**Twenty-Fourth Meeting of the AFI Planning and Implementation Regional Group
(APIRG/24)
(Virtual – 2 to 4 November 2021)**

Agenda Item 3: **Performance Framework for Regional Air Navigation Planning and Implementation**

New AFI SSR Code Management Plan Implementation

(Note presented by ASECNA)

SUMMARY	
This note recalls the actions taken by ASECNA to implement the new SSR code management plan. Action by the meeting: Encourage all centers to share information on problems encountered during the trial period (60 days) in order to support them in a smooth transition.	
REFERENCE(S)	• Decision 21/07: Update of the AFI secondary surveillance radar (SSR) code allocation plan and assignment procedures • Decision 22/03: Revised AFI SSR Code Management Plan (CMP). • Conclusion 22/04: SSR Code Occupancy Time • Decision 22/05: Collection of data on traffic volumes and patterns in the AFI Region and the interface with other ICAO Regions. • Decision 22/06: Workshops to Facilitate Implementation of the Revised SSR Code Management Plan.
Strategic Objectives	*A - Safety and B-Capacity and Efficiency*

1 INTRODUCTION

1.1 In accordance with Decision 22/06, ICAO organized a workshop on the implementation of the new AFI SSR Code Management Plan from January 27 to January 30, 2020 at the request of the ASCAAR project team and an implementation action plan was developed. Unfortunately, due to COVID-19, the process was not completed as planned. However, at the ASECNA level, some actions have been taken.

2 DISCUSSION

2.1 Situation at ASECNA level

In 2007, ASECNA launched an extensive program to equip the ATS centers under its responsibility with secondary surveillance radar systems with Mode S functionality and air traffic management (ATM) systems. As a result, the first equipped sites were able to issue their SSR

code from the AFI SSR code allocation list in ATM Table II-AFI-2.

Whereas subsequent sites were unable to find an appropriate SSR code allocation due to the outdated AFI SSR Code Management Plan, this situation led to problems such as SSR code duplication alerts from ATM systems and difficulties in maintaining radar track correlations in some cases. this situation posed a serious threat to air traffic with numerous controller reports.

As an illustration, real-life situations were experienced with the Dakar and Nouakchott ATS centers when the Nouakchott radar was put in service. Since the two centers have overlapping radar coverage, it was found that when a flight plan was activated by Dakar, it was correlated with another flight operating in Nouakchott airspace and vice versa.

Subsequent investigations revealed that both centers had the same set of SSR codes in their ATM system configuration. Local changes were made to resolve the problem.

2.2 ASECNA's preparation for the implementation of the new SSR Code Management Plan

After the workshop held in Nairobi in January 2020, which focused on the development of the AFI SSR code management plan (CMP), ASECNA held several meetings by videoconference with all the centers concerned and developed its own roadmap that includes all the actions of the roadmap for the region. This roadmap can be summarized in the following four steps:

− **Step One**: Ensure that the number of codes assigned, and the time to occupy a code are sufficient and conduct a safety study to identify and assess potential hazards associated with changes to the ATM systems database.
− **Step 2**: Evolve the ATM back-up system in line with the new SSR codes assigned to the State and make air traffic controllers aware of the new AFI CMP, especially when it comes to manually assigning an SSR code
− **Step 3**: Replace the current configuration for SSR assignment in the operational ATM system database to meet the new AFI CMP, and then perform a pre-implementation phase within a 60-day period for observation purposes to identify other possible hazards
− **Step 4**: Move to implementation after acceptance/approval by the Civil Aviation Authorities of the safety assessment file related to the change and after taking into account the situation of our adjacent centers by signing the LoAs.

3 ACTION TO BE TAKEN

3.1 The meeting is invited to:

• take note of the information provided;
• Encourage all centers to share information about problems encountered during the 60-day trial to help each center make a smooth transition.