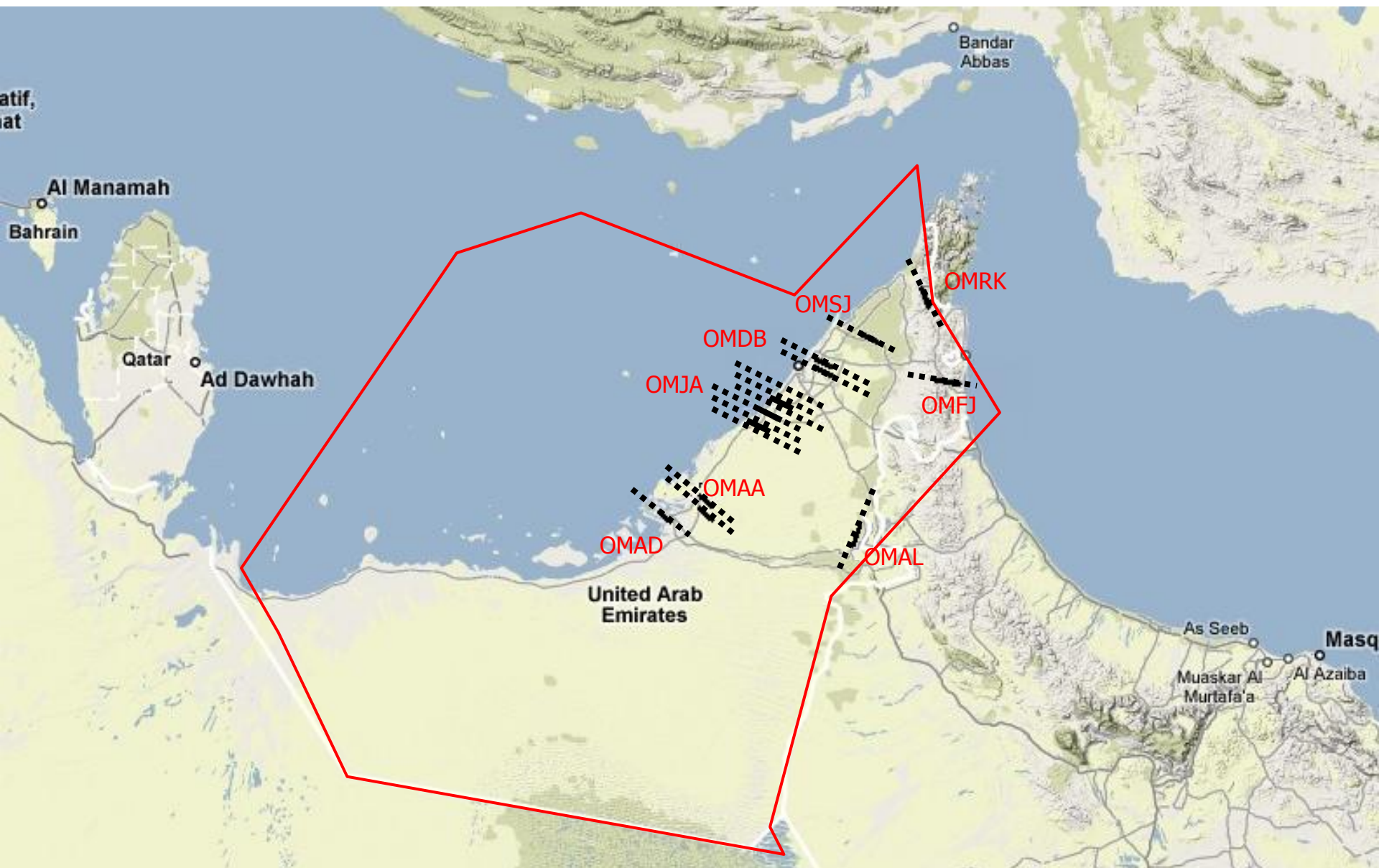


ATM in the UAE: Challenges and Opportunities

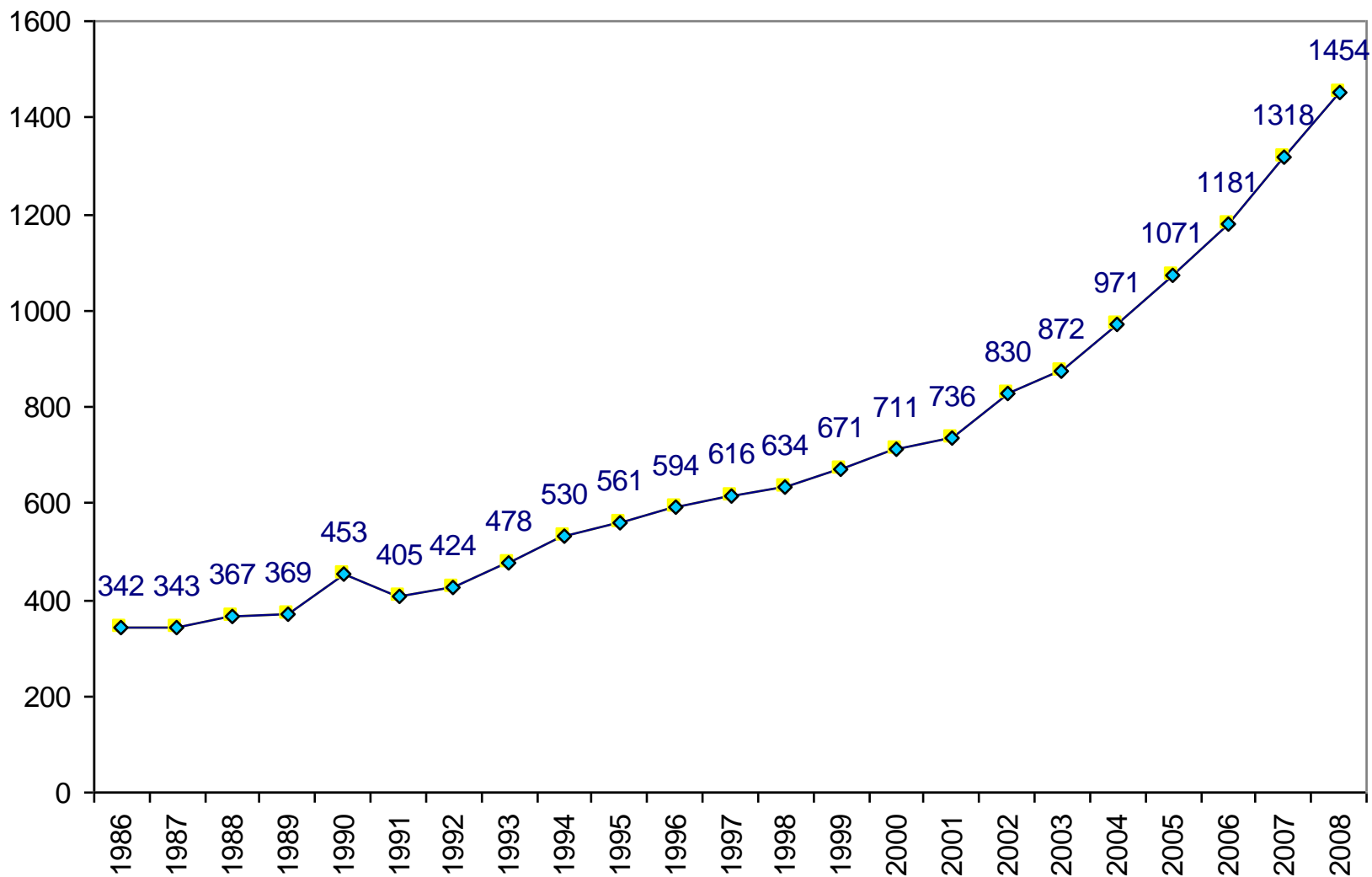
2009



UAE AIRSPACE & INT'L AIRPORTS

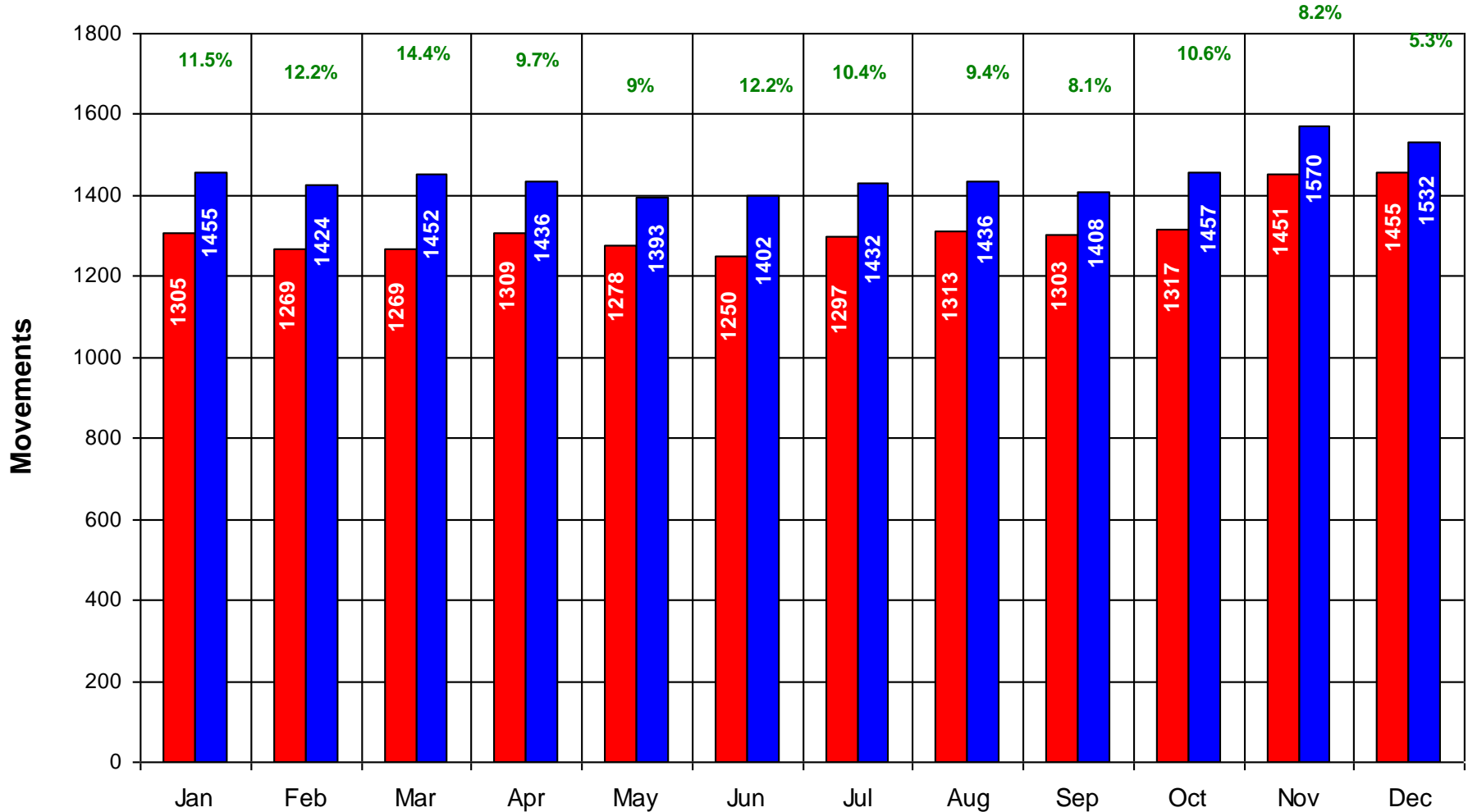


TRAFFIC GROWTH, DAILY AVERAGE 1986-2008



U A E Air Traffic Control Centre

Daily Average Air Traffic Movements (2007-2008)

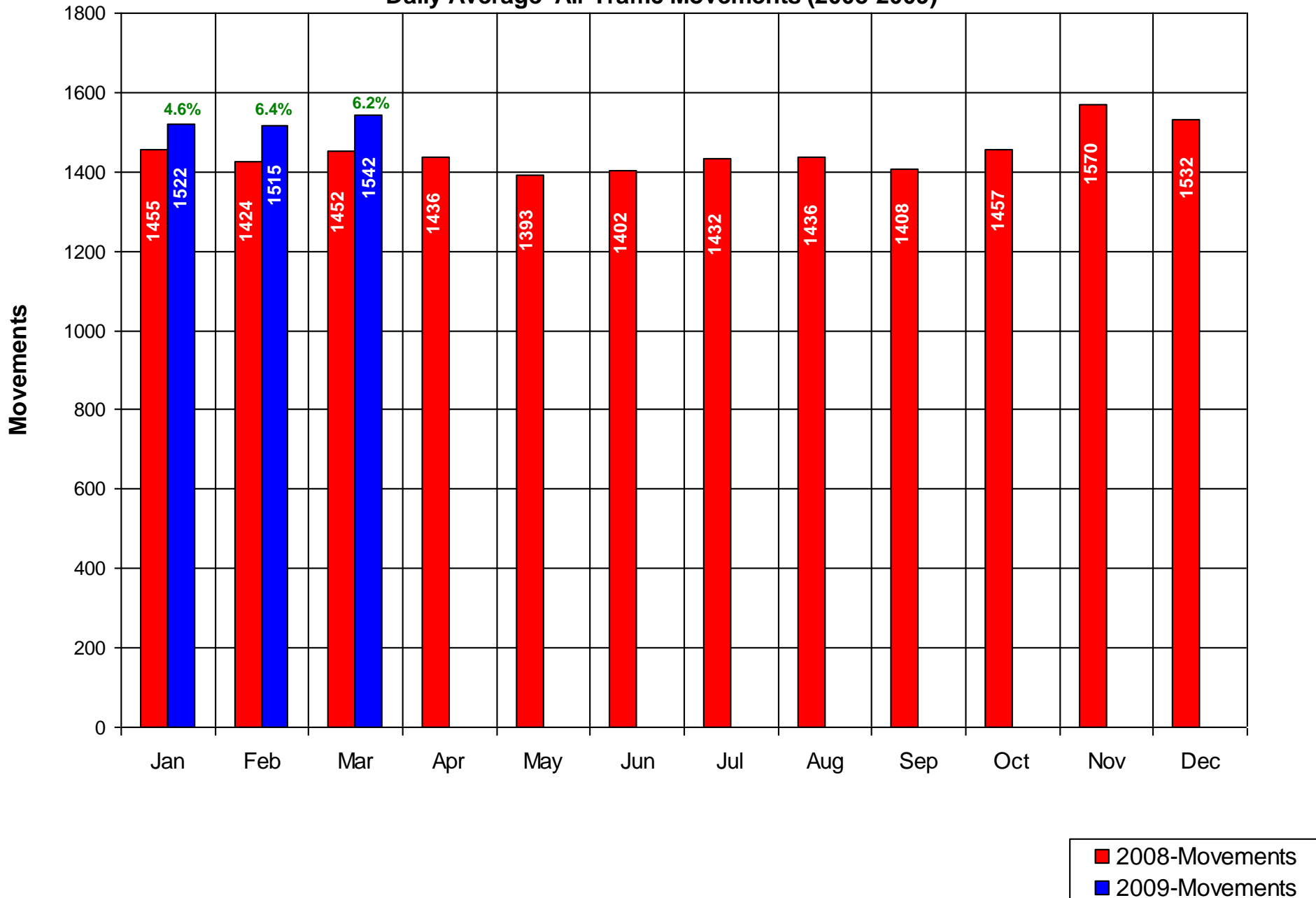


Total monthly movements	Jan 07	Feb 07	Mar 07	Apr 07	May 07	Jun 07	Jul 07	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07
	40458	35539	39344	39275	39627	37488	40221	40706	39095	40824	43523	45101
Total monthly movements	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08
	45093	41308	45009	43082	43181	42048	44399	44528	42245	45180	47086	47496

■ 2007-Movements
■ 2008-Movements

U A E Air Traffic Control Centre

Daily Average Air Traffic Movements (2008-2009)



ATM System Evolution *(first in the Middle East)*

- MSAW,APW,STAC from 2008
- Stripless Environment:
Fully stripless operations from 15/02/2009.
- OLDI:
Internal OLDI with Abu Dhabi Airport 18 March 2009.
- PBN upgrade of ATM system.
P indication in line 0 on the track Label From Feb 09
- CLAM ,AMAN, CPDLC upgrade of ATM system by Q4 2009.

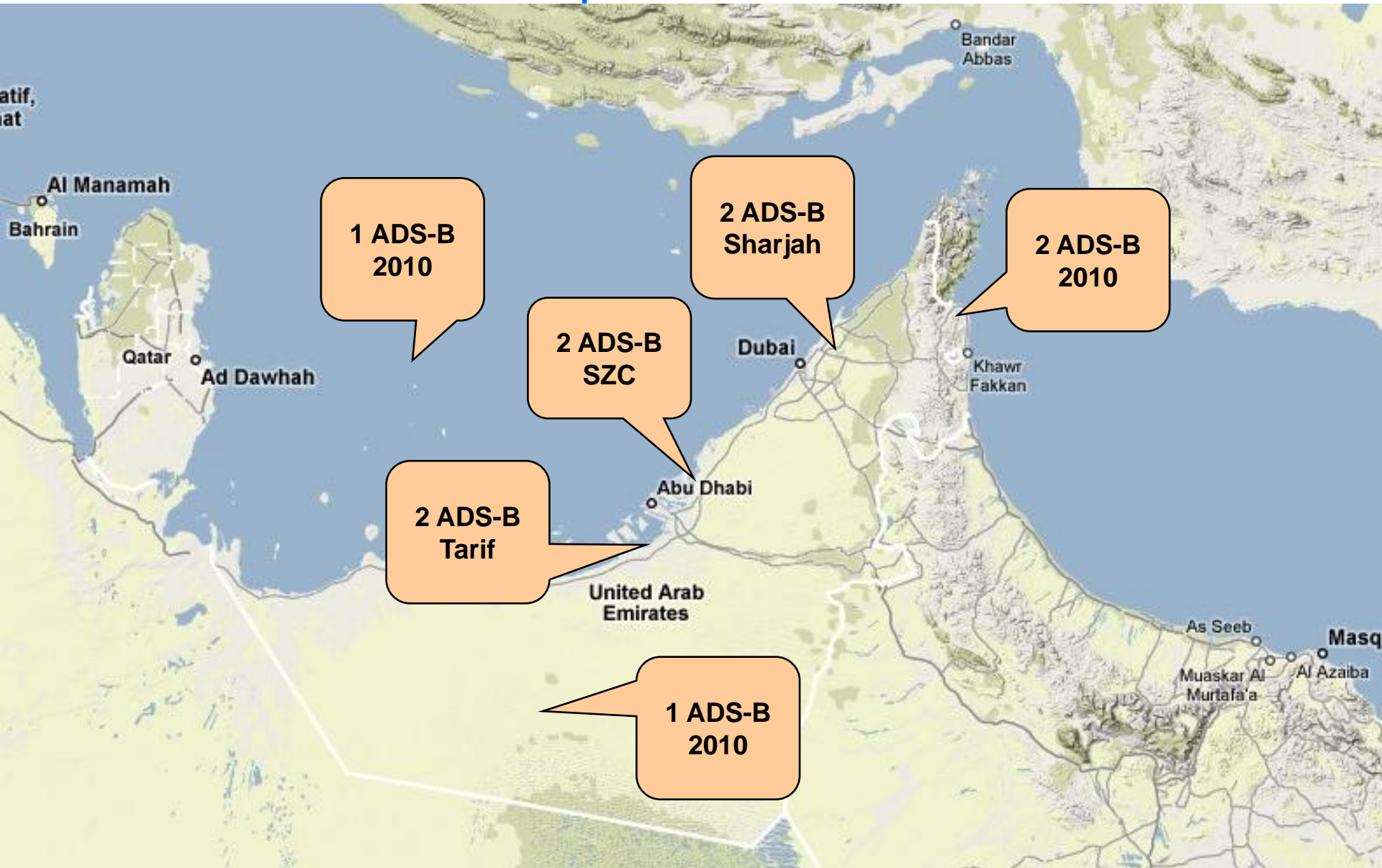
Airspace Evolution *(first in the Middle East)*

- RNAV1 implementation:
 - Abu Dhabi CTA RNAV1 SID/STAR - 09 April 2009
 - A419 RNAV1 -18 December 2008
- Flexible use of airspace:
 - Airway A419 opened in OMR54 and shared with military.
 - Reduced size of restricted areas OMR50 and OMR51.
- PBN Design Course (08-19 March 09):
GCAA promoting PBN in the Middle East by hosting 8 state.
- More than 1540 movement a day.
- 6 Sectors and 2 more before end of this year.
- 50 controllers increasing to 60 before end of this year.

Surveillance Evolution *(first in the Middle East)*

- ARTAS fully operational.
- ADS-B initial operational capability by Q2 2009 and full operational capability by Q3 2009.
- Mode S preliminary work will start by Q4 2009.

ADS-B Implementation in UAE



Communications *(first in the Middle East)*

- AMHS optimization programme:
Linked with Muscat 16 March 09.
- IP-VPN
Communications capability in the SZC by 1 June 2009.

SHEIKH ZAYED CENTRE

- **Operational Date: 01 June 2009**
- Largest, most advanced Air Traffic Management facility in the Middle East.
- Consists of an Area Control Centre (ACC) and an Emergency ACC.
- Capable to handle traffic movements exceeding 2 million per year, projected for next 20 years.
- Equipment range includes ARTAS, AMHS, IVCS, Simulator facility etc.
- 76 working positions include live ACC, military liaison, emergency and training roles.
- RNAV1 and ADS-B picture through ARTAS tracker.

SZC ACC



SZC ACC Ops



SZC ACC Ops



SZC EACC



SZC EACC Ops



SZC Simulator Room



SZC Equipment Room



Thank You

