUCTION**

- 1.1 The activities of IIM SG COM 4 Project “Integrated Aeronautical Telecommunication Infrastructure” were actively resumed since the beginning this year to work on the Develop an AFI interoperable seamless telecommunication infrastructure to support ATM, AIM, MET and aeronautical telecommunication services
- 1.2 This paper summarizes the key achievements and the way forwards for review and discussion by the meeting

**2. DISCUSSIONS**
**2.1. Summary of achievements:**

- 2.1.1. The plenary meeting was organized on 06 May 2022 in order to reactivate the project. It relied on a working note and provided an overview of the following points:
  - **Objectives:** Develop an AFI interoperable seamless telecommunication infrastructure to support ATM, AIM, MET and aeronautical telecommunication services.
  - **Scope:** 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
  - Provide an efficient support to operational data and potentially voice communications
- Metrics: Coverage of IP infrastructure with capability to support forthcoming ATM services (AMHS, SWIM, ...)
- Goals: Ensure that the aeronautical services are provided in compliance with ICAO SARPs
- Strategy:
  - ✓ Upgrade of AFI VSAT networks to support the current and forthcoming ATM services (AMHS, SWIM, ...)
  - ✓ Implement a global IP infrastructure in the near future to deploy forthcoming ATM services (AMHS, SWIM) including AFI addressing plan
  - ✓ Implement a global security policy for a secured operation
  - ✓ Training and qualification of Technical and operational staff
- ✓ ICAO and Designated Experts to conduct Technical workshops to support the development of the project.

2.1.2. At this stage the following conclusions were taken for the rest of the project :

- update its work program and to redistribute the related tasks among the active members of the project team.
- It was also agreed to update the draft questionnaire and forward the questionnaire to ICAO for validation at the next meeting of the SG/IIM.
- The referential and normative framework relating to the project must be circumscribed.
- The work must be carried out in accordance with the 6th edition of the GANP, in particular, the applicable ASBU elements in CNS area in the deployment framework of the ASBU module.
- The point on data volume and point-to-point and point-to-multipoint flow topology inherent in current and future ATM, MET, AIM applications and services should be input elements for solution sizing.
- The project will consider a global vision of an integrated ATM intranet cloud service, including performance monitoring, AFI addressing plan, etc.
- Implement a global security policy for a secure operation considering the results of the COM5 project
- In order to support the development of the project, the request for technical workshops led by ICAO/or designated experts was strongly recommended in order to be well highlighted in accordance with the ASBU module deployment sheet.

## **2.2. Next step:**

### 2.2.1. Project Deliverables:

- Develop and update a complete project specification – **08/2022**
- Update and transmit the questionnaire **09/2022**
- Carry out an assessment of AFI VSAT networks and infrastructures, as well as the results of the relevant reengineering project in the region in terms of compliance with current and future requirements for their future seamless integration of AFI VSAT networks. **10/2022**
- Realization of a GAP analysis to determine the level of compliance with the requirements of GANP-ASBU-GRPE TECHNOLOGIE-FIL COMS, and open up prospects for the deployment of the GANP ASBU GRPE INFORMATION-FIL SWIM module aimed at ensuring the global prospects of interoperability of the networks of the region and their interfaces with adjacent regions. **11/2022**
- Organized technical workshops to support the development of the project. **11/2022**
- 6-Design principle and guidance documents for the development of an integrated regional project for the evolution of AFI networks towards a seamless interoperable and cyber-secure AFI ATN IPS global network 07/2023
- 7-Provide cybersecurity guidance documents and best practices. 07/2023

## **3. ACTIONS BY THE MEETING**

### 3.1 The meeting is invited to:

- a) Take note of the progress made so far by the project team and the forwards.

----- END -----