KINGDOM OF BAHRAIN

Ministry of Transportation and Telecommunications





Civil Aviation Affairs

New Area Control Centre & Air Traffic Management Systems



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A: New Area Control Centre & Air Traffic Management Systems





A: New Area Control Centre & Air Traffic Management Systems

- The new Area Control Center is one of the important infrastructure development projects launched by Bahrain Ministry of Transportation and Telecommunications as part of the National Development Agenda 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 Gaols 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 developments and accommodating anticipated growth in air traffic in the region.
- The total cost of the project including the new communication infrastructure is at 31 Million U.S. Dollars.
- The center 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 the highest levels of safety and efficiency, in order to keep pace with the anticipated growth of air traffic over the coming years, to align BCAA Air Navigation Modernization Strategy with Global Air Navigation Plan and the ICAO MID Region Air Navigation Strategy.



A: New Area Control Centre & Air Traffic Management Systems

- The ATM System includes advanced systems for the processing of radar information and flight data, and other information systems necessary for the execution of air traffic control services that are based on flight trajectory surveillance, ADS/Data Links and PBN concepts.
- Through a new state-of-art integrating voice control and communication system (IVCCS) the system will be connected to new transmitter and receiver air-ground communication stations which is operational since September 2020.
- The new centre will have complete independence and resiliency in terms of electric power, technical systems and redundant external communication lines to ensure the safe and continuous operations without any service interruption.

B: New Area Control Centre Building



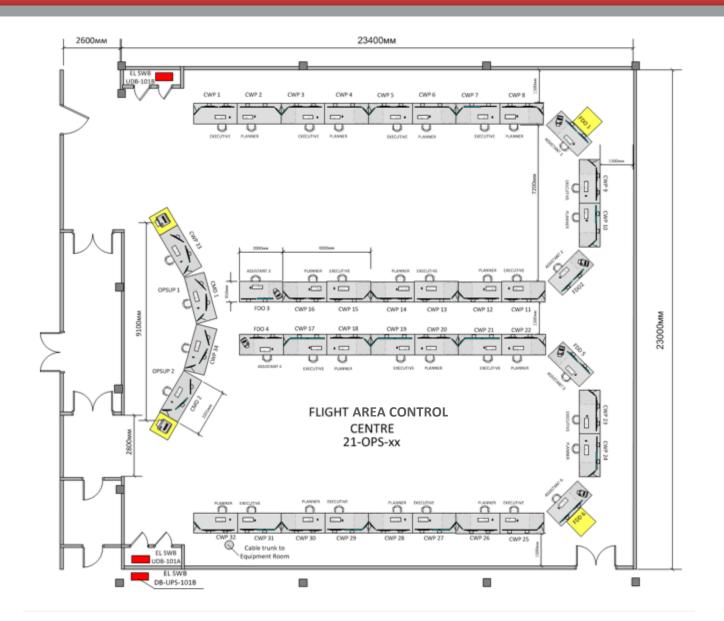
Project Overview	
Project Starting Date	21 October 2018
Building-Project Completion Date	First Quarter of 2021
New ACC Area	3120 m ²
Equipment Room Capacity	87 Racks (Expandable)



Project Overview	
Starting Date	19 April 2020
Completion Date	19 April 2022
Controllers Positions	32 Positions (Expandable)
Assistants Positions	4 Positions
Supervisors Positions	2 Positions
Simulator Positions	10 Positions

C: Air Traffic Management Systems - Area Control Centre (ACC)

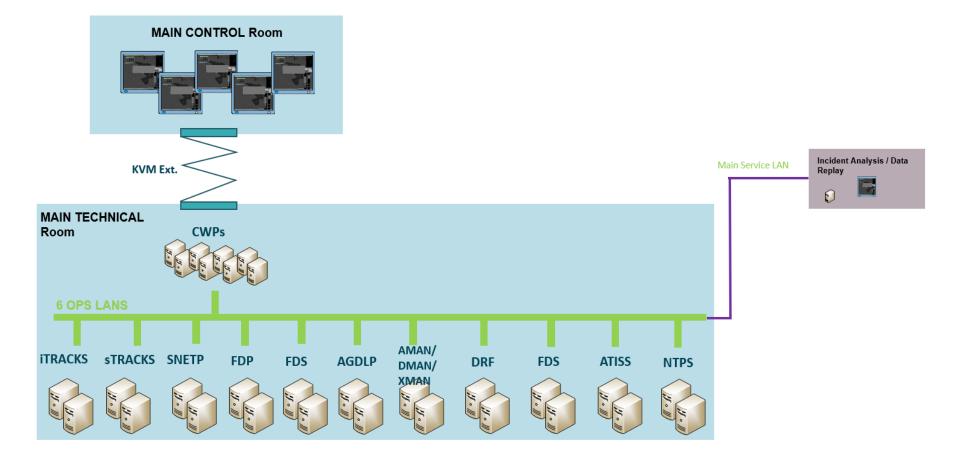




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C: Air Traffic Management Systems

Overview: Main System



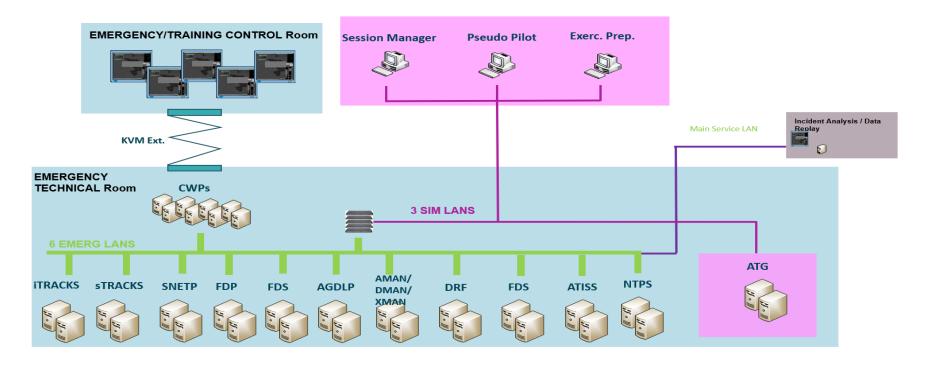
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Ministry of Transportation and Telecommunications

D: Emergency Back-up Centre & Simulator Training Centre

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- 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.



Thank You

