



INTERNATIONAL CIVIL AVIATION ORGANIZATION

Seventh Meeting of the APIRG Infrastructure and Information Management Sub-Group (IIM/SG7)

Dakar, Senegal, 5 - 8 August 2024

Agenda Item 3 : Achievements in Infrastructure and Information Management**3.3. Implementation of ASBU elements and Achievements of IIM Projects****WP3.3G Progress report of the APIRG IIM SURV Project**

(Presented by SURV Project Team Coordinator)

SUMMARY

This working paper provides an update on the progress made by the Surveillance Project team of the IIM. It details the team's working methods and the work completed to date.

Action by the meeting in paragraph 3

REFERENCE(S):

- Global Air Navigation Plan (GANP)
- Report of the 6th meeting of IIM SG (APIRG IIM SG/6)

Related ICAO Strategic Objective (s): **A** – *Safety*, **B** – *Air Navigation Capacity*

Related ASBU elements: **B0-ASUR, B0 -SNET, B0-ASEP**

1. INTRODUCTION

1.1. The objectives of the team were to assist States, within the framework of the technological Roadmap for Surveillance defined in the GANP and AFI strategy, in implementing:

- a) Secondary Surveillance Radar Mode S (SSR) in accordance with the operational requirements of Annex 11 (Air Traffic Service), Doc 4444 (Procedures for Air Navigation Services), Annex 10 Volume IV, and its supporting documents.
- b) Automatic Dependent Surveillance Contract (ADS-C).

- c) Automatic Dependent Surveillance Broadcast (ADS-B), both ground and space-based, as well as Multilateration (MLAT).
- d) Surveillance Data Sharing.

1.2. The team's activities were organized through virtual meetings which were held bi-monthly. Additionally, information about the team's activities were disseminated by electronic mail and WhatsApp platforms. Sub teams were created from time to time to address specific project needs.

2. DISCUSSIONS

Key achievements

2.1. Development of AFI Surveillance Infrastructure Survey Questionnaire.

- a) A questionnaire to assess the level of surveillance infrastructure in the AFI region was developed and sent to the ICAO Regional office for distribution to the various states.
- b) The collected data will help evaluate the current state of surveillance capabilities and identify areas needing improvement or support. The team is yet to receive the full complement of the responses to the questionnaire for analysis.

2.2. Project Documentation Repository.

- a) A repository of all relevant ICAO documents related to the Surveillance project has been created.
- b) The repository serves as a centralized resource, ensuring that all team members and stakeholders have easy access to important information and reference materials. It also facilitates efficient collaboration and informed decision-making for the project.

2.3. Matrix of Project Linkage with other IIM projects.

- a) A matrix outlining the linkage between the Surveillance Project and other IIM and AAO projects has been developed.
- b) This matrix provides a clear overview of how the Surveillance Project aligns and collaborates links with various other initiatives within both the IIM and AAO frameworks. It also helps ensure coordinated efforts and synergies across related projects for enhanced effectiveness and efficiency.

2.4. Regional Workshop on Mode S Interrogator Identification codes and 24-bit address allocation

- a) The ICAO WACAF regional office successfully organized a workshop focused on the assignment Mode S 24-bit addresses and II Codes. The workshop was hosted by the Ghana Civil Aviation Authority.

- b) The workshop aimed to enhance understanding and implementation practices related to Mode S 24-bit addresses and II Codes. This will foster improved operational standards and coordination within the AFI region.

2.5. AFI Surveillance strategy – Draft framework

- a) Based on the importance of being guided by a strategy, the team begun the process of reviewing an existing AFI Surveillance strategy document. The main aim of this exercise was to have a reference document that would guide the AFI region as far as Aeronautical surveillance is concerned.
- b) The reviewed version would also ensure that the strategy meets currents and future trends and needs. This strategy document is expected to be completed by the end of the year.

2.6. Project Cost Estimation

The cost estimate for the Surveillance project activities has been developed using the template provided by the ICAO Secretariat as a guide.

Status of implementation of ASBU elements in the scope of the project

- 2.7. The table below shows the status of implementation of the ASBU element in the surveillance project.

Ref. ASBU element	Deliverable	Beneficiary States	Status
ASUR-B0/1 ASUR – B0/3	Project Questionnaire	All	Completed
ASUR – B0	Project Documentation	All	Completed
	Project Link with other IIM projects	All	Completed
ASUR-B0/1 ASUR – B0/3	AFI ADS-B Mandate	All	Pending
ASUR – B2/1	Mode S interrogator Identification code and 24 bits addresses allocation	All	Completed
ASUR-B0/1 ASUR – B0/3 ASUR – B2/1	AFI Surveillance Strategy	All	On-going
	SURV Project cost estimation	All	Completed

Implementation challenges

- 2.8. Lack of participation from subject matter experts from various states and organisations poses a significant challenge to the work of the team. Without the input of these experts, the project may miss out on valuable knowledge and experience.

3. ACTIONS BY THE MEETING

3.1 The meeting is invited to:

- a) Take note of the work done by the surveillance team
- b) Encourage states to nominate experts to the surveillance project and encourage members who are already part of the team to actively participate in the project team's work.
- c) The ICAO regional office to kindly assist with the dissemination and collection of related information from States.

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