International Civil Aviation Organization

MIDANPIRG/22 & RASG-MID/12 Meetings

(Doha, Qatar, 4 – 8 May 2025)

Agenda Item 5.3: ANS (AIM, PBN, AGA-AOP, ATM-SAR, CNS and MET)

IRAN ATSEP EXPERTS ABILITY TO ADDRESS CHALLENGES RELATED TO ATM AUTOMATION & SURVEILLANCE SYSTEM

(Presented by Iran)

SUMMARY

The paper is intended to share Iran experiences on its step forward plan for addressing some problems of outdated ATC Automation and Surveillance systems.
According to the MID Region Surveillance Plan, Iran has developed a strategy to enhance ATM surveillance services. However, due to certain limitations, acquiring modern systems is not feasible. Consequently, we are addressing this challenge by leveraging the expertise of ATSEP.

REFERENCE

- MID DOC 013: MID REGION SURVEILLANCE PLAN
- GLOBAL AIR NAVIGATION PLAN

1. INTRODUCTION

1.1 ATC Automation and Surveillance systems in Iran are outdated and There is an insufficient supply of spare parts to PM (Preventive Maintenance). Although the acquisition and improvement of ATM systems is essential, obtaining a new automation system is not feasible. As a result, the ATSEP specialists in Iran decided to address these challenges by leveraging their own knowledge and skills.

2. DISCUSSION

2.1 The Iranian Airport and Air Navigation Company, in partnership with academic institutions, has undertaken the following actions.:

- design, development and installation of MSSR Mode S RADAR in ABADAN (OIAA) airport to improve surveillance coverage in south-west of Tehran FIR and backup of Ahwaz radar in this area.
- installation and commissioning of three RADARs by ATSEP personnel without any assistance from RADAR manufacturing companies.

- design, development, and implementation of the Visual Surveillance Display (VSD) system in the control towers of various airports for Air Traffic Control (ATC) personnel has been completed. It is important to note that the VSD system has superseded the previous Air Move Display (AMD) system. In contrast to the former AMD system, the VSD system offers advanced features, including the capability to receive and process Automatic Dependent Surveillance–Broadcast (ADS-B) signals, among others.
- design, development and implementation of EFS (Electronic Flight Strip) in Tehran ACC. The installation of EFS has brought some advantages in terms of ATS and commercial aspects, such as:
    a. EFS system has been replaced the strip printer paper
    b. ATC personnel can modify Flight data via EFS application
    c. the EFS system provide significant assistance in more accurately calculating flight statistics and related financial statements for the commercial sector.

3. ACTION BY THE MEETING

3.1 The meeting is invited to note the information contained in this paper.

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