



الهيئة العامة للطيران المدني
GENERAL CIVIL AVIATION AUTHORITY



MIDANPIRG ATM SG/4 Meeting

Amman, Jordan, 29 April – 3 May 2018

United Arab Emirates

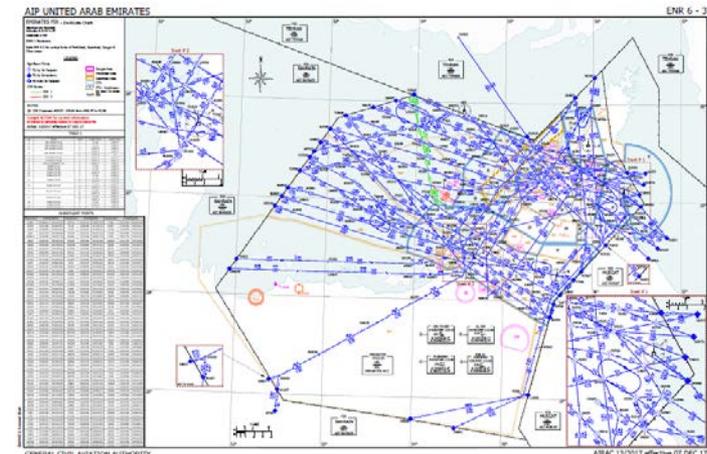


Presentation Outline

- **ATS Route improvements implemented**
- **ATS Routes planned for implementation**
- **Enhancements enabled through UAE Airspace Restructuring Project**
 - **Phase 3**
- **AIDC/OLDI implementation Status**
- **ATM Projects/Initiatives**
- **Lessons Learned for Success**
- **Thoughts/Recommendations**

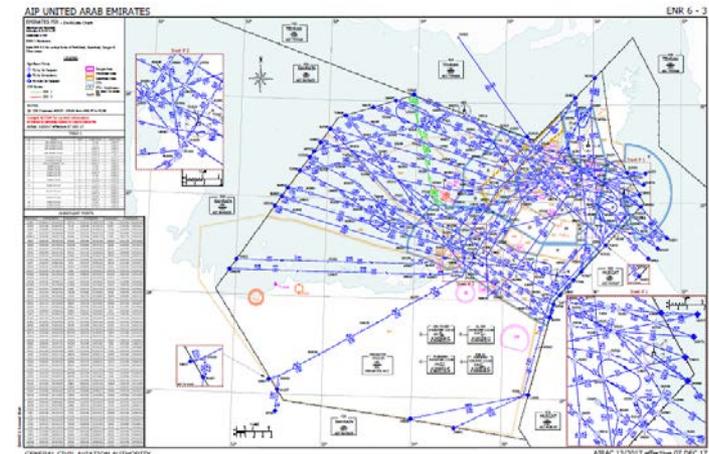
ATS Route improvements implemented UAE Airspace Restructuring Project – Phase 3

- Increase UAE Airspace capacity to meet the forecasted air traffic demand for 2020 - 2035.
- 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.



ATS Route improvements implemented UAE Airspace Restructuring Project – Phase 3

- 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 hours (6 * 8)**
- Number of aviation stakeholders involved – **26**
- Number of UAE ANSPs involved – **6**
- Number of Project Representatives – **over 150**
- Number of ATCOs Trained - **250**





ATS Route improvements implemented

UAE Airspace Restructuring Project – Phase 3

- 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.



ATS Routes planned for implementation

- UAE Airspace Restructuring Project – Phase 3 Post Implementation project support of 6 months to identify any required optimisations 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 2035. 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

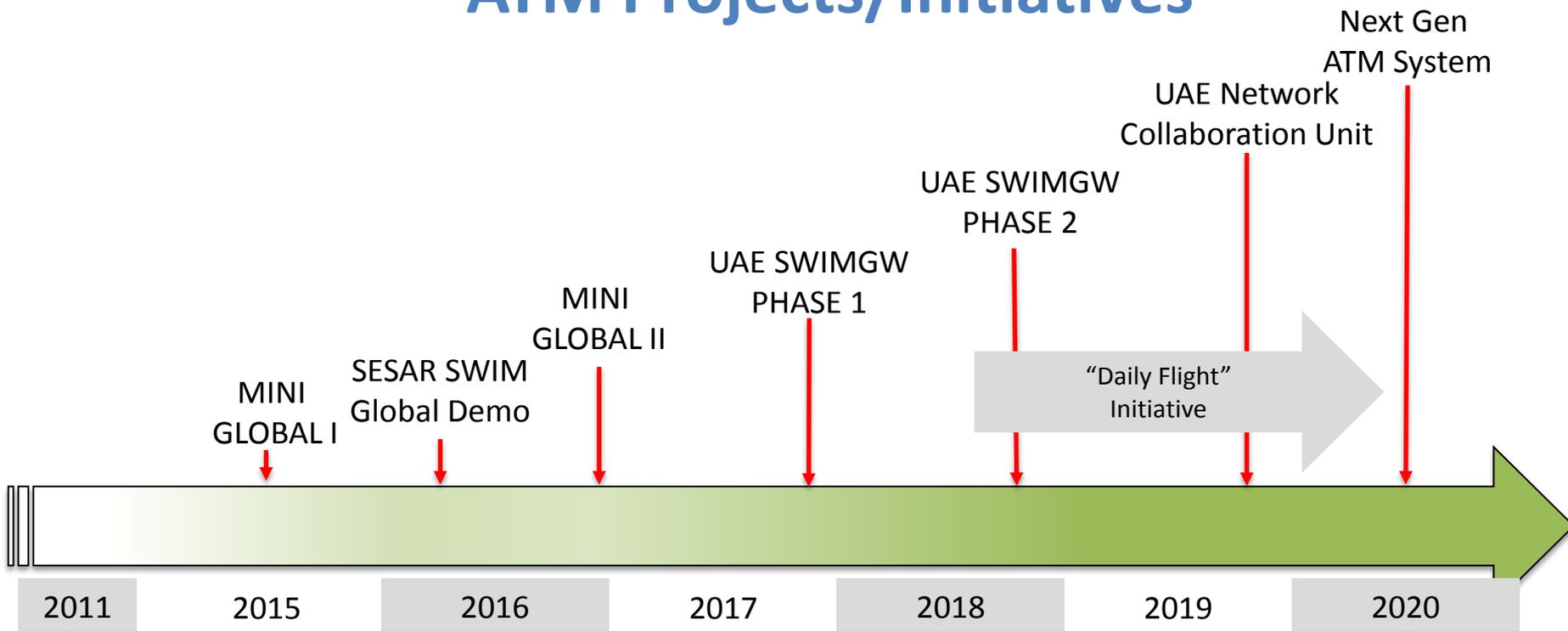




AIDC/OLDI implementation Status

No	ATSU	Airspace/Airports Included	Status	Date
01	Abu Dhabi APP	OMAA, OMAD, OMAL, OMAM, OMAW	In Operation	April 2009
02	Doha APP	OTHH, OTBH, OTBD	In Operation	January 2010
03	Sharjah TWR	OMSJ	In Operation	February 2011
04	Ras Al Khaima TWR	OMRK	In Operation	March 2011
05	Dubai APP	OMDB, OMDM, OMDW	In Operation (SZC To Dubai)	June 2012
06	Bahrain ACC	Traffic to/from Bahrain FIR	In Operation	July 2017
07	Muscat ACC	Traffic to/from Muscat FIR	In Operation	March 2018
08	Fujairah APP	OMFJ	Planned	Q2 – 2019

ATM Projects/Initiatives



FIXM: Flight Information Exchange Model document

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Thoughts/Recommendations

ICAO is invited to promote:

- Enhancement of stakeholder collaboration for key strategic planning & execution to ensure success.
- Prioritise and develop mechanisms to promote and support joint regional investments.
- Commitment to joint regional common priorities.
- Adaptability and openness to support regional ATM dynamic changes.
- Encourage States to develop regulatory framework for the standardisation of information sharing platforms that should subsequently complement regional and global framework.
- Lessons Learned from the UAE Airspace Restructuring Project.



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Thank you