



International Civil Aviation Organization

MIDANPIRG/18 and RASG-MID/8 Virtual Meetings

(15-22 February 2021)

Agenda Item 5.1 Global and Regional Developments Air Navigation Developments

BAHRAIN NEW AREA CONTROL CENTRE

(Presented By The Kingdom Of Bahrain)

SUMMARY

The paper provides information on the progress of Bahrain New Area Control Centre which is launched as part of the National Development Program through the government action plan for modernization of air navigation infrastructure and facilities within the full commitment of the Kingdom of Bahrain to the international agenda and trends towards the achievement of the Sustainable Development Goals strategy, serving the airspace users within Bahrain Flight Information Region with the objectives of enhancing safety, efficiency and capacity in the airspace, coping with the global air navigation plan, avionic developments and accommodating anticipated traffic growth in the region.

1. INTRODUCTION

1.1 In 2018, as a part of the Ministry of Transportation and Telecommunication's Strategy for (2019-2022) for the modernization of air navigation infrastructure towards harmonized and interoperable Air Traffic Management Systems, Bahrain has launched a major project for a complete modernization of air traffic management systems comprising a new building for an Area Control Centre that accommodates a complete state-of-the-art air traffic management system featuring cutting edge CNS/ATM technologies with the objectives of enhancing safety and efficiency of air traffic services in line with the Global Air Navigation Plan, users changing demands and the anticipated traffic growth in the region.

1.2 This information paper, provides a brief description of the Bahrain's new Area Control Centre project and more details will be presented to the meeting through a power point presentation.

2. DISCUSSION

2.1 Bahrain is the Air Navigation Service Provider in Bahrain FIR with more than six decades of successful ATS management and operations. Throughout these decades, the development of the services including the introduction of state-of-the-art Air Traffic Management infrastructure has been a continuous investment practice for serving the dynamic traffic flows in the region.

2.2 During the 1950's, Bahrain established its first Area Control Centre to provide air traffic services within Bahrain FIR. In order to cope with the developments of the international air navigation service and the traffic growth, Bahrain continued to invest in improving the infrastructure and established a new Area Control Centre by the late 1970's. In 1999 a new Area Control Centre was built with a completely new ATM System. In 2012 a major ATM system upgrade was completed (currently operational), this upgrade has enhanced safety, efficiency and capacity of air traffic in Bahrain FIR.

2.3 In 2018, Bahrain has launched a major project for a complete modernization of air traffic management systems comprising a new building for an Area Control Centre that accommodates a complete state-of-the-art air traffic management system.

The new Area Control Centre will be equipped with an integrated air traffic management system using the latest technology in the air navigation field highly customized to provide air traffic control services at Bahrain International Airport and Bahrain Flight Information Region to ensure highest levels of air traffic safety, efficiency, capacity and to meet airspace user's demands. It includes highly advanced ATM systems for processing radar information and flight data, in addition to an integrated voice communication system and an integrated recording system along with other essential supporting systems.

The new ATM system will be connected to new transmitter and receiver air-ground communication stations which has been put into operation in September 2020.

2.4 The completion of the construction works is expected to be by the end of March 2021. The centre's area is 3120 m². The ACC room has 32 controller positions (expandable), 4 assistant control positions and 2 integrated supervisory and management consoles. The total area of the area control centre and the engineering equipment room is 4 times bigger capacity than the current facility.

2.5 The total cost of the project including the new communication infrastructure is at 31 Million U.S. Dollars.

2.6 The installation, testing, commissioning and transition are planned for completion by the second quarter of 2022 where the centre will be fully operational.

2.7 The current Area Control Centre will be maintained as back-up centre for use in case of emergency, additionally as a simulator training centre as the project includes a complete upgrade of the current equipment for these purposes. The new center will have complete independence in terms of electric power, technical systems and redundant external communication lines to ensure the safe and continuous operations without any service interruption.

3. ACTION BY THE MEETING

3.1 The meeting is invited to note the contents of this Information Paper.