

# Flexible Use of Airspace Within Bahrain FIR

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- What is FUA.
- Why FUA.
- Benefit of FUA.
- Where Can We Have FUA.
- Bahrain FIR Traffic Flow.
- Time Routs Within Bahrain FIR.
- Conclusion.



# Flexible Use of Airspace

The airspace should not be designated as either pure civil or military airspace, but rather be considered as a continuum in which all user requirements have to be accommodated to the maximum extent possible.

# Why FUA ?

A major obstacle to producing more en-route capacity is that the Middle East airspace has not yet been optimized.

Civil-Military cooperation has become very important in the current aviation environment because of the continuous rapid growth in civil air traffic.

The airspace of the GCC countries is experiencing high growth in traffic and facing continuous increase of demands by airline operators to accommodate and facilitate this growth.

# Fight Information Region (F.I.R.) Aircraft Movements

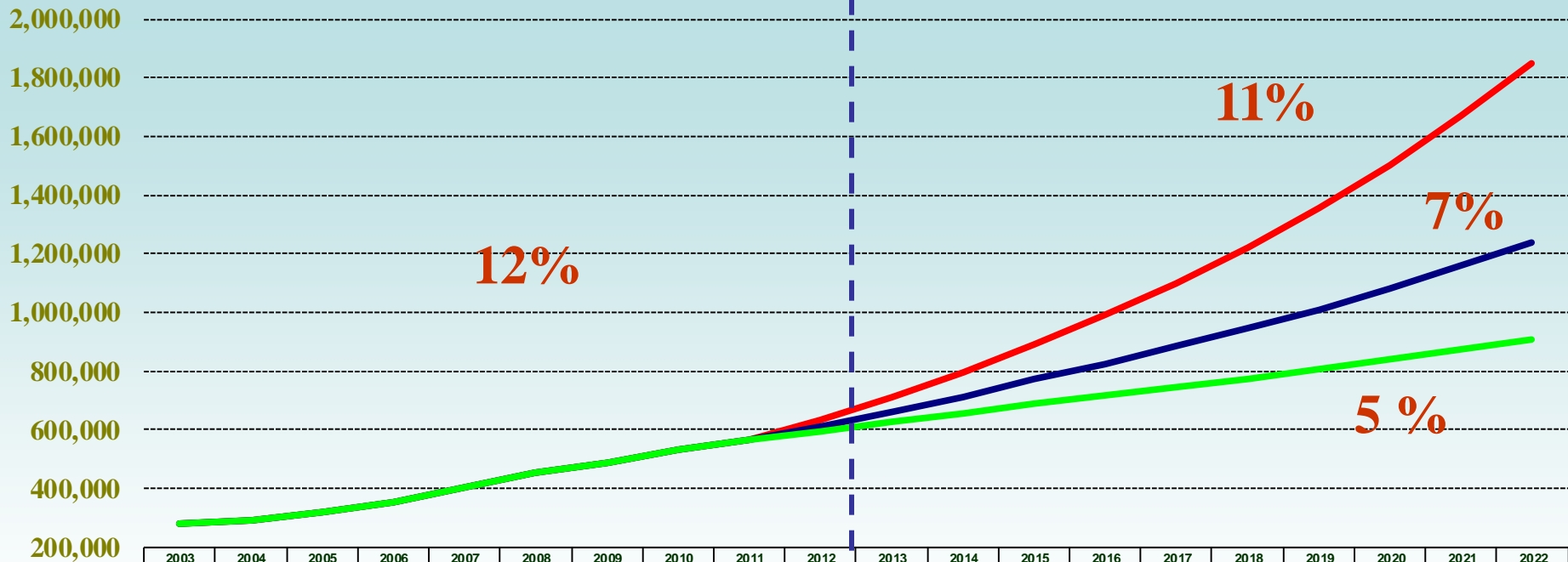
## Long Term Forecast

### 2012 - 2022

Actual Average growth

Forecasted Average growth

Movements in Thousand

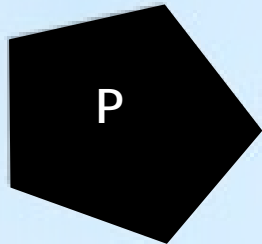


	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Higher	278,603	292,265	321,947	352,078	402,697	452,246	487,409	534,170	566,930	634,962	711,157	796,496	892,075	990,204	1,099,126	1,220,030	1,354,233	1,503,199	1,668,551	1,852,091
Medium	278,603	292,265	321,947	352,078	402,697	452,246	487,409	534,170	566,930	612,284	661,267	714,169	771,302	825,293	883,064	944,878	1,011,020	1,081,791	1,157,516	1,238,542
Lower	278,603	292,265	321,947	352,078	402,697	452,246	487,409	534,170	566,930	595,277	625,040	656,292	689,107	716,671	745,338	775,152	806,158	838,404	871,940	906,818

— Higher   
 — Medium   
 — Lower

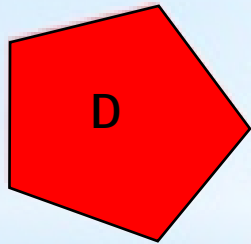
## The Implementation of Flexible Use of Airspace will benefit both Civil and Military Aviation with:

1. Flight economy offered through a reduction in distance, time and fuel.
2. The establishment of enhanced Air Traffic Services (ATS) route network and associated sectorisation providing:
  - an increase in Air Traffic Control (ATC ) capacity;
  - a reduction in delays to Air Traffic.
3. More efficient ways to separate Operational and Air Traffic.
4. Enhanced real-time civil/military coordination.
5. Reduction in airspace segregation needs.



**PROHIBITED**

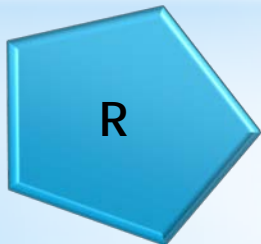
**Not Possible**



**DANGER**

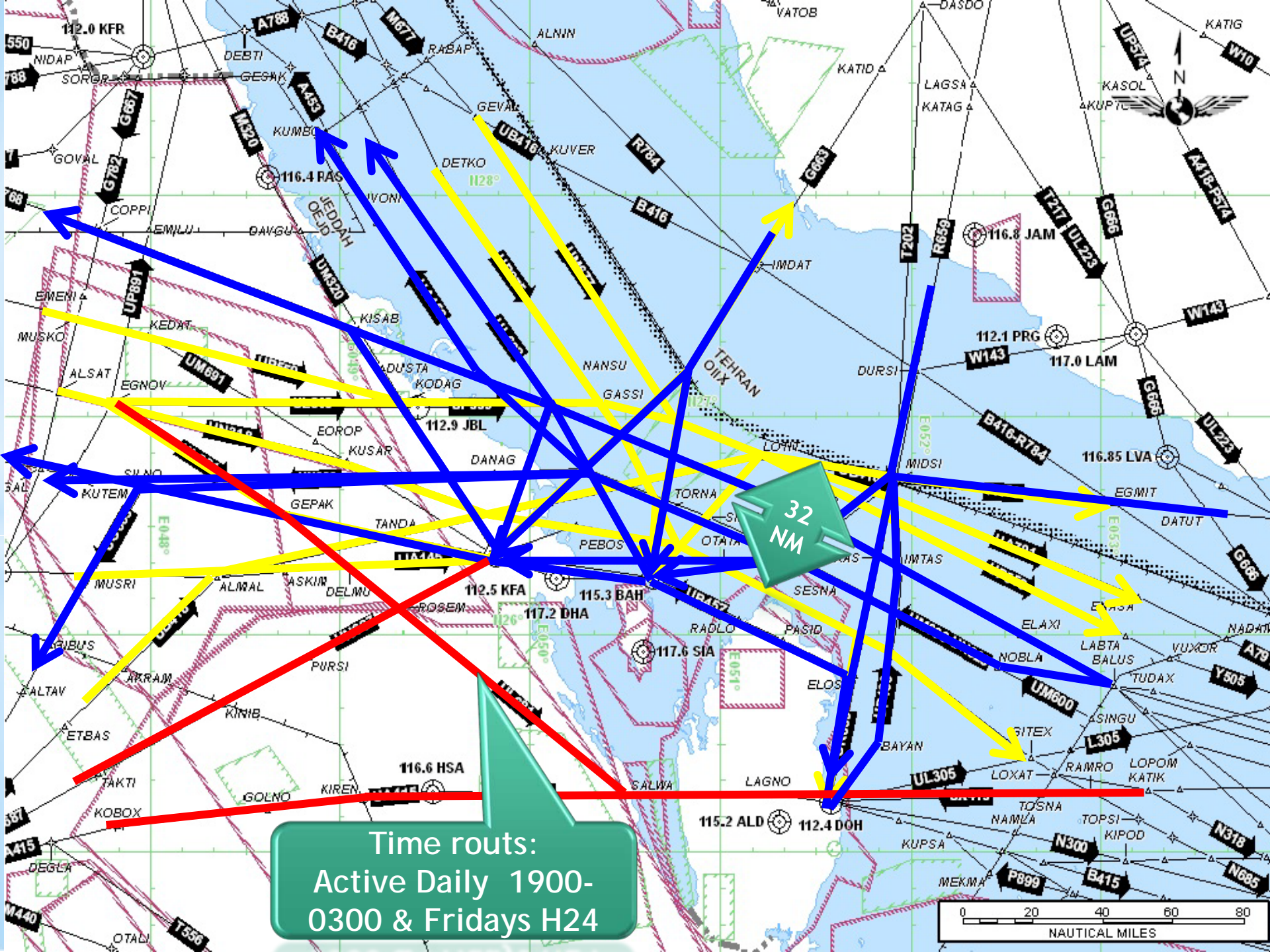
**Activated by ATC or  
NOTAM**

Possibility of crossing  
when active under pilot  
discretion / released as  
soon as activity stops.

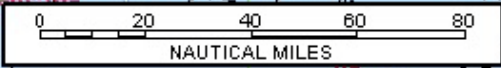


**RESTRICTED**

**Possibility of releasing  
the area as soon as  
the activity stops**



Time routs:  
Active Daily 1900-  
0300 & Fridays H24





# Conclusion

The airspace to the north of Bahrain is categorized by the Middle East Regional Monitoring Agency (MIDRMA) is the most congested and busiest airspace within the Middle East Region.

The operational hours of the three time routes to the south and south west of Bahrain are required to be activated more often to cover the peak hours and to reduce traffic congestion north of Bahrain.

Failure to add additional routes structures, including the FUA in the region particularly within the Bahrain FIR will result in severe limitation in the ability to increase air traffic capacity.

**Thank you for attention!**