KINGDOM OF BAHRAIN Ministry of Transportation and Telecommunications



# **Bahrain Civil Aviation Affairs**

#### **Tower Simulator for Air Traffic Control Project**



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#### **JANUARY 2021**

Maniney of Interportation

Air Traffic Control Approved Training **Organization Certification** 



#### Introduction





وتزازة المواصلات والانصالات Ministry of Transportation and Telecommunications

# **A: Current Challenges**



• External private entity to conduct the simulator training



- No local training before ATCOs go to live
- Incapability of practice on emergency/new scenarios & any airspace changes

# **B: Tower Simulator Overview**







- 240° Physical view, with 360° 3D realistic view
- High resolution simulation of Bahrain International Airport
- 2x Controller Positions
- 2x Pseudo Pilots Positions
- 1x Supervisor Position
- 1x Exercise Development Position
- 7x Simulation of subsystems i.e.
  weather display, VCCS,
  ASMGCS, Radar Display, Navaids
  status ...

### **B:** Tower Simulator Overview





## **C: Implementation Benefits**



- Stand-alone system under the responsibility of ATC
- Higher training chances on different scenarios
- Simulated functions replicate closely the real-life scenarios
- Dynamic weather & visibility simulation, fully configurable
- Recording capability of full exercises for future playback & training analysis purposes





- The system has been successfully installed at the Control Tower
- ATCOs conducted the initial trainings on the system
- The meeting is invited to take note of the information provided in this presentation and encourage States to exchange information on the implementation of Tower Simulators and lessons learned

# Thank You

