

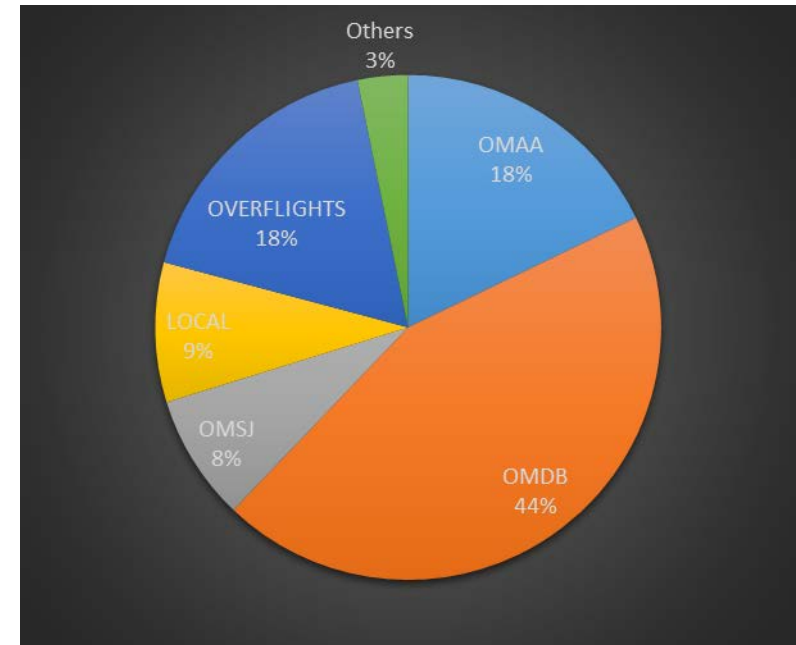
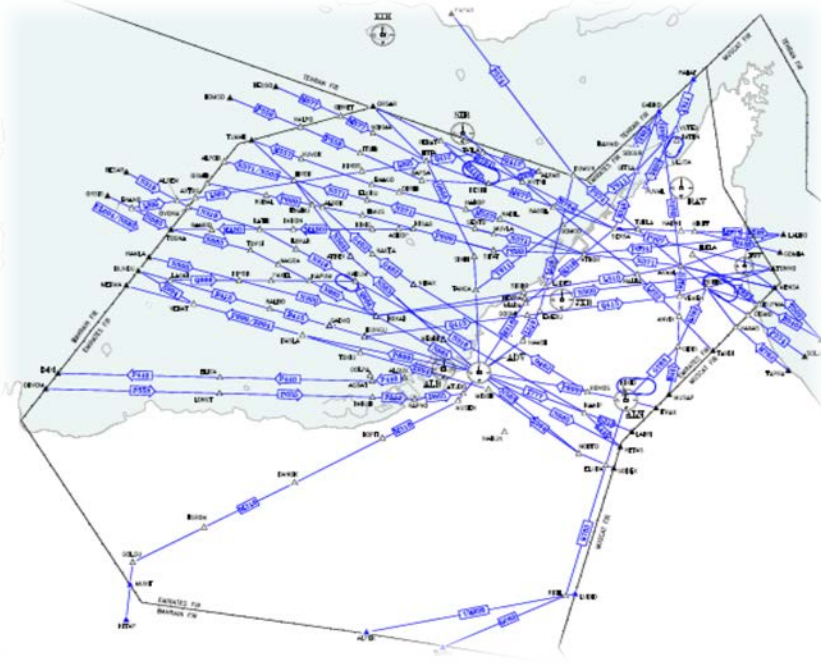


ATM Developments within the UAE

United Arab Emirates



124,288 KM²



5 Adjacent ATS Units

- Bahrain ACC
- Doha APP
- Jeddah ACC
- Muscat ACC
- Tehran ACC

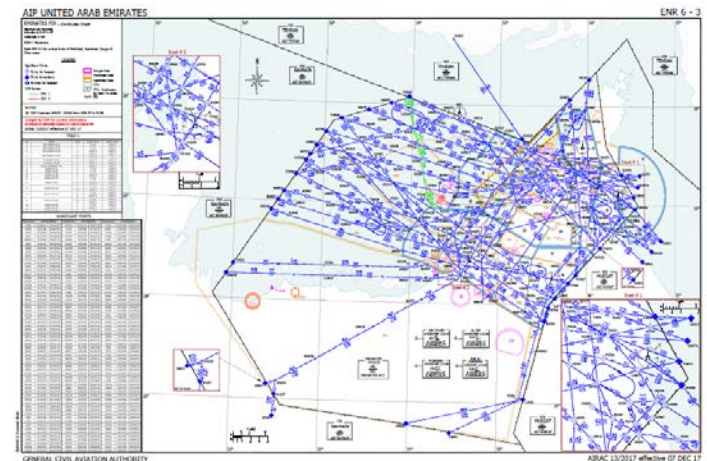
December 2017

- 882,652 Air Traffic Movements,
- 2,419 Daily Average



UAE Airspace Restructuring Project – Phase 3 Objectives:

- Increase UAE Airspace capacity to meet the forecasted air traffic demand for 2020.
- Increased access to all UAE airports.
- Improved efficiency for both airspace users and Air Navigation Service Providers.
- Reduction in the environmental impact of the increasing traffic through the provision of more effective ATM operations.





UAE Airspace Restructuring Project – Phase 3

Stats:

- Project Implementation Period – **18 Months**
- Number of Project Deliverables – **50 deliverables**
- Number of Workshops/Meetings – **over 200**
- Actual Man Hours for design development – **over 120,000**
- Number of aviation stakeholders involved – **26**
- Number of UAE ANSPs involved – **6**
- Number of Project Representatives – **over 150**
- Number of ATCOs Trained - **250**



UAE Airspace Restructuring Project – Phase 3

Stats:

- Full PBN with RNAV 1 (GNSS).
- Introduction of **30** new Routes.
- Allocation of **407** new 5LNC and Alphanumeric Waypoints.
- Incorporation of over **200** Instrument Flight Procedures (IFPs).
- **1000+** changes related to **312** new/modified route segments.
- Upload of **1741** route segments related to **115** new SIDs and **111** new STARs.
- Fast Time Simulation results highlighted fuel savings of over **15m USD** within the first year after implementation & **100,000 Mt** of CO² saving.



UAE Airspace Restructuring Project – Phase 3

- UAE Airspace Restructuring Project – Phase 3 Post Implementation project support of 6 months to identify any required optimisation of the network. Post Implementation activity:
 - Implementation of RNP-AR at Abu Dhabi International (OMAA) – **24th May 2018.**
- UAE Integrated Airspace Master Plan (IAMP).
 - Development of an industry driven, strategically harmonised IAMP to support the needs of the ATM Community to 2040. IAMP forms a key deliverable within UAE Airspace Restructuring Project – Phase 3 and will continue to be developed through the UAE National Airspace Advisory Committee (NASAC) Working Group 16.



Enhancements enabled through UAE Airspace Restructuring Project – Phase 3

- Greater Civil/Military Coordination & Cooperation.
- Enablement of Continuous Climb & Descent Operations.
- Dynamic ATC Sectorisation.
- Multi-stakeholder collaborative decision making towards project deliverables.
- Improved ATM community feedback.

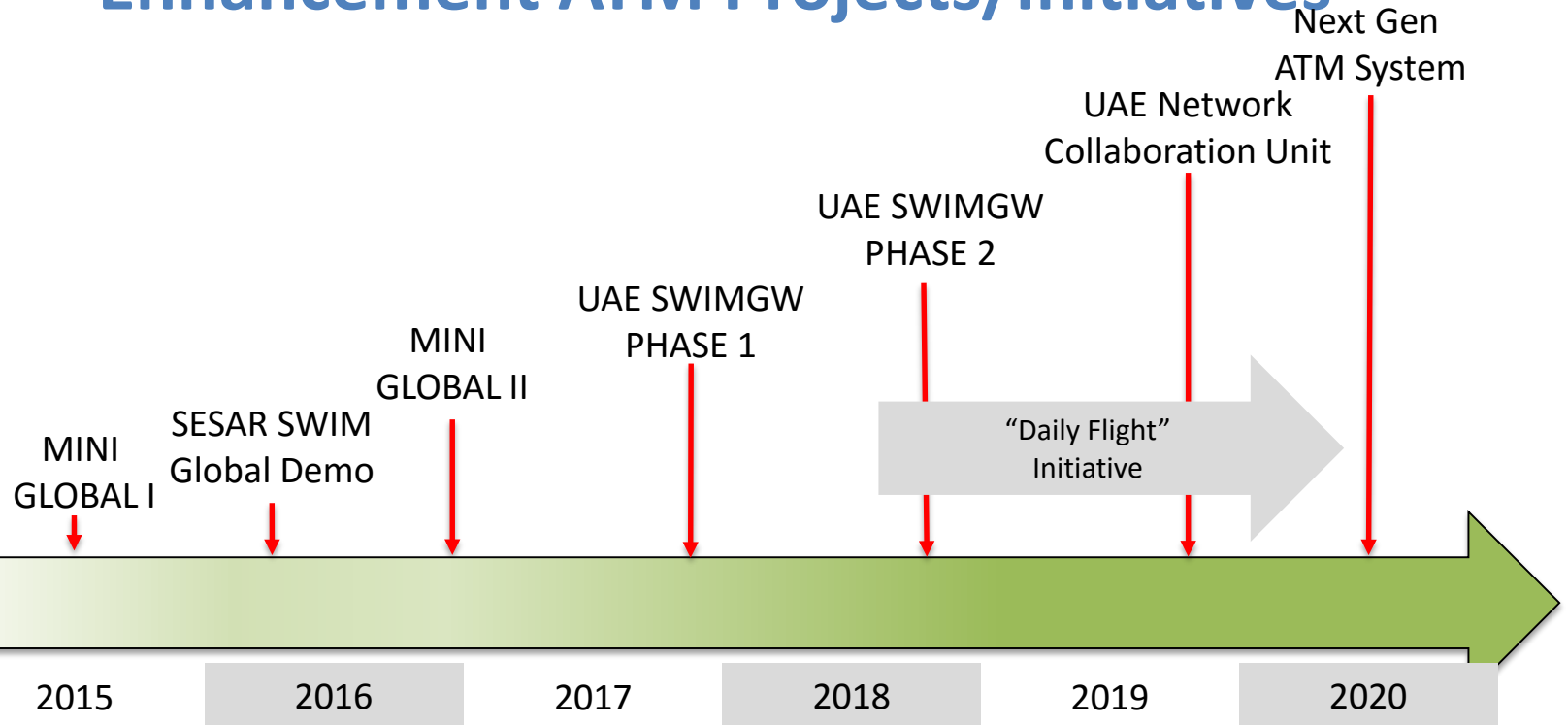
Lessons Learned for Success

UAE Airspace Restructuring Project – Phase 3





Enhancement ATM Projects/Initiatives





Overall Progress in ASBU Implementation

- | | | |
|-------------|---|---|
| ▪ B0-APTA | — | Fully Implemented December 2017 |
| ▪ B0-SURF | — | A-SMGCS Level 1 – Fully Implemented – Level 2 – 67% |
| Implemented | | |
| ▪ B0-ACDM | — | In progress (67% expected Q4 2018) |
| ▪ B0-FICE | — | 98% Implemented (100% expected Q2 2019) |
| ▪ B0-DATM | — | Fully Implemented |
| ▪ B0-AMET | — | Fully Implemented |
| ▪ B0-FRTO | — | Partially Implemented – In progress |
| ▪ B0-NOPS | — | Partially Implemented – In progress |
| ▪ B0-ACAS | — | Fully Implemented |
| ▪ B0-SNET | — | Fully Implemented |
| ▪ B0-CDO | — | Fully Implemented |
| ▪ B0-CCO | — | Fully Implemented |



Thank you