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# Agenda Item 3: Europe - Southeast / South Asia Contingency planning (scenarios, procedures) Airspace Developments since AHACG/2 influencing ICAO EUR/NAT traffic distribution

**THE THIRD AD HOC AFGHANISTAN CONTINGENCY GROUP MEETING**

**11<sup>th</sup> - 14<sup>th</sup> May 2015**

**Muscat, Oman**

**Presented by: ICAO EUR / NAT Office - EUROCONTROL NM**

**Prepared by: Mr. Tihomir Todorov**

Head of Section Airspace Design

Operations Planning

Network Operations Management Division

Network Manager Directorate

EUROCONTROL



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# Airspace penalization / unavailability

# CLOSURES AND WARNINGS

Latest update - 24 FEB 2015



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**Legend**

- Closed Routes
- Officially Closed Areas
- ATS Routes Area Closure
- Airspace for which a warning is issued
- FIR/UIR

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EASA SIB (Ref:2014-10; 2014-21)  
ICAO Letter (EUR/NAT 14-0243.TEC FOL/CUP)  
LF AIC 02/15  
UK AIC 02/14  
FAA NOTAM A0012/14  
FAA NOTAM A0068/14  
EG NOTAM V0006/15  
EG NOTAM V0008/15

ATS Routes area closure  
NOTAM V9688/14  
SFC/FL200

Area closed by  
NOTAM A2323/14  
SFC/UNL

ATS Routes area closure  
NOTAM V9689/14  
SFC/UNL

Area closed by  
NOTAM A2461/14  
SFC/UNL

Interception of offenders by  
the air force is mandatory  
action NOTAM A0024/11  
SFC/UNL

EASA SIB (Ref:2014-25)  
ICAO Letter (AN 13/4.3.Open-13/25)  
LF AIC 02/15  
FAA NOTAM A0071/14

ATS Route is not available  
NOTAM A1561/14  
SFC/UNL

EASA SIB (Ref:2014-24)  
ICAO EB 2015/15  
FAA NOTAM A0065/14  
LF AIC 02/15

EASA SIB (Ref:2014-23)  
ICAO Letter (AN 13/4.3)  
LF AIC 02/15  
DA NOTAM A2523/14  
DT NOTAM A0122/15  
ED NOTAM A0874/15  
EG NOTAM V0004/15  
HE NOTAM A0422/14  
HL NOTAM A0018/15  
LI NOTAM W027 1/15  
LM NOTAM A0134/15  
LO NOTAM A008 1/15  
FAA NOTAM A0031/14A02

ATS Routes area closure  
NOTAM A0126/15  
SFC/UNL

EASA SIB (Ref:2014-22R1)

EASA SIB (Ref:2014-30R1)  
FAA NOTAM A0056/14A02  
EG NOTAM B2363/14  
EG NOTAM V0005/15  
HE NOTAM A0048/15

**Important Note:**  
This map is provided on a trial basis. Its content is made available for information only and shall not be used for operational purposes. While the Network Manager will do its utmost to keep the map updated, there is no guarantee that the map will contain the latest information available.



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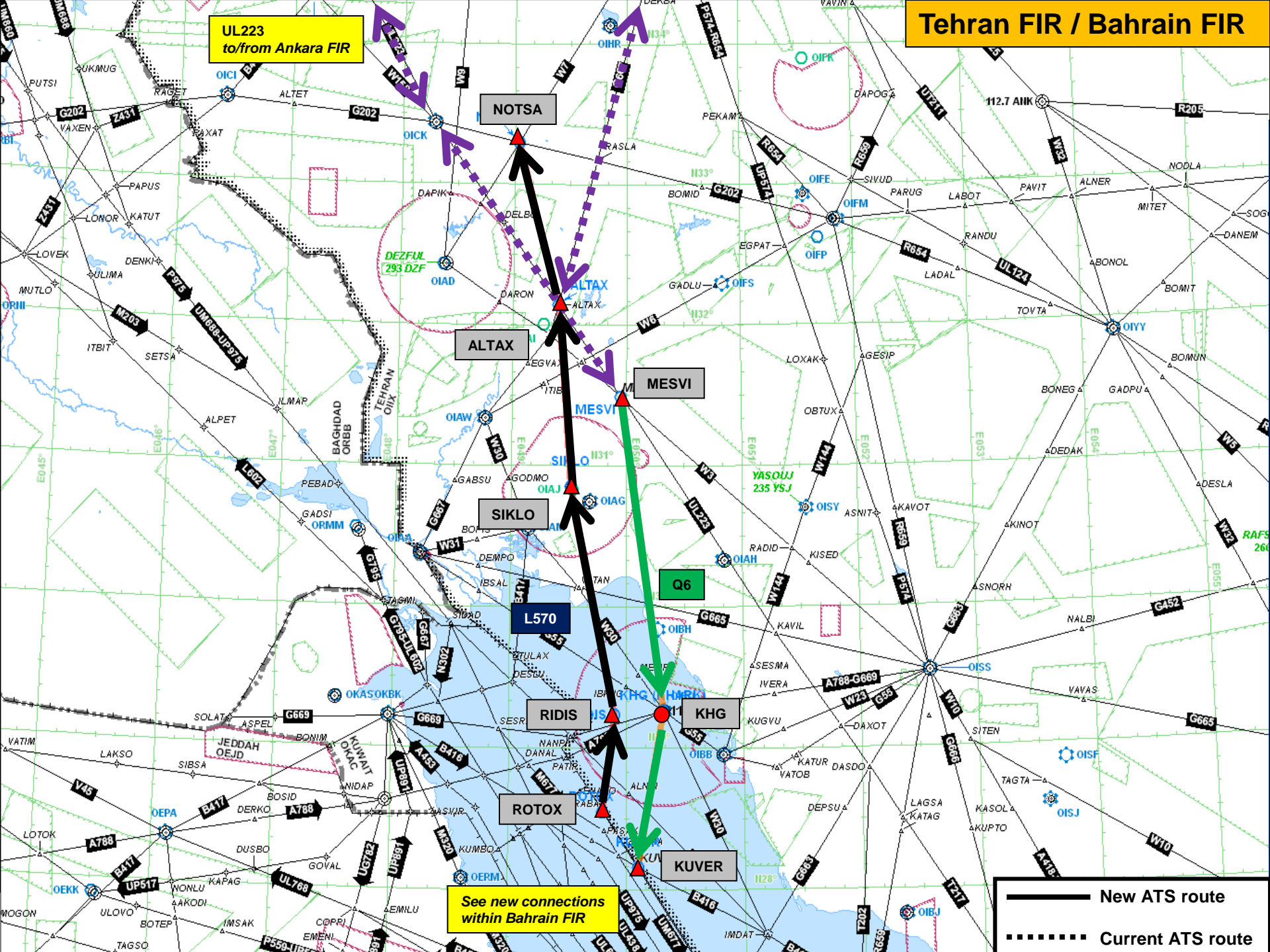


# **Tehran FIR / Bahrain FIR / Emirates FIR**

## **New ATS route organization**

### **16 OCT 2015**

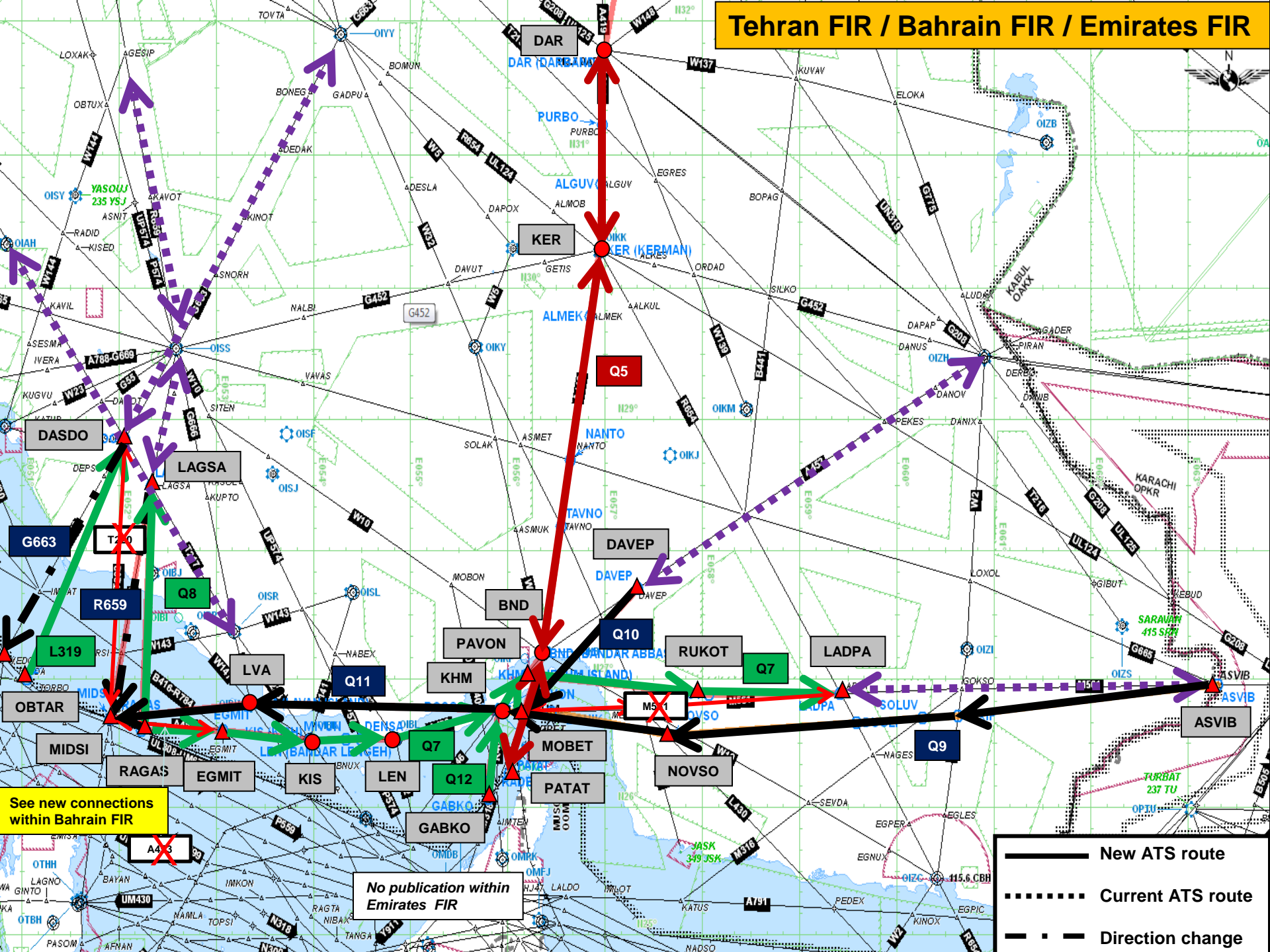
UL223  
to/from Ankara FIR



See new connections  
within Bahrain FIR

— New ATS route  
..... Current ATS route

# Tehran FIR / Bahrain FIR / Emirates FIR

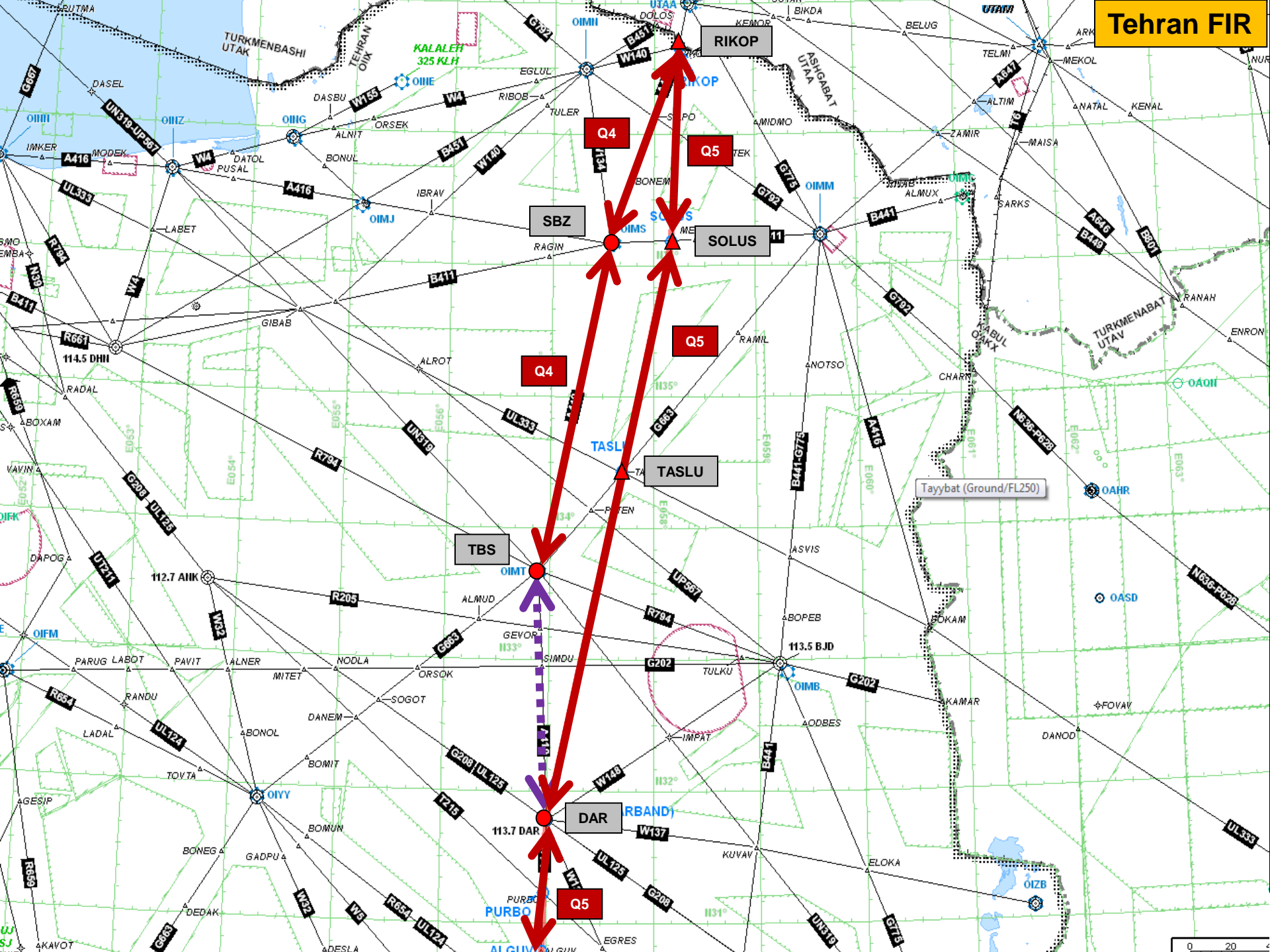


See new connections within Bahrain FIR

No publication within Emirates FIR

- New ATS route
- - - - Current ATS route
- Direction change

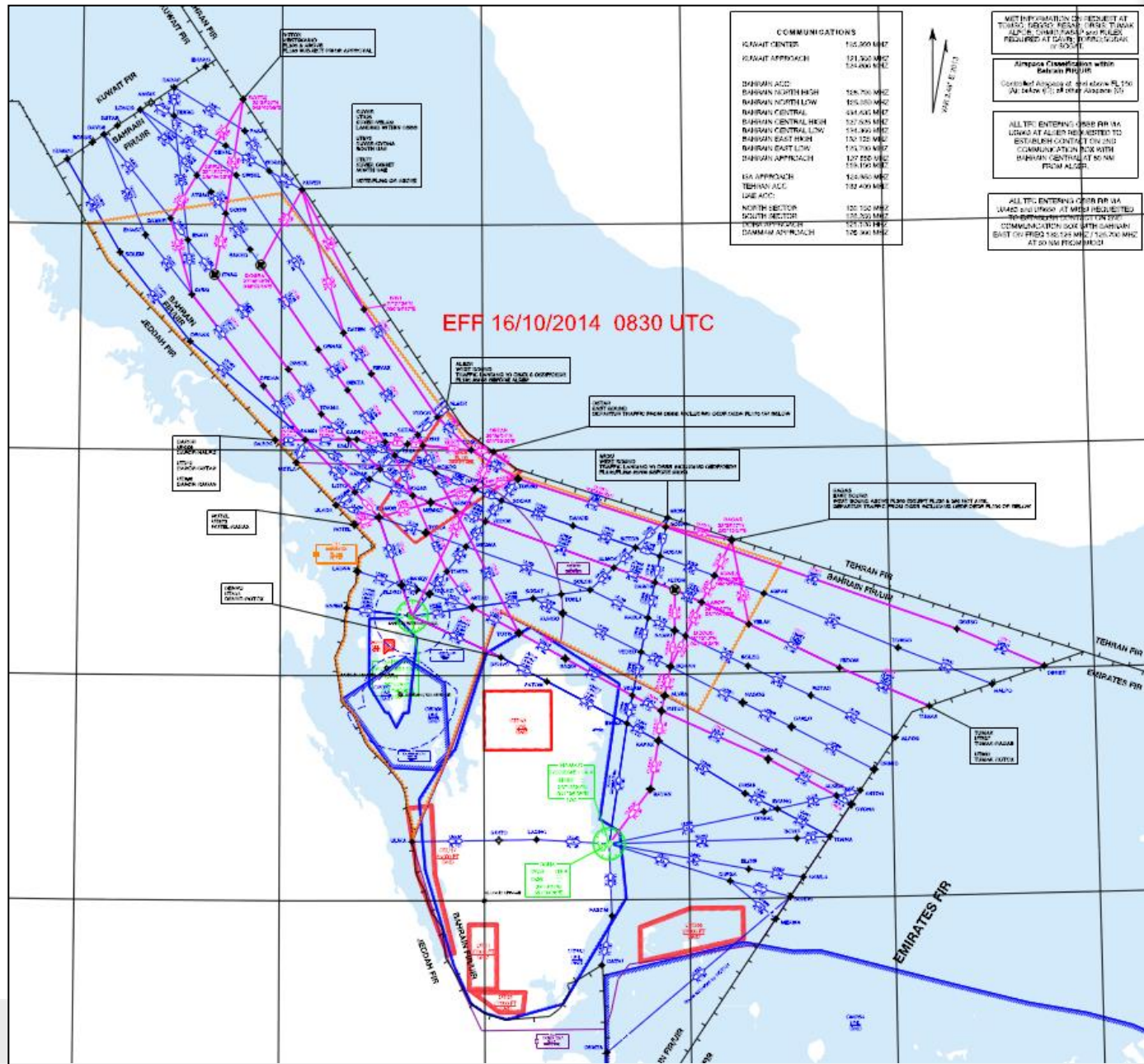
# Tehran FIR





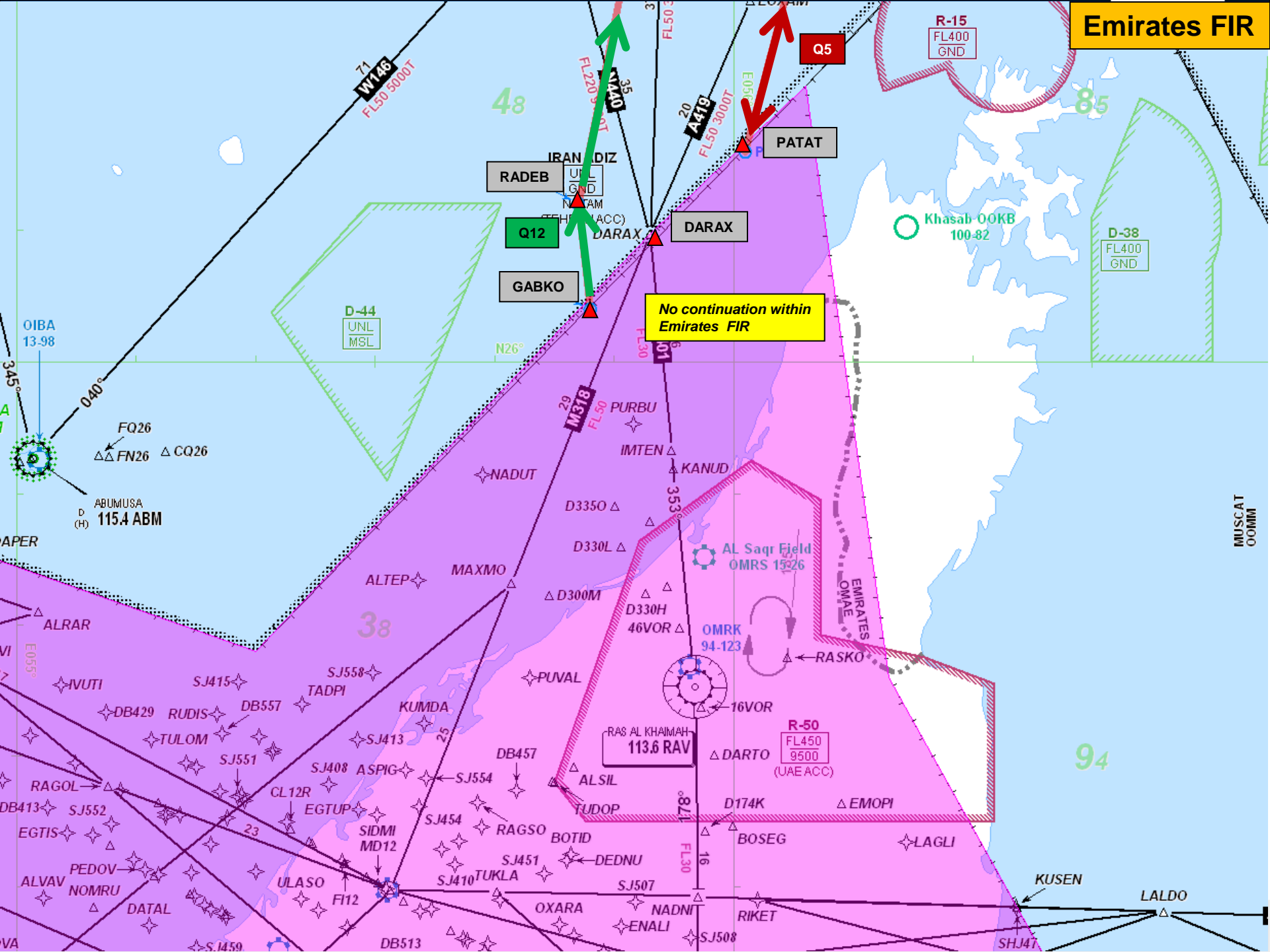
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# Bahrain FIR





Emirates FIR





- ❖ ATS route changes within Tehran FIR and Bahrain FIR activated by NOTAMs on AIRAC date 16 OCT 2015, 08:30UTC.
- ❖ No proper ATS route connections published till now within Emirates FIR. Still only DARAX is available for traffic bi-directionally.



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# **Tehran FIR**

## **Required Routing (TOS)**

### **5 FEB 2015**



# **IRAN AIP Supplement 37/15 - 1 JAN 2015**

## **REQUIRED ROUTING WITHIN OIIX (WEF 05 FEB 2015)**

The following routing information is published to enable all aircraft operators, planning to fly within the OIIX FIR (including transit, domestic & international departure and arrival) to file flight plans as required by Tehran Air Traffic Service.



## REQUIRED ROUTING WITHIN OIIX (WEF 05 FEB 2015)

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### 1- TRANSITING TEHRAN FIR:

(TCP: Transfer of Control Point)

No	FROM	TO	CONDITION	RMK	DESCRIPTION
10	UAE	Ankara	Transiting or landing in Ankara FIR		DARAX-Q12-RADEB-Q1-SYZ-UP574-SAV-UL124-ZAJ-UL125-TBZ-UL333-DASIS
		Ashgabat	Transiting or landing in Ashgabat FIR		DARAX-Q12-RADEB-Q4-RIKOP DARAX-Q12-RADEB-Q4-TBS-G663-MSD-A647-RITAB
		Baku	Transiting or landing in Baku FIR		DARAX-Q12-RADEB-Q4-ASMUK-W32-ANK-G208/UL125-RADAL-N39-ULDUS DARAX-Q12-RADEB-Q1-SYZ-UP574-SAV-R654-ZAJ-R661-DULAV
		Kabul		Over ZDN Expect FL290 or below	DARAX – Q12-RADEB-Q4 - KHM - A453 - PIRAN



## ❖ Column “FROM”

Not clear what for example Kuwait, Bahrain, UAE, Muscat means? Kuwait, Bahrain could be considered instantaneously as State and FIR, Muscat is normally FIR and UAE is State name as the FIR is named Emirates.

It is important to have correct writing and clarifying which flights are captured by the TOS. Is it departures and overflights or only overflights? For example if for UAE is written DEP / OVFL it means that all flight from UAE shall fly via DARAX routing then to DASIS. Today most of the DEP OM.. are overflying Bahrain FIR and are going to BONAM which is also in accordance with the TOS. May be the TOS is flexible in understanding and interpretation.

## ❖ Some mistakes shall be clarified:

“FROM” Bahrain / Kuwait - “TO” Ankara option is ... Q1-TOTBO-G208-ALRAM but in accordance with AIP Iran, page ENR 3.1 - 20, segment TOTBO - UMH is available FL200 - FL280. Does it mean that flights shall be below FL280 or TOS shall be revised as ... Q1-TOTBO-G208/UL124-UMH-G208-ALRAM



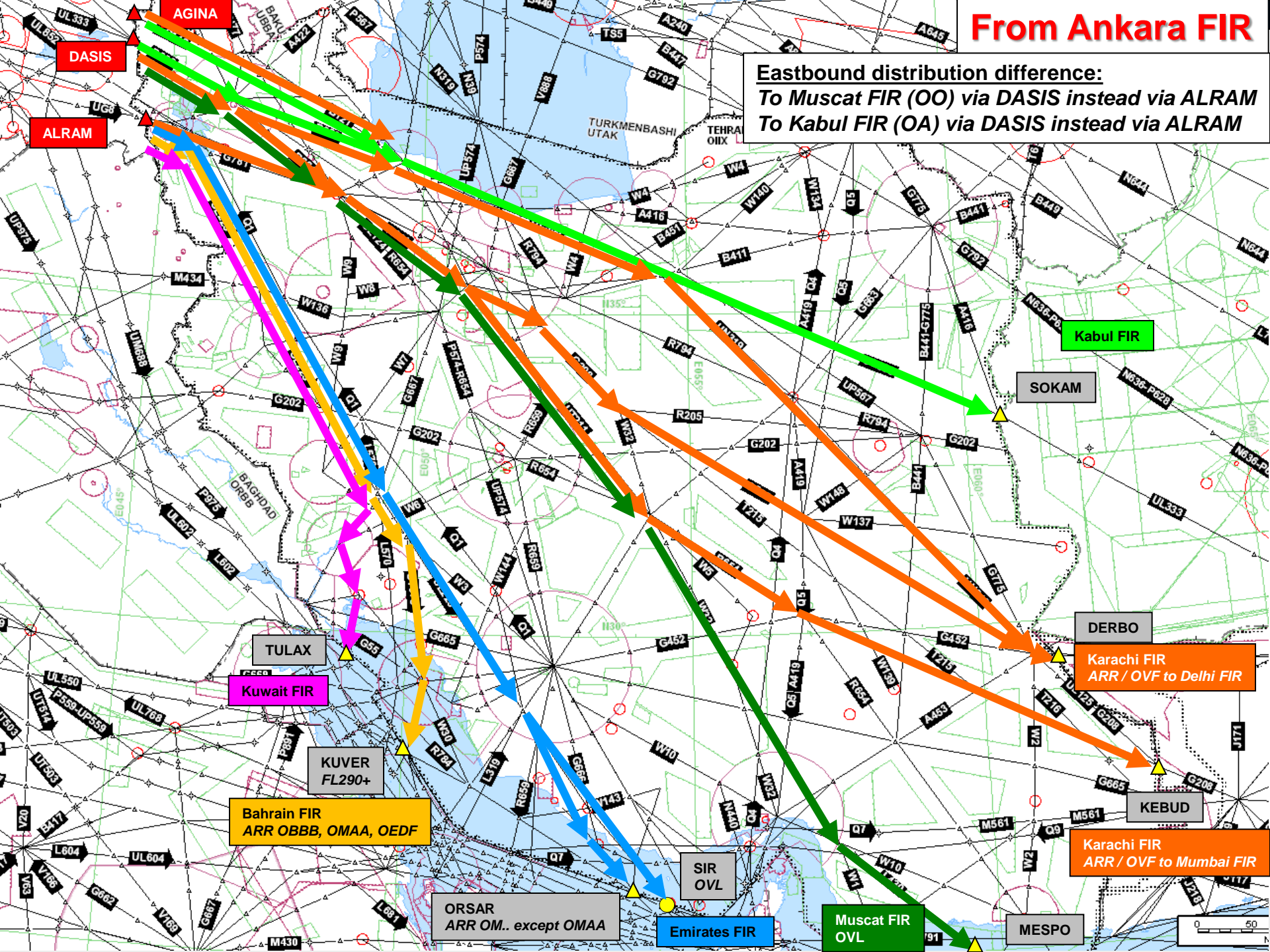
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# Required Routing (TOS) from ICAO EUR/NAT Region

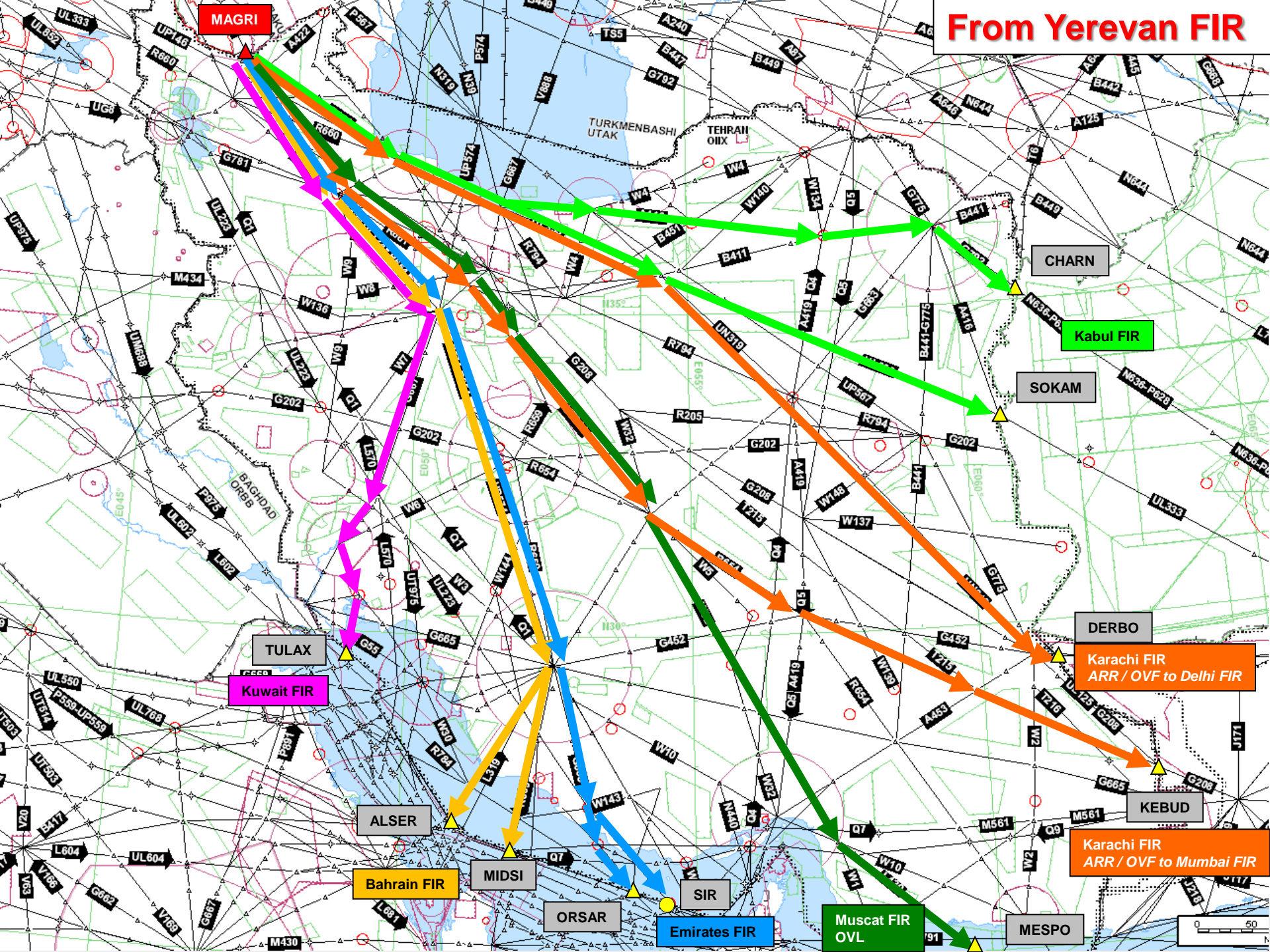
# From Ankara FIR

**Eastbound distribution difference:**  
To Muscat FIR (OO) via DASIS instead via ALRAM  
To Kabul FIR (OA) via DASIS instead via ALRAM

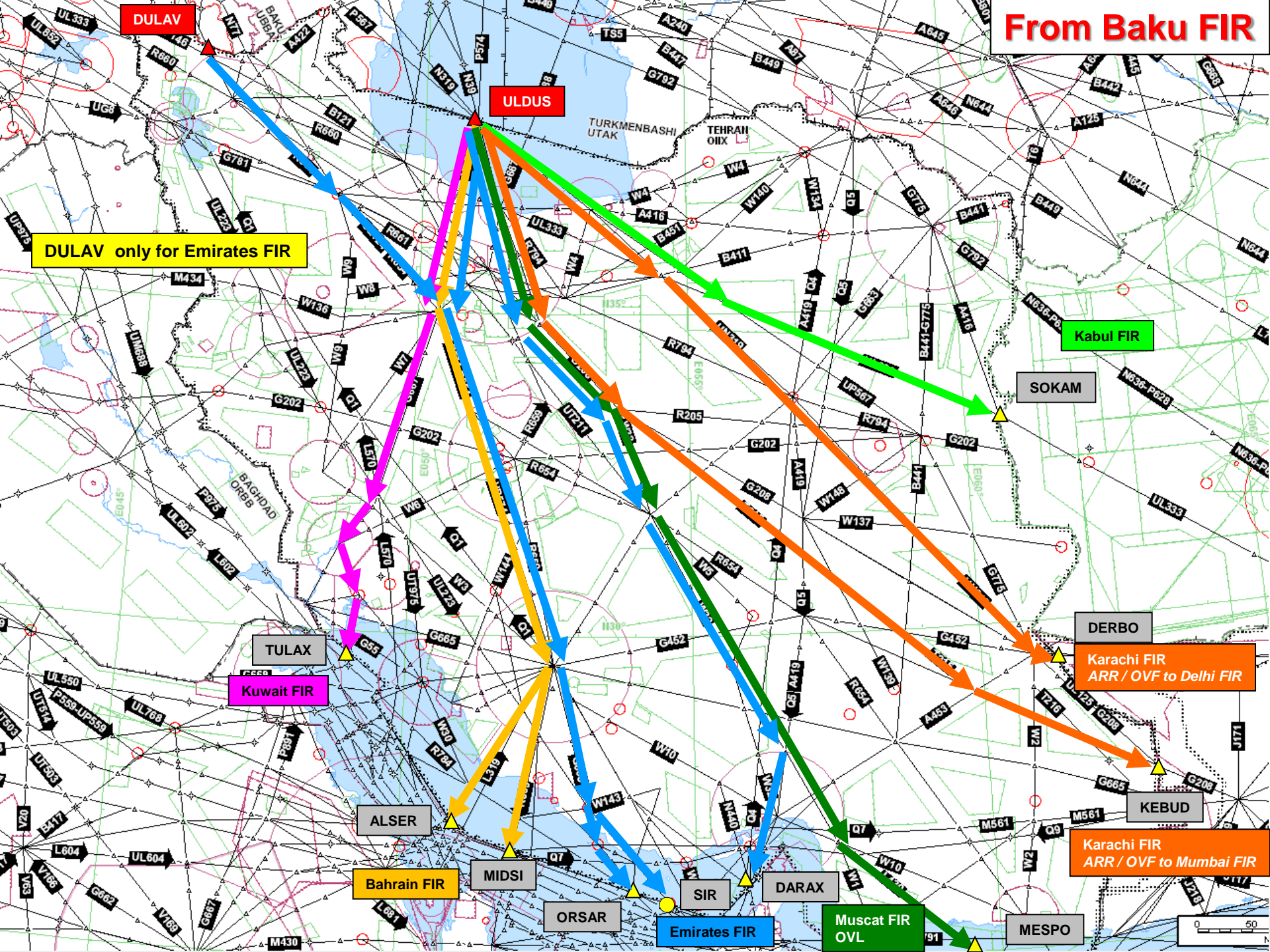




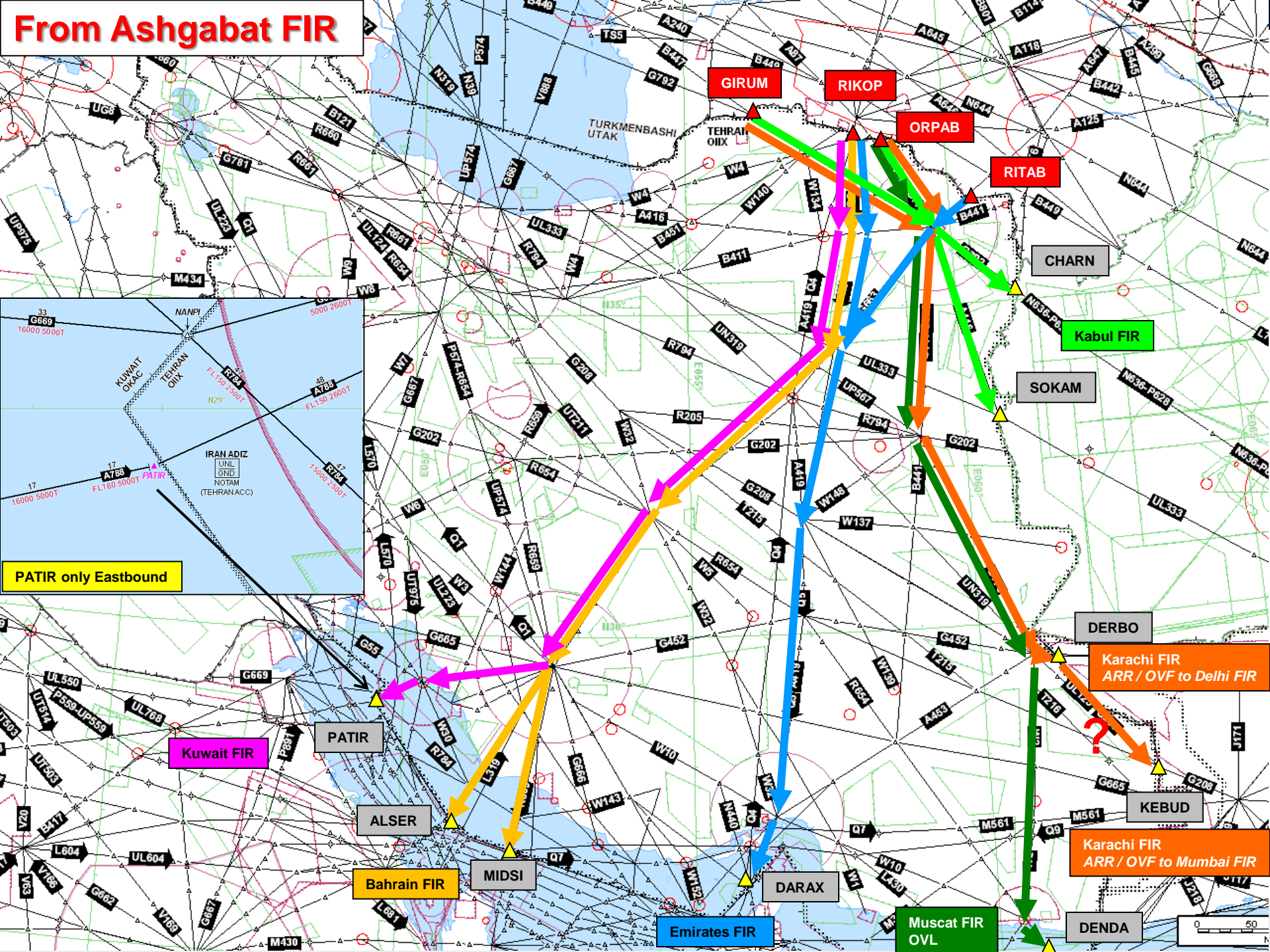
# From Yerevan FIR



**From Baku FIR**



# From Ashgabat FIR





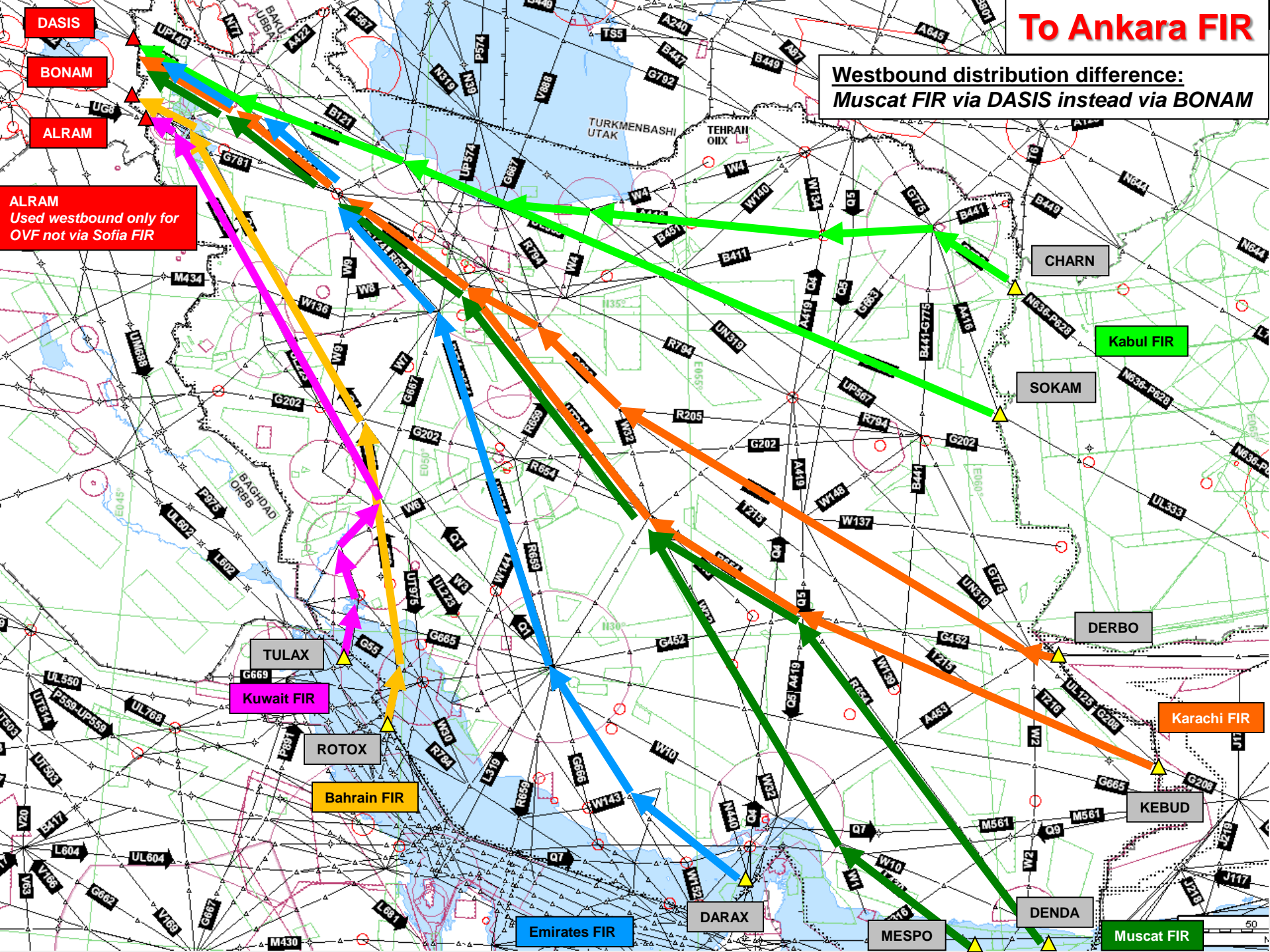
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# Required Routing (TOS) to ICAO EUR/NAT Region

# To Ankara FIR

**Westbound distribution difference:  
Muscat FIR via DASIS instead via BONAM**



**DASIS**  
**BONAM**  
**ALRAM**

**ALRAM**  
Used westbound only for  
OVF not via Sofia FIR

**Kuwait FIR**

**Bahrain FIR**

**Emirates FIR**

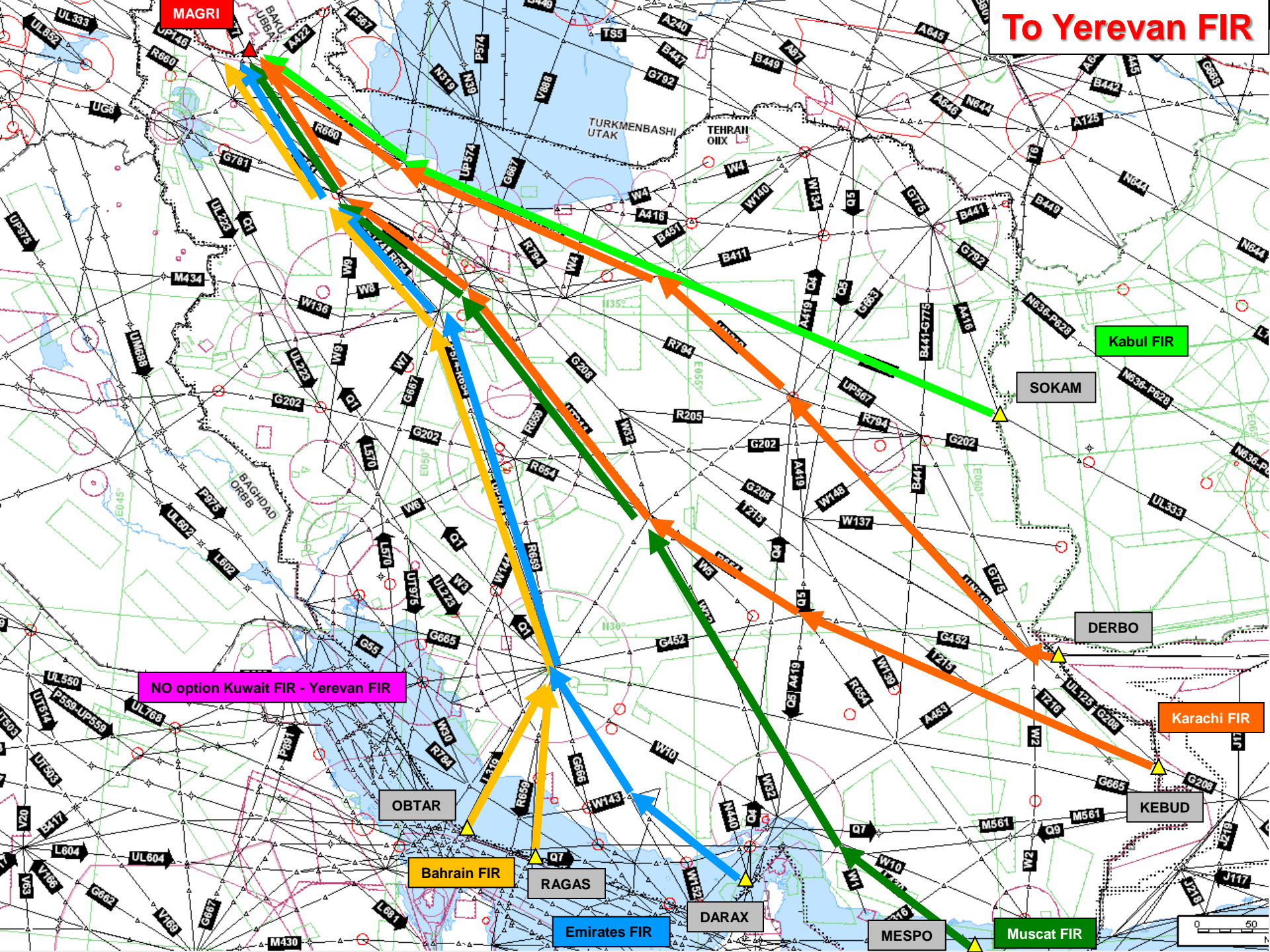
**Muscat FIR**

**Karachi FIR**

**Kabul FIR**

**To Ankara FIR**

To Yerevan FIR

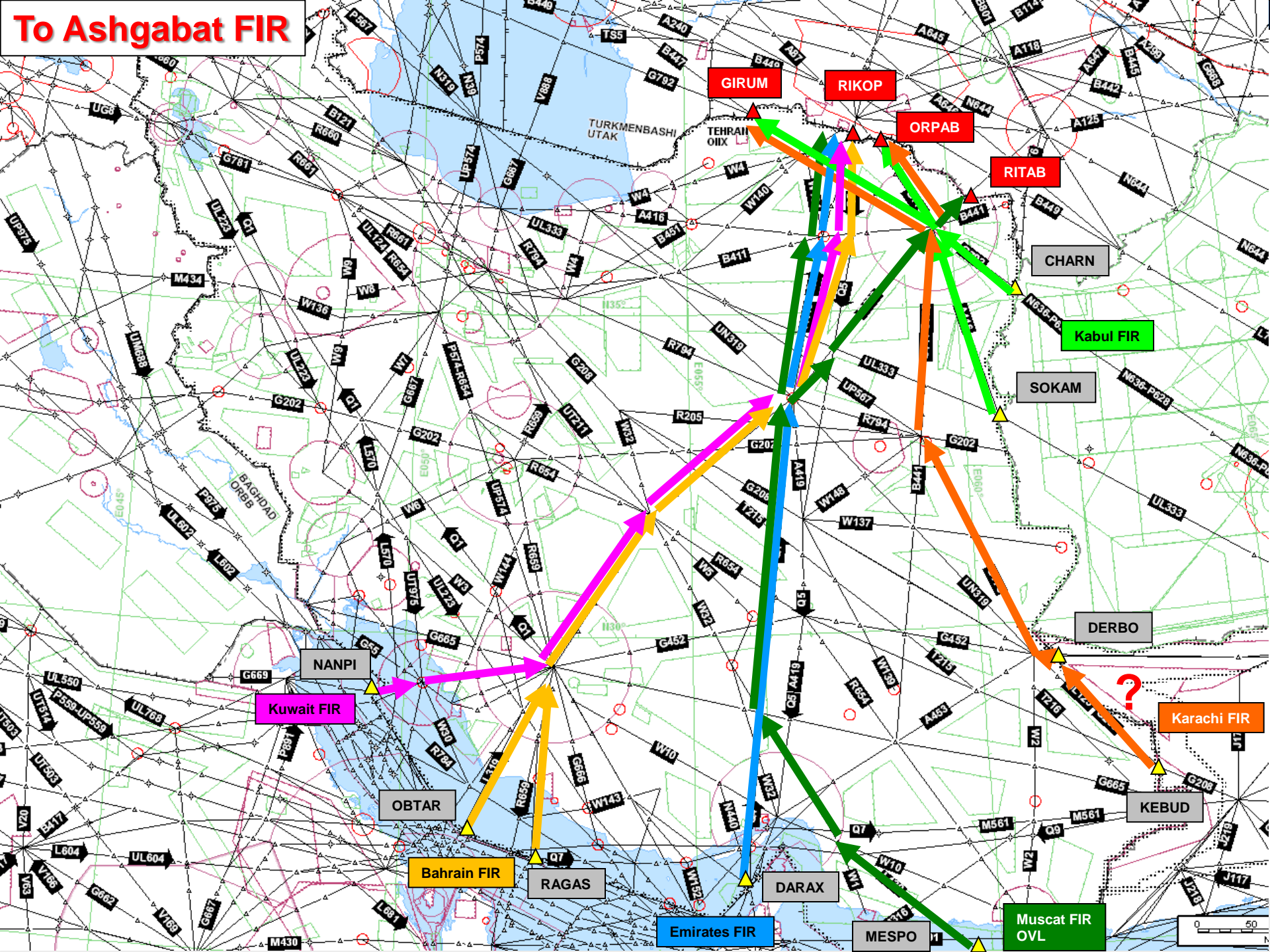


NO option Kuwait FIR - Yerevan FIR





# To Ashgabat FIR







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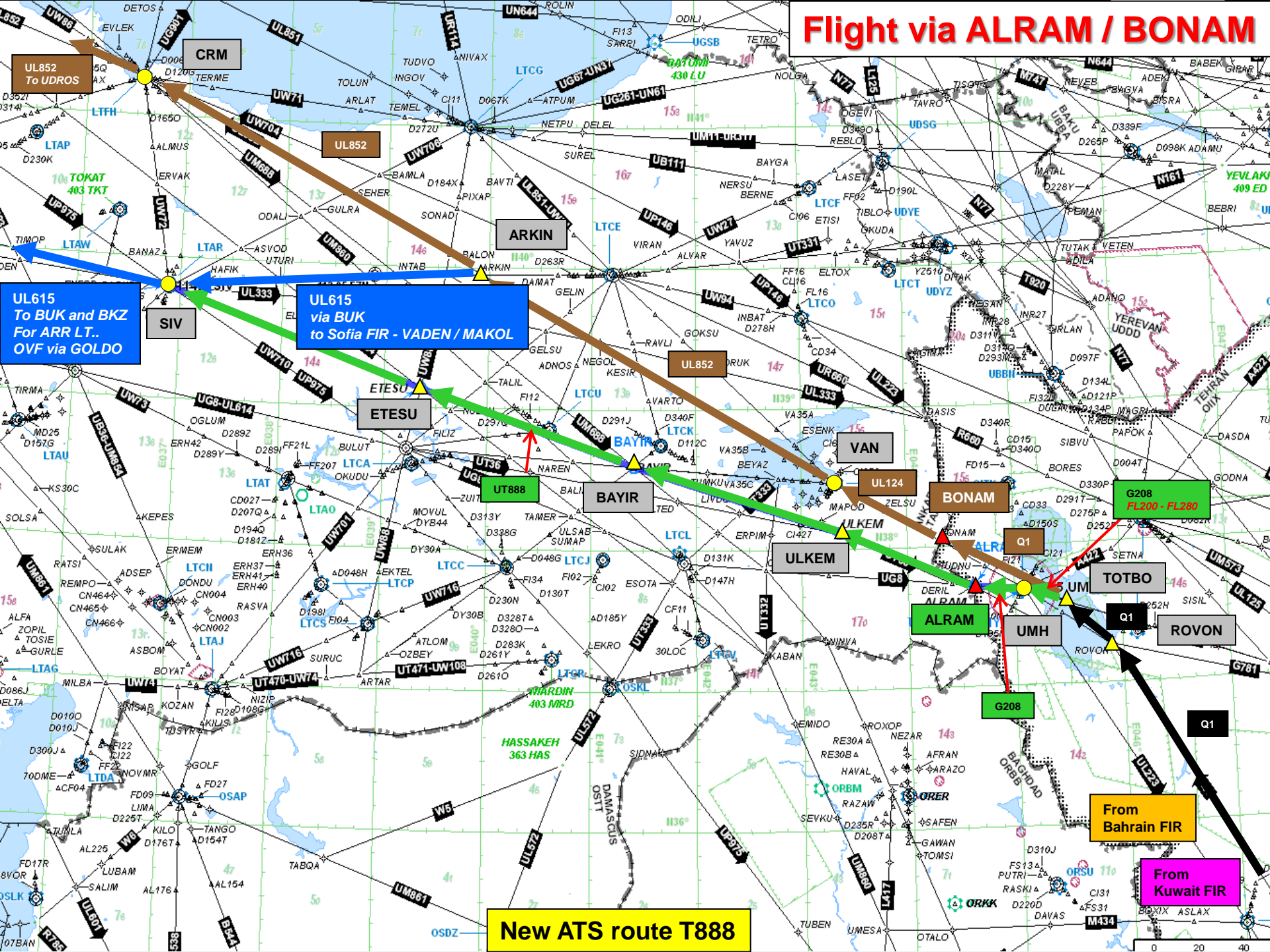


# **Ankara FIR / Tehran FIR**

## **ALRAM bi-directional use**

### **5 MAR 2015**

# Flight via ALRAM / BONAM



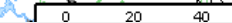
UL615  
To BUK and BKZ  
For ARR LT.  
OVF via GOLDO

UL615  
via BUK  
to Sofia FIR - VADEN / MAKOL

New ATS route T888

From Bahrain FIR

From Kuwait FIR





A0842/15 NOTAMN

Q)LTAA/QANCS/I/NBO/E/000/999/3856N03709E423

A)LTAA

B)1503050000 C)PERM

E)RNAV ROUTE UT888 INSTALLED PROPERTY AS BELOW

1.SIGNIFICANT POINT :ALRAM(FIR BDRY):374230N0443736E;

ULKEM:380638N0432153E; BAYIR:383541N0412414E;

ETESU:390817N0392116E; SIV VOR: 394722N0365336E

2.MAG TRACK :ALRAM(FIR BDRY)-ULKEM:287

ULKEM-BAYIR:283; BAYIR-ETESU :284; ETESU-SIV VOR:285

3.DIST NM :ALRAM(FIR BDRY)-ULKEM:64.58

ULKEM-BAYIR:96.99; BAYIR-ETESU:101.41; ETESU-SIV VOR:120.84

4.UPPER/LOWER LIMITS: ALRAM(FIR BDRY)-SIV VOR:FL660/FL285

5.MNM FL ALT: ALRAM(FIR BDRY)SIV VOR:FL290

6.CRUSING LEVELS: EVEN

7.REMARK: 1)UNIDIRECTIONAL WESTBOUND

2)NOT AVAILABLE FOR TRAFFIC ARR/OVERFLY LB../UK../UR../UG../UD..

A0776/15 NOTAMN

Q)OIIX/QARCH/IV/BO/E/000/999/3742N04451E012

A)OIIX

B)1503041902 C)PERM

E)ACCORDING TO AGREEMENT BTN OIIX AND LTAA FIR, POINT ALRAM

DEFINED AS ENTRY/EXIT POINT TO/FM OIIX FIR AND DIRECTION OF

AWY G208 BTN ALRAM AND UMH VOR/DME CHG TO BIDIRECTIONAL.

AMD AIP PAGE ENR 3.1-20.

- ✓ *Airspace change agreed in November 2014 but announced by permanent NOTAM few days before AIRAC date.*
- ✓ *Emirate initial concerns:*
  - *Routes are not included in the current FMS NavDB cycle #1503;*
  - *Routes are not charted;*
  - *No drift down/depressurisation strategies have been calculated yet (because of missing publications);*
- ✓ *Emirates finally decided to file/use the new ATS route UT888.*
- ✓ *ICAO MID Office send an official State Letter to Iran urging them to adhere to Annex 15 requirements, otherwise an air navigation deficiency will be filed against Iran.*
- ✓ *Inserted in AIP Turkey with AIRAC AMDT 30 APR 2015.*



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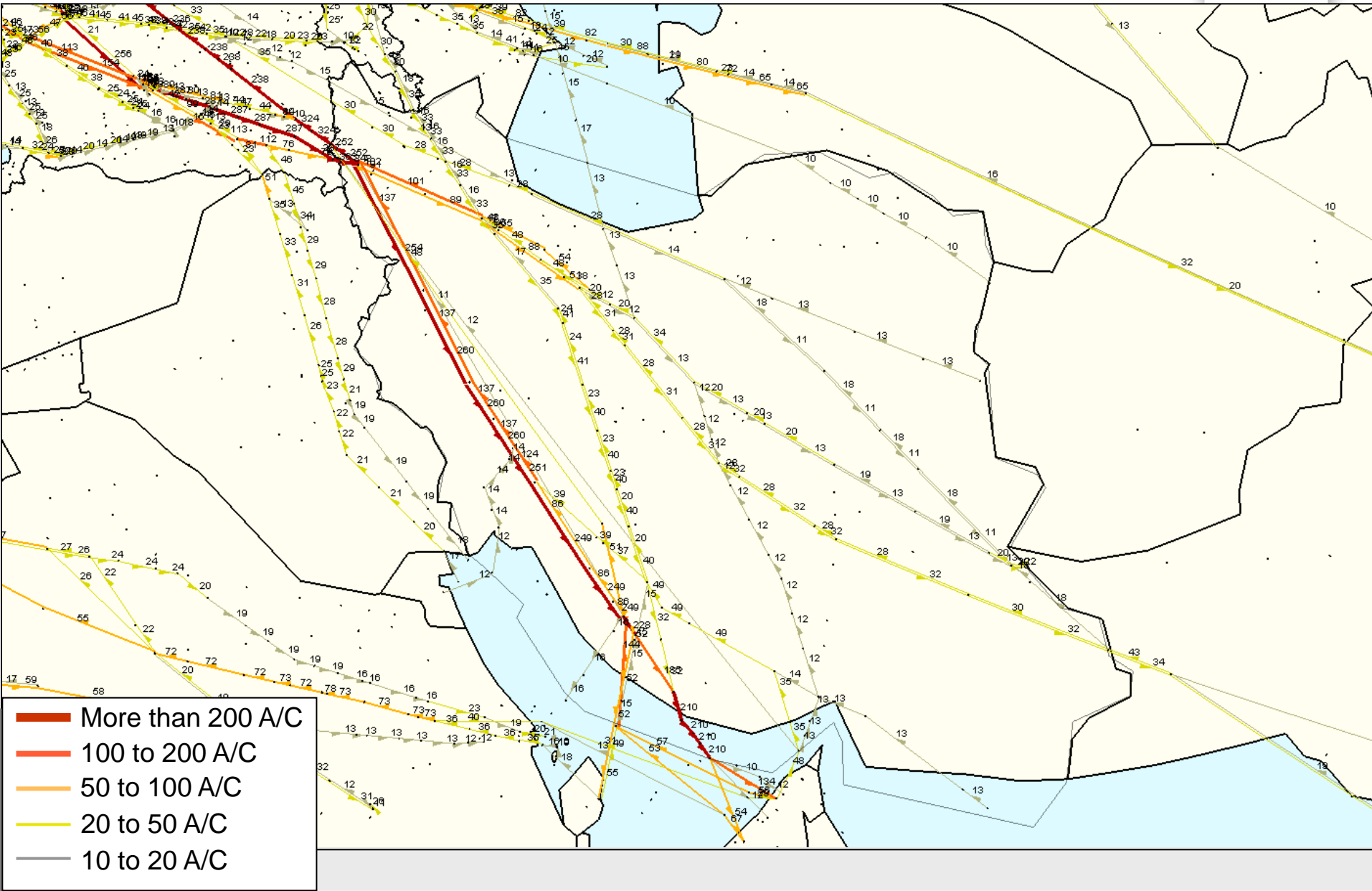
# **ATS route changes and Required Routing (TOS) Traffic Influence**



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# Europe / Asia interface traffic distribution

## Tehran FIR - 5 SEP 2014 (FRI)

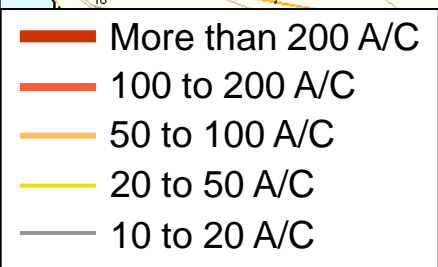
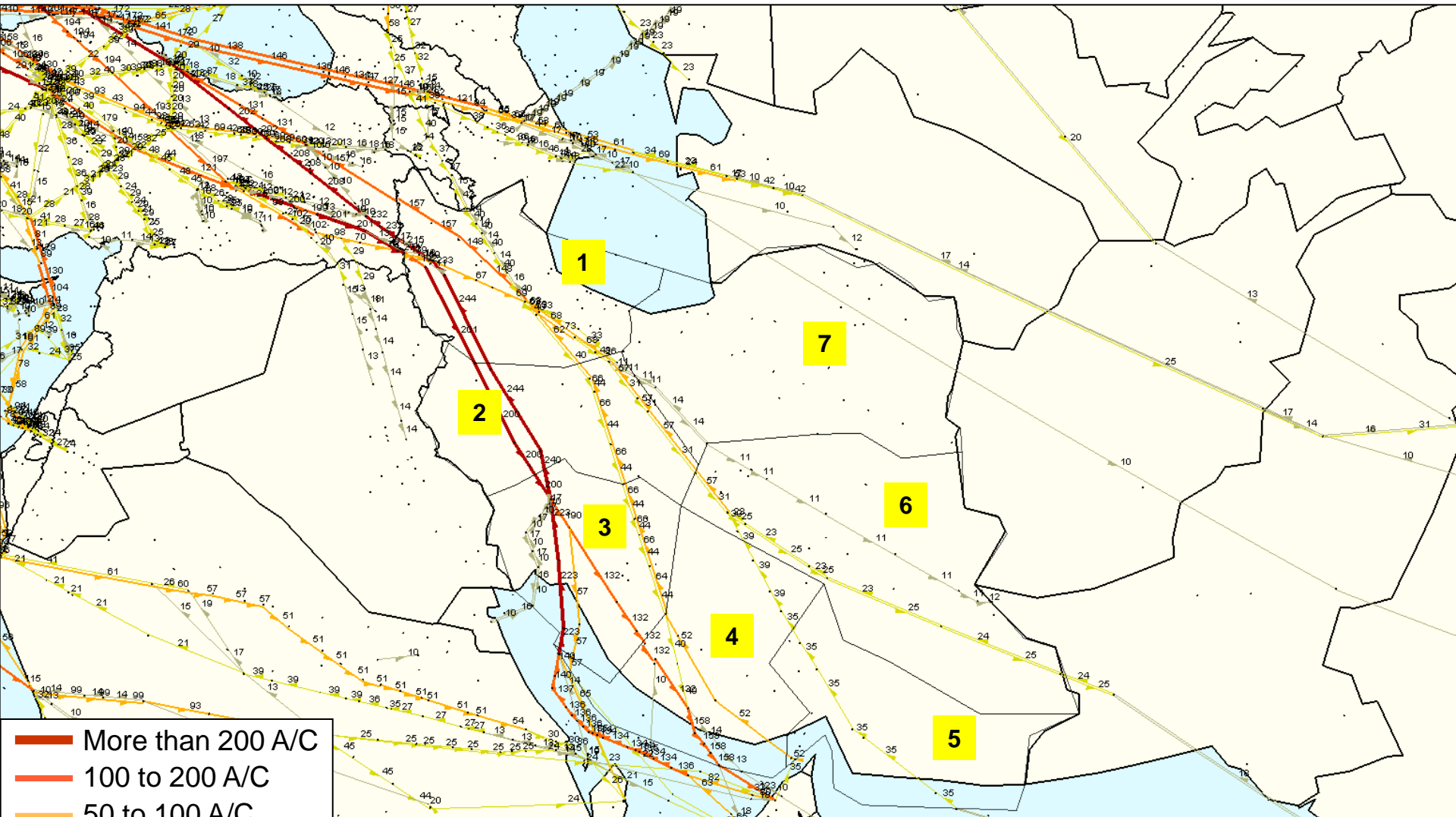




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# Europe / Asia interface traffic distribution

## Tehran FIR - 24 APR 2015 (FRI)



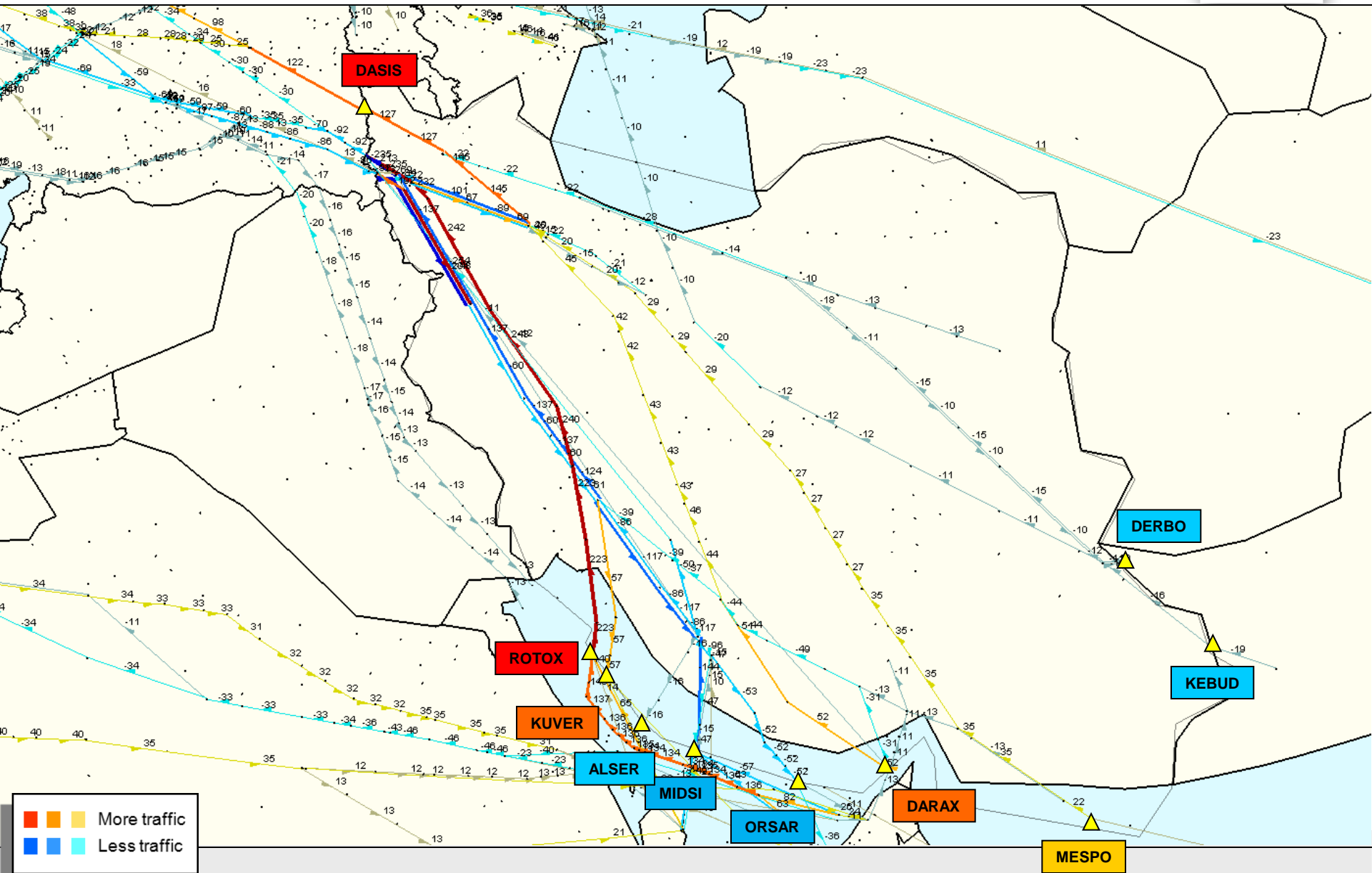
Tehran ACC Sector boundaries are as per State AIP ENR 2.1



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# Europe / Asia interface traffic distribution

## Tehran FIR - Comparison - 24 APR 2015 (FRI)





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# Europe / Asia interface traffic distribution

## Tehran FIR - ACC Traffic Load - 24 APR 2015 (FRI)



Current Traffic Distribution				
Sector	Number of flights	Average distance (NM)	Average time (min)	Maximum occupancy Count
Sector 1	768	258.4	33.1	96
Sector 2	739	162.8	21.2	66
Sector 3	558	246.2	31.1	50
Sector 4	577	114.0	14.6	21
Sector 5	108	156.8	20.4	16
Sector 6	121	377.1	48.5	21
Sector 7	90	259.8	34.0	12

- ❖ **Maximum Occupancy Count** - Instantaneous number of aircraft, which gives the number of aircraft that are observed within the sector at any minute during the interval. An aircraft is counted during the time it actually flew in the sector.





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# Europe / Asia interface traffic distribution Tehran FIR - TOS application - 24 APR 2015 (FRI)





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# Europe / Asia interface traffic distribution

## Tehran FIR - TOS application - 24 APR 2015 (FRI)





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# Europe / Asia interface traffic distribution

## Tehran FIR - TOS application - 24 APR 2015 (FRI)

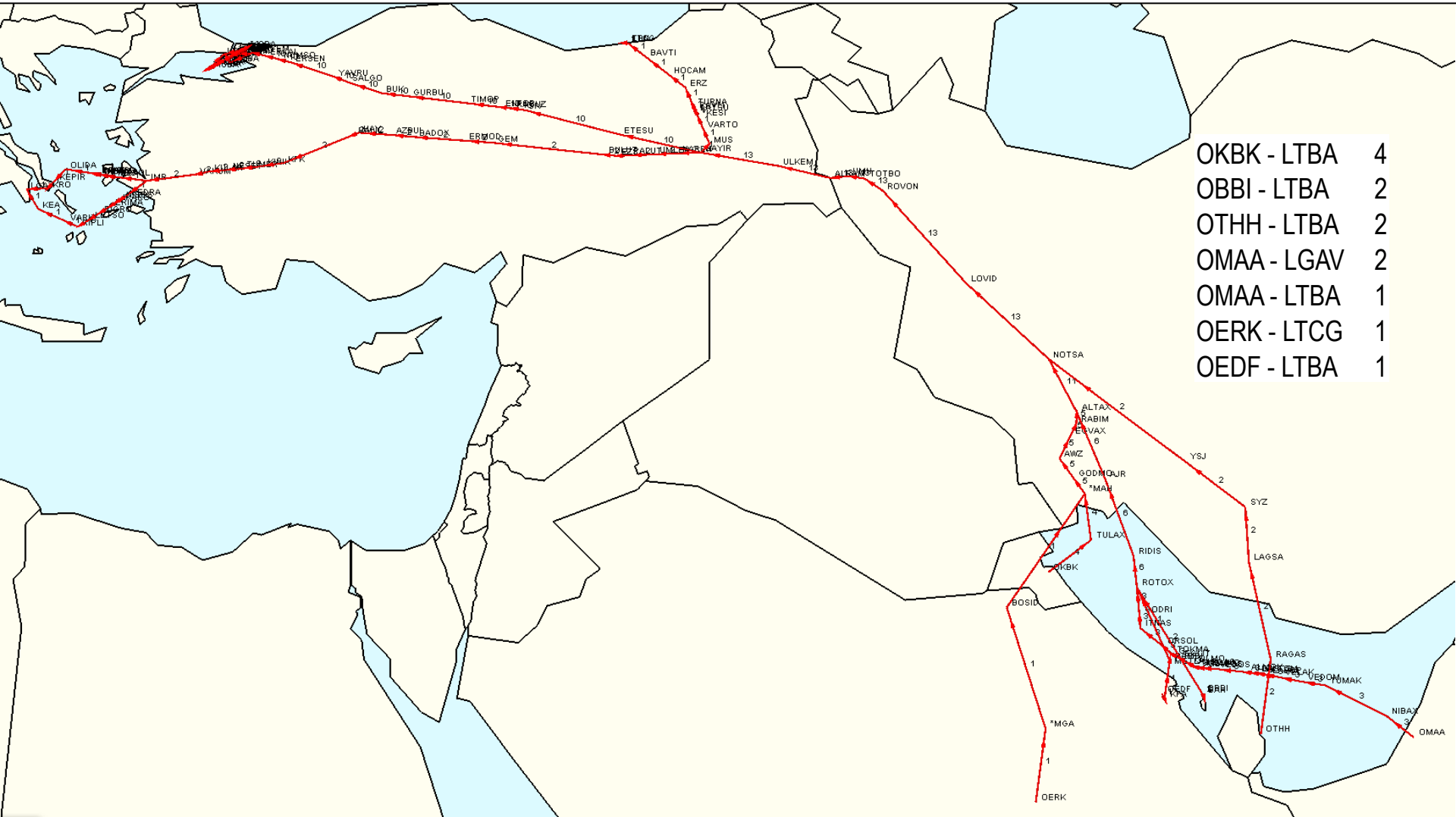




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# ALRAM westbound Traffic Load

## 24 APR 2015 (FRI)





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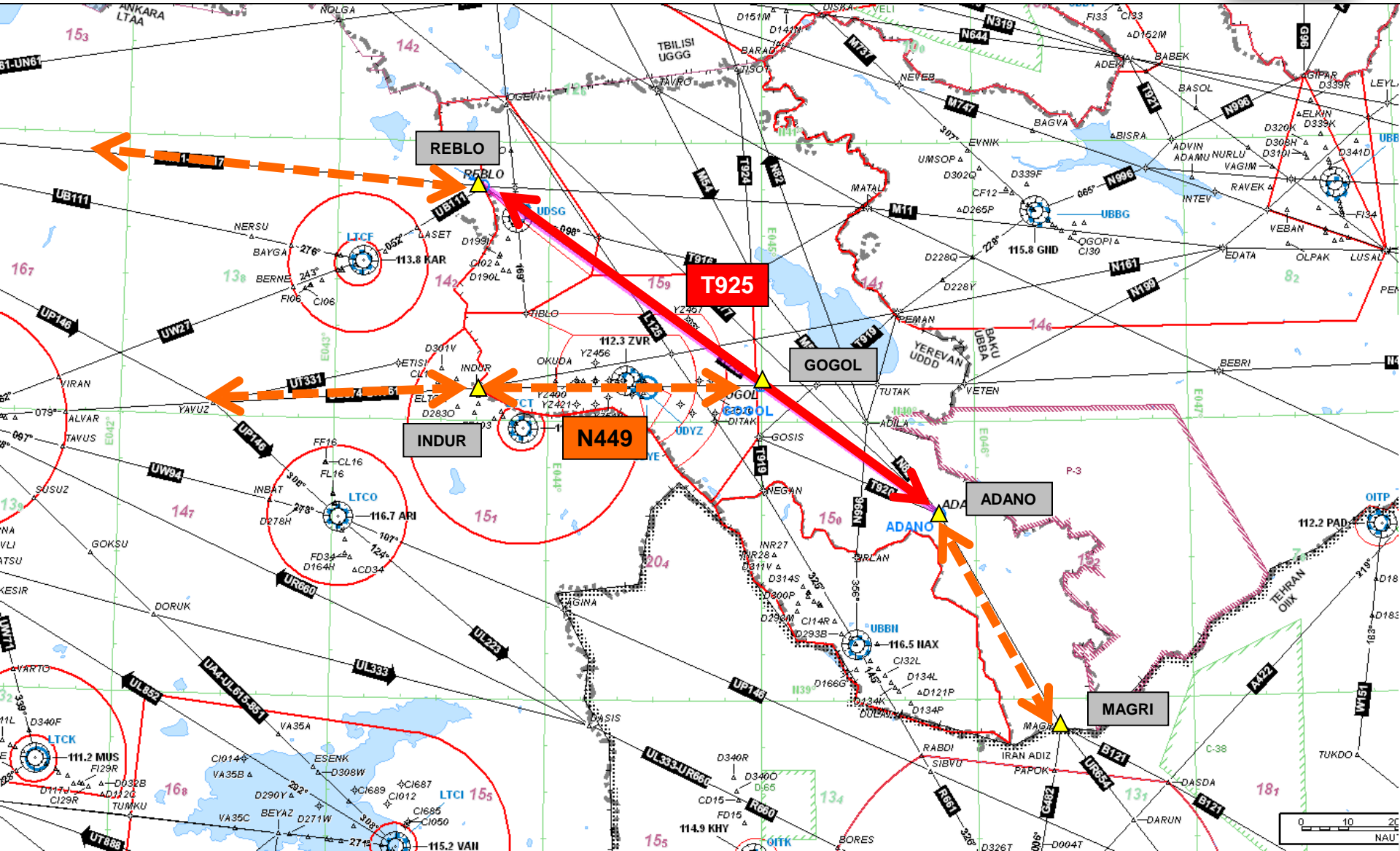


# **Adjacent ATS route changes within ICAO EUR/NAT**



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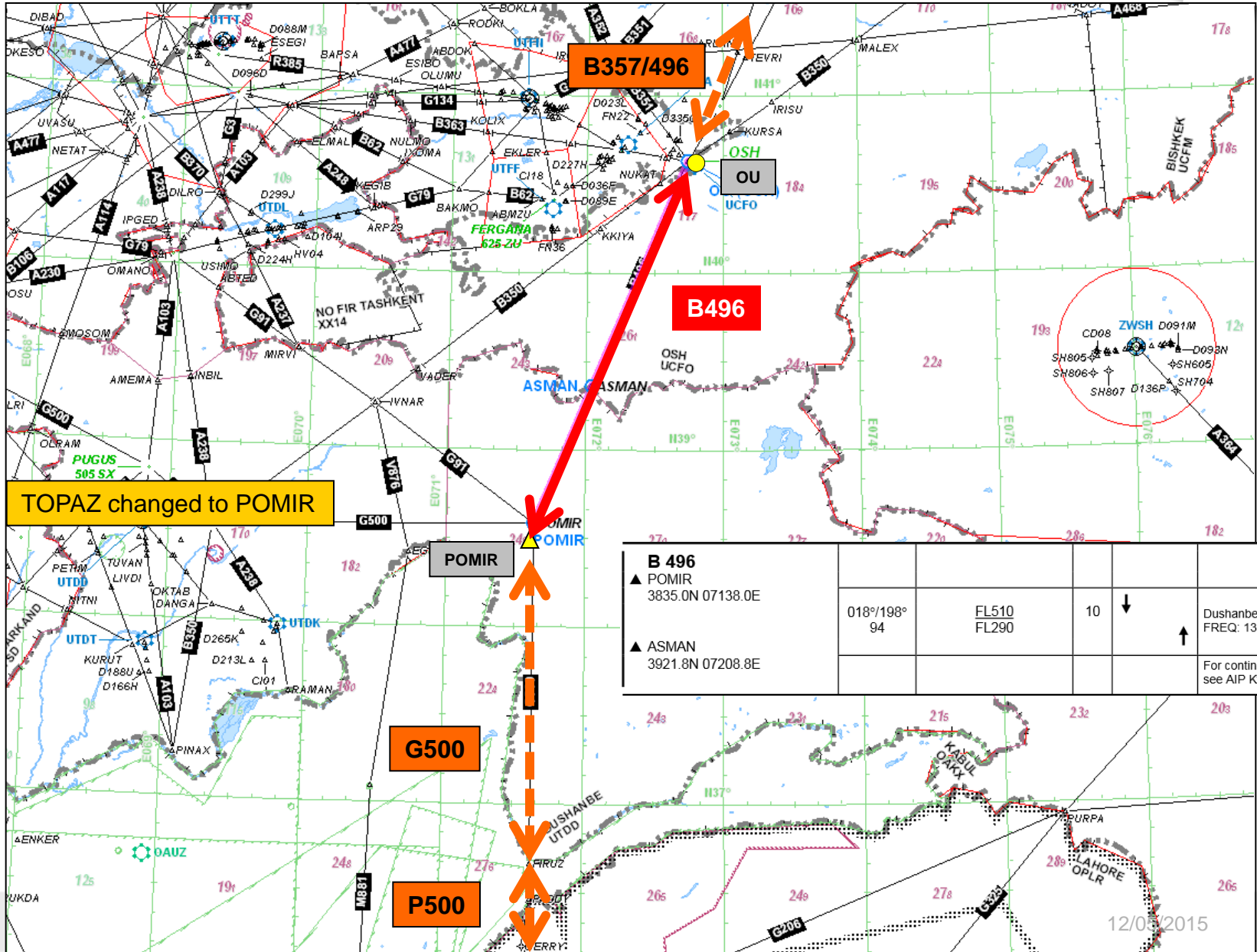
# Armenia 5 FEB 2015





# Tajikistan / Kyrgyzstan

## 2 APR 2015



TOPAZ changed to POMIR

B357/496

B496

G500

P500

<b>B 496</b>					
▲ POMIR	3835.0N 07138.0E	018°/198°	FL510	10	↓
		94	FL290		
▲ ASMAN	3921.8N 07208.8E				↑
					Dushanbe ACC FREQ: 133.100 MHz
					For continuation, see AIP Kyrgyzstan



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**END**