# SHARED AIRSPACE IN DUBAI & QATAR





#### **Mohtasim HUSSAIN**

Vice President
ACR International









#### **Dubai UTM Project – Vision of Dubai**

- Goal: Establish a national UTM system to safely integrate drones into Dubai's airspace
- Support Dubai's vision of becoming a global leader in smart aviation and UAM



- Enable safe, efficient, and scalable drone operations for governmental, commercial, and recreational use
- Ensure compliance with ICAO, GCAA, and regional regulatory frameworks
- Promote innovation and competitiveness by creating a future-proof system that supports upcoming Advanced Air Mobility
- Deliver a reference model for the Middle East, positioning **Dubai as a benchmark** for advanced UTM deployment



#### **Dubai UTM Project – Overview**

- Contracting Authority: Dubai Aviation Engineering Projects (DAEP)
- Scope: National UTM system procurement & implementation
- ACR International subcontractor to Dar Al-Handasah (DAR)
- End-to-end project support from drafting Technical Specifications, through Tender process support, to vendor selection and contract award, as well as full implementation support including system testing, training, and operational rollout
- Kick-off in Jan 2023, weekly workshops with DAEP, DAR, DANS
- Evaluation Phase closed in May 2025, successful bidder announced, UTM Implementation Phase started
- Multi-stakeholder coordination with six key Dubai entities
- Focus: safety, operational efficiency, regulatory compliance









## Dubai UTM Project – Stakeholder Engagement





#### Dubai UTM Project – Stakeholder Engagement

- DAEP: project owner ensuring funding, infrastructure readiness, and long-term oversight
- **DANS:** end user of the system, hosting the platform and responsible for integrating drones into ATM
- **GCAA:** national authority aligning Dubai's UTM with ICAO and federal standards
- DCAA: regulatory body providing approvals, safety rules, and operational compliance
- **Dubai Police:** security, law enforcement, drone misuse
- Dubai Municipality providing 3D city model data to support safe drone operations
- Roads and Transport Authority: integrating drones into urban mobility concepts and future transport networks
- National Center of Meteorology: providing weather data for safe drone operations





#### **Dubai UTM Project – Tender Process Support**

- Drafting UTM Technical Specifications with DAR
- Finalizing UTM Technical Specifications with
  - DAEP Dubai Aviation Engineering Projects
  - DANS Dubai Air Navigation Services
- Ensuring compliance with international UTM standards
- Responding to vendors' Technical Post Tender Clarification requests after Tender release
- Inviting leading global UTM providers, who conducted live system demos with real drone flights in Dubai in Jan 2025.
  - NATS Altitude Angel
  - ANRA Technologies
  - Thales AstraUTM











### **Dubai UTM Project - Compliance & Evaluation**

- Post-demo evaluation and detailed compliance matrix review
- Assessment of compliance levels
  - Compliant
  - Partially Compliant
  - Non-Compliant
- Consolidated scoring sessions with DAEP,
   DAR and DANS to validate evaluations
- Documentation of gaps, risks, and readiness for each vendor
- Final recommendation to DAEP for provider selection, based on:
  - Tender documentation
  - Live demonstration results
  - Compliance matrices









### Qatar UTM Project – Overview

- Client: Qatar Civil Aviation Authority (QCAA)
- Scope: National UTM system concept & tender support
- ACR International prime consultancy role
- End-to-end project support:
  - Concept of Operations
  - Technical Specifications
  - **UTM System Procurement**
  - Vendor Selection and Contract Award
  - **UTM System Implementation**
  - Tests and Trainings
  - Full operational capability
- Compliance with ICAO & regional UTM frameworks







#### **Qatar UTM Project – Project Status**

- Building stakeholder awareness and alignment: briefings on project status & UTM concepts
- Open days and Workshops by UTM vendors
  - Thales
  - NATS Altitude Angel
  - Leonardo
  - ANRA Technologies
- Tender issued awaiting vendor proposals
- ACR to support evaluation & selection process
- Continued advisory role during Implementation phase









وزارة الدف

Ministry of Defence







#### Key Learnings from the Middle East – For Sweden

- Strong stakeholder alignment is essential throughout the entire project.
- Clear and detailed specifications ensure fairness in vendor selection.
- Live demonstrations to validate real system performance beyond documents.
- Early and proactive regulator involvement secures compliance and smooth acceptance.
- Structured evaluation matrices enable transparent, objective decisions.
- Careful transition planning ensures continuity into the implementation phase.

Learning from global UTM experiences would allow Sweden to tailor proven solutions for its own implementation.



