



الهيئة العامة للطيران المدني  
CIVIL AVIATION AUTHORITY  
قطر QATAR



ICAO

# MIDANPIRG/22 & RASG-MID/12

Doha, Qatar | May 4-8, 2025



# **QCAA's Vision for Global Excellence:**

## **Leveraging Advanced Technologies in Air Traffic Services**

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# Introduction

## Presentation Objectives:

- 01** Current Status
- 02** Overview of the QATCC project
- 03** Importance for Qatar's aviation



## Current Status:

To ensure the requirements for the Doha FIR (DFIR) project were met and exceeded, multiple projects have been implemented, and future additions are in the pipeline:

- ATM system upgrade
- Airspace Redesign (FIR and TMA)
- ACS rated ATCO training and upstaffing
- Enhanced ATC simulation platform
- Enhanced ATC network infrastructure upgrades
- Enhanced Radar Surveillance capabilities throughout Qatar
- ATFM Unit implementation

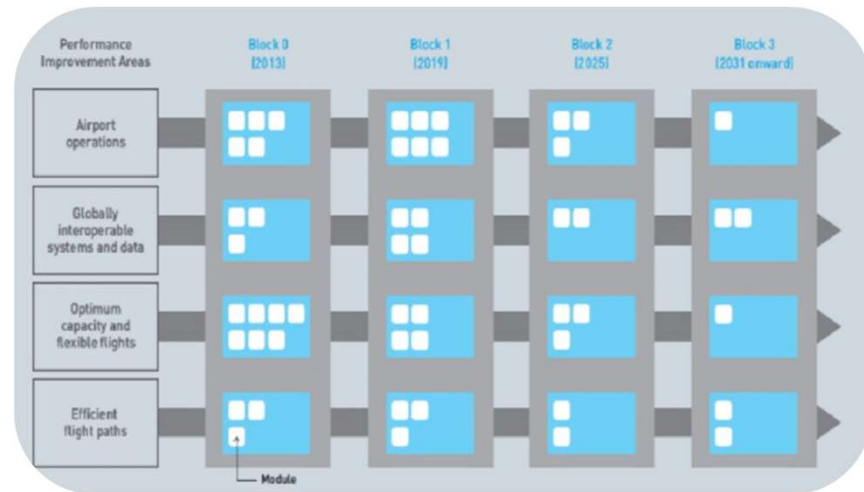
This has ensured the QCAA is at the cutting edge of ATM innovation, not only in the GCC and MENA regions, but worldwide.



## Enhancements in Progress:

To ensure the QCAA meets and exceeds future ASBU (Aviation Block System Upgrade) requirements:

- ACS rated ATCO upstaffing
- ICWP project
- GBAS project
- UTM project
- QATCC project
- Digital Tower project

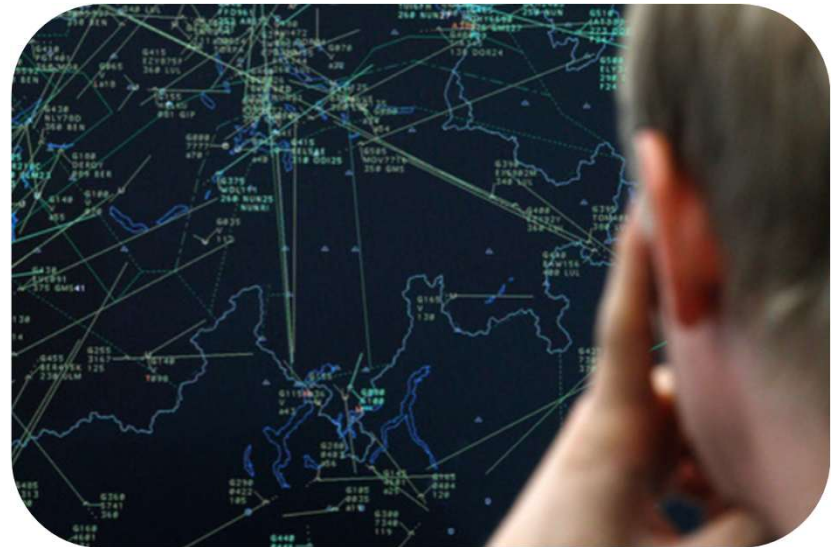


## Enhancements in Progress (Staffing):

To ensure the QCAA meets **and exceeds** future ASBU requirements:

### 01 | ACS rated ATCO upstaffing

The QCAA has secured a long-term partnership for the employ and training of ACS rated ATCOs from ENAV SpA and Fusion Qatar Technology. While in parallel training its own resources.



## Enhancements in Progress (ICWP):

To ensure the QCAA meets **and exceeds** future ASBU requirements:

### 02 | ICWP project

The QCAA has contracted Honeywell to provide a state-of-the-art ICWP system for HIA and DIA towers that will provide ASMGCS functionality up to Level 5 and with seamless integration with multiple systems including the new ATM and simulation platforms.

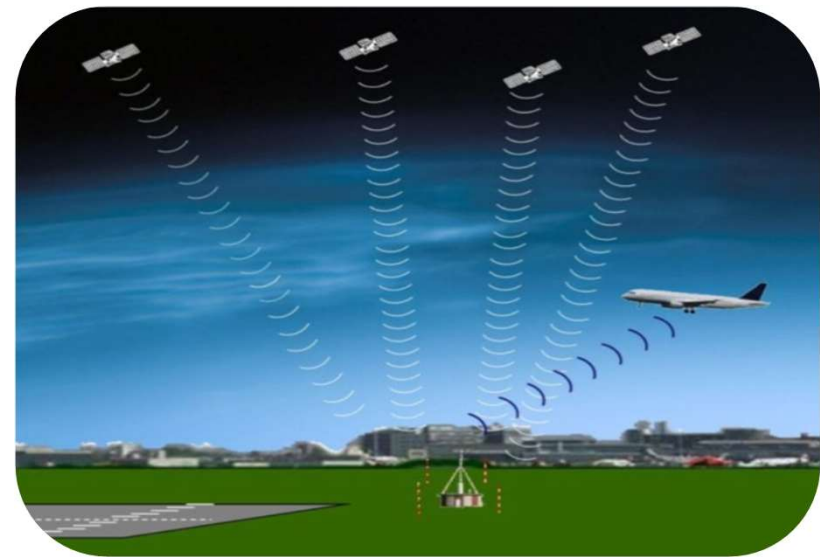


## Enhancements in Progress (GBAS):

To ensure the QCAA meets **and exceeds** future ASBU requirements:

### 03 | GBAS Project

The QCAA is currently finalizing the requirements for a new GBAS system for HIA and DIA airports that will be able to provide advanced approaches (curved, variable glide slope, etc.) and optimized low visibility operations. This will be the first in the region.





## Enhancements in Progress (UTM):

To ensure the QCAA meets **and exceeds** future ASBU requirements:

### 04 | UTM Project

The QCAA is currently in the tender phase for a new UTM system for the Doha FIR (DFIR), that will enable the safe integration of UAS operations with legacy civil aviation in a safe and controlled manner.



## Enhancements in Progress (QATCC):

To ensure the QCAA meets **and exceeds** future ASBU requirements:

### 05 | QATCC Project

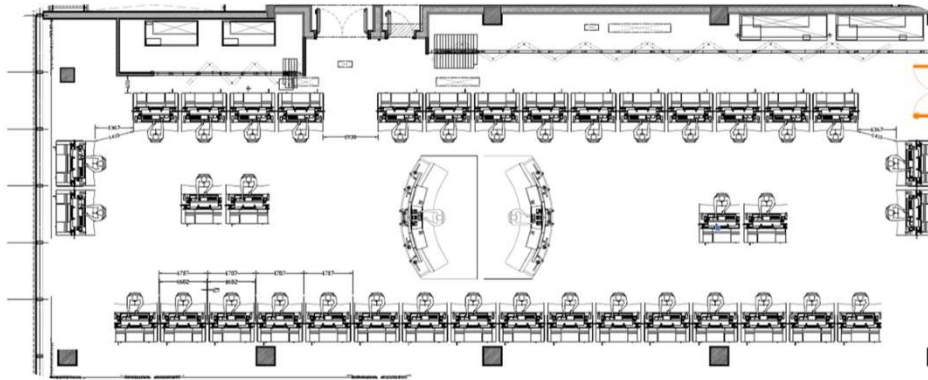
The QCAA is currently in the implementation stage of various sub systems as part of the greater QATCC project. This project is the premier enabler in further transforming Qatar ATC into a world leading ANS provider. A new ACC (that will later become the contingency room) commenced operations in Q4 2024.



## QATCC Project:

This project is the premier enabler in further transforming Qatar ATC into a world leading ANS provider. The 8 main deliverables of the QATCC project are to provide the following:

1. An operational ATC radar control facility providing both TMA (APP) and Area (ACC) capability and/or services – Inclusive of a new ATM system that can accommodate 40 or more CWPs.



## QATCC Project:

The 8 main deliverables of the QATCC project are to provide the following:

2. An operational MER (Main Equipment Room) supporting the current operational equipment and new equipment as and where necessary.



## QATCC Project:

The 8 main deliverables of the QATCC project are to provide the following:

3. An Audio/Video Room - Equipped with recording and replay systems necessary for investigations and new ATFM Office with enhanced capabilities.





## QATCC Project:

The 8 main deliverables of the QATCC project are to provide the following:

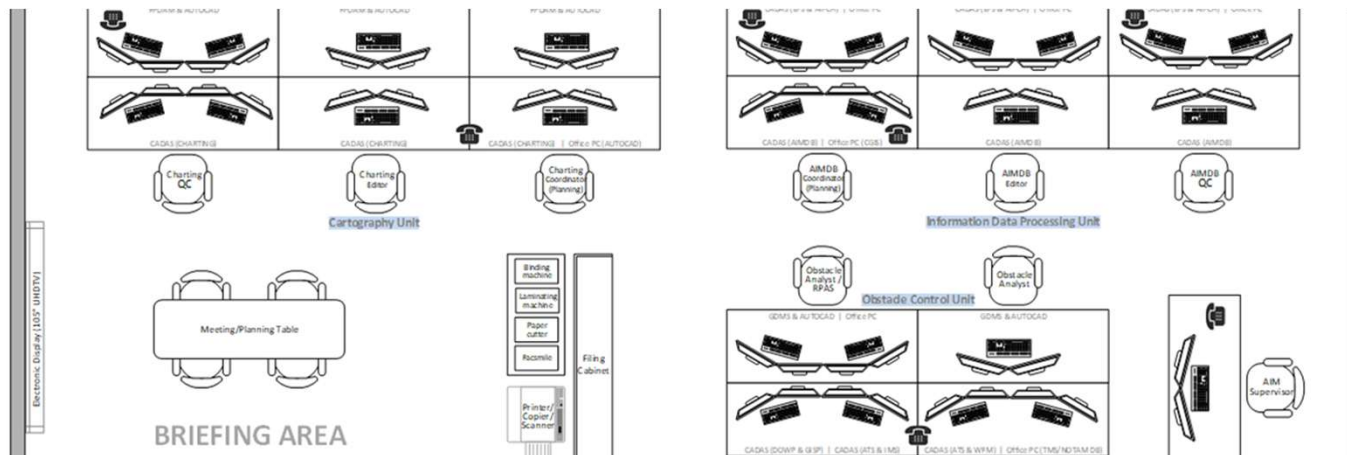
4. A Rescue Coordination Centre (RCC) for search and rescue services.



## QATCC Project:

The 8 main deliverables of the QATCC project are to provide the following:

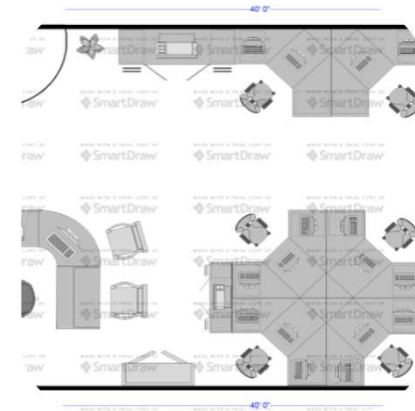
5. An AIS Operational Center to ensure the uninterrupted flow of aeronautical information and data.



## QATCC Project:

The 8 main deliverables of the QATCC project are to provide the following:

6. An Aeronautical Telecommunications Service Center (COMMS Office)





## QATCC Project:

The 8 main deliverables of the QATCC project are to provide the following:

7. A fully integrated Digital Aerodrome Contingency Center (DACC) solution for DIA tower initially, with HIA and Aprons W and E as later phases.



## QATCC Project:

The 8 main deliverables of the QATCC project are to provide the following:

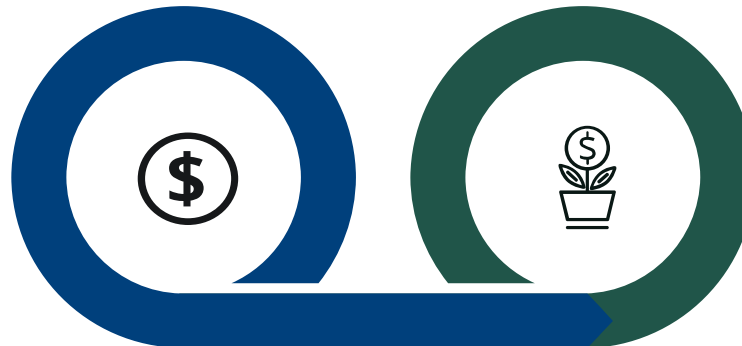
8. Full simulator integration (between the new ATM and ICWP, Tower and Radar simulation integration) and use of the current simulation capabilities at the QATCC building fully utilizing the available 360- and 180-degree tower simulators with the radar simulator of the chosen ATM system solution.



# Recent and Future Investments

## Recent Investments

- SMR 2, 3 and 1
- QFIR Radio Upgrade
- ATFM System
- ASR North and South
- VCCS Upgrade
- Radio Upgrade
- Micronav 360 Sim
- Electronic Flight Strips



## Future Investments

- ICWP Systems DIA
- ICWP System HIA
  - QATCC Project
    - GBAS
    - UTM
- Digital Tower Contingency



## Conclusion

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The QCAA continues to make substantial investments in the future of aviation in Qatar, fostering innovation and regional cooperation.

The QATCC project builds on the successful infrastructure enhancements made to cater for FIFA 2022 World Cup, and establishment of Doha FIR; further cementing Qatar's commitment to excellence.



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# Thank You

