ICAO EUR - MID Regions Interface NM Vision

Current Flows, Loads and Ideas for Improvement

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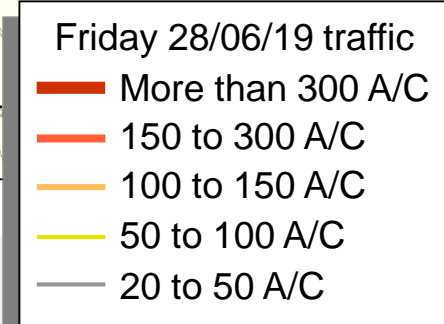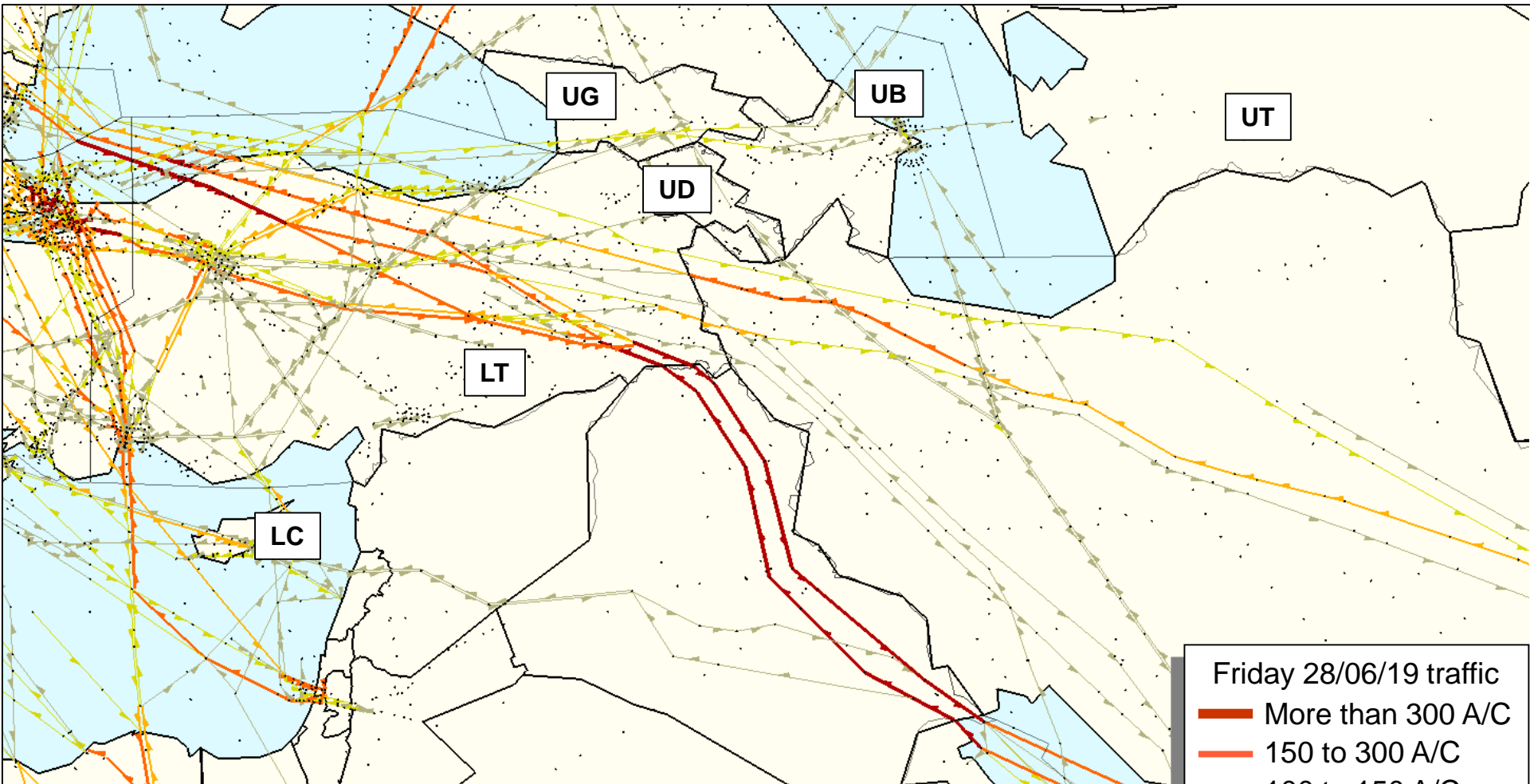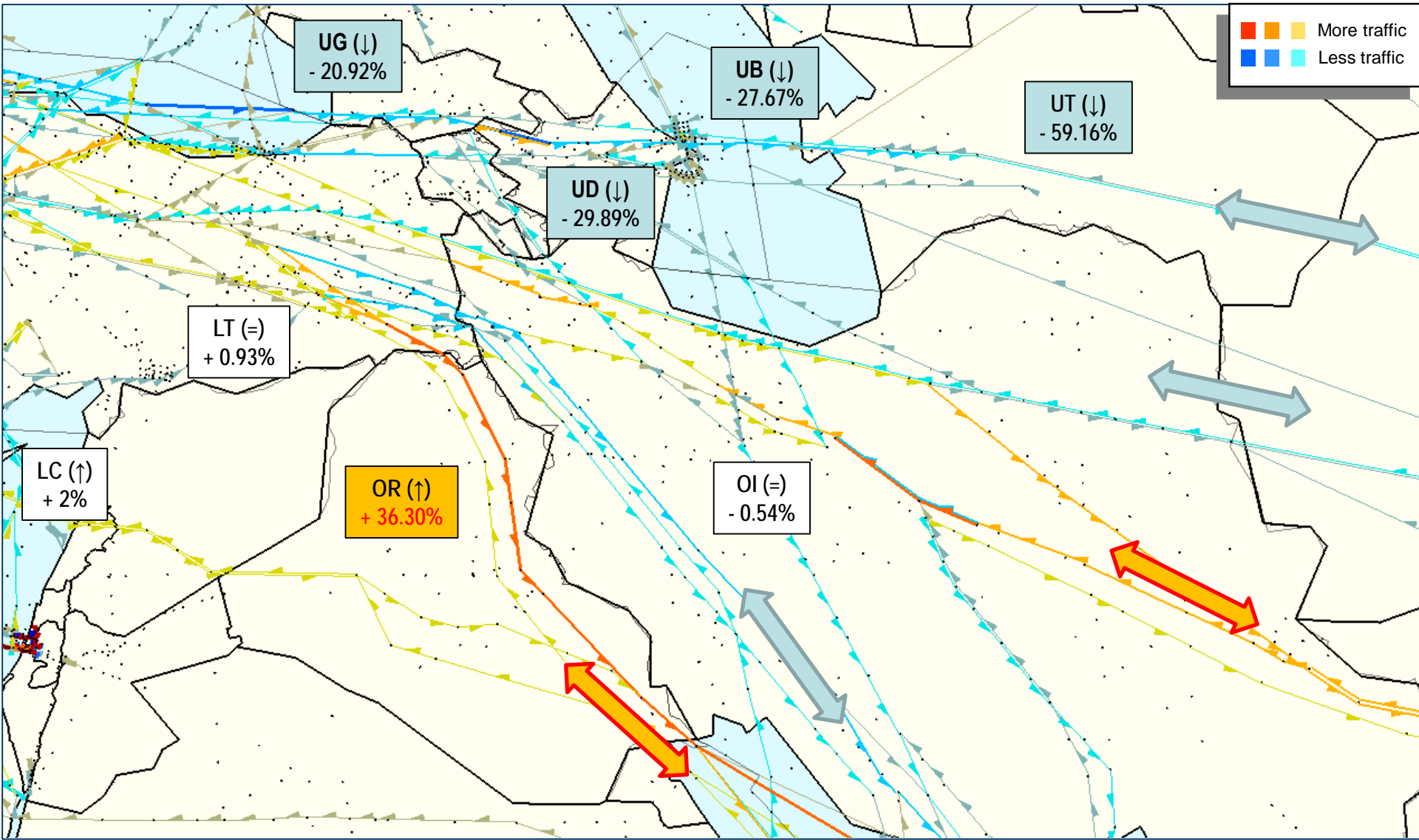16th July 2019

FOUNDING
MEMBER
SESAR
JOINT UNDERTAKING

NETWORK
MANAGER

ICAO EUR-MID Regions - Current South East Area Traffic Flows

ICAO EUR-MID Regions Interface Traffic Load
28 JUN 2019 FRI (the busiest 2019 day)

Legend — Friday 28/06/19 traffic:
- More than 300 A/C
- 150 to 300 A/C
- 100 to 150 A/C
- 50 to 100 A/C
- 20 to 50 A/C

Map labels: UG, UB, UT, UD, LT, LC

ICAO EUR-MID Regions Interface Traffic Load
Comparison 28 JUN 2019 / 29 JUN 2018
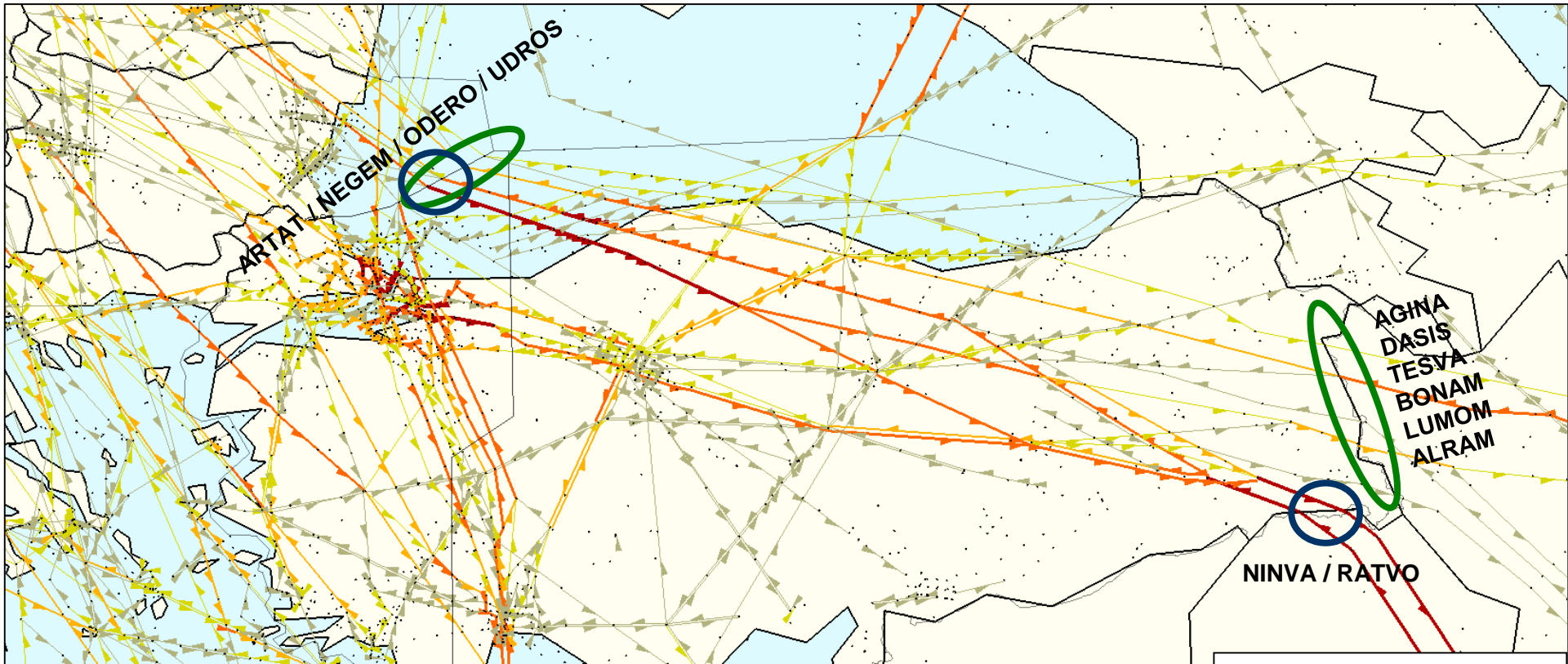
EUROCONTROL

Legend:
More traffic
Less traffic

UG (↓) - 20.92%

UB (↓) - 27.67%

UT (↓) - 59.16%

UD (↓) - 29.89%

LT (=) + 0.93%

LC (↑) + 2%

OR (↑) + 36.30%

OI (=) - 0.54%

ICAO EUR Region Internal Organisation
Main Traffic Flows

ARTAT / NEGEM / ODERO / UDROS

AGINA
DASIS
TESVA
BONAM
LUMOM
ALRAM

NINVA / RATVO

Friday 28/06/19 traffic
— More than 300 A/C
— 150 to 300 A/C
— 100 to 150 A/C
— 50 to 100 A/C
— 20 to 50 A/C

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ICAO EUR Region Internal Organisation
Main Traffic Flows and Load

- Due to some unavailable airspaces the shortest and most optimum options for East-West / West-East traffic flows are at interface between Sofia FIR and Istanbul FIR / Ankara FIR via points ARTAT, NEGEM, ODERO and UDROS. Additional options are also available via ADORU, VADEN, TUDBU, RIXEN and MAKOL.

- Traffic flows are organised via unidirectional ATS routes / FRA points as follows:
    - ARTAT - entry for Istanbul FIR / Ankara FIR;
    - NEGEM - exit for Istanbul FIR / Ankara FIR;
    - ODERO - exit for Istanbul FIR / Ankara FIR;
    - UDROS - entry for Istanbul FIR / Ankara FIR.

- Traffic flow limitations imposed by Bulgaria and Turkey are as follows:
    - ARTAT - entry for Istanbul FIR / Ankara FIR and exit only via Baghdad FIR and Tehran FIR (selected Southern points);
    - NEGEM - exit for Istanbul FIR / Ankara FIR and entry only via Baghdad FIR and Tehran FIR (selected Southern point);
    - ODERO - exit for Istanbul FIR / Ankara FIR but entry not allowed via Baghdad FIR;
    - UDROS - entry for Istanbul FIR / Ankara FIR but exit not allowed via Baghdad FIR.

- Traffic load is unbalanced and is as follows for 28 JUN 2019:
    - ARTAT - 316 flights;
    - NEGEM - 280 flights;
    - ODERO - 160 flights;
    - UDROS - 140 flights.

- Potentiality exists for more balanced use of entry/exit points between Sofia FIR and Istanbul FIR / Ankara FIR.

ICAO EUR-MID Regions Interface Organisation
Main Traffic Flows and Load

- East-West / West-East traffic flows via points ARTAT, NEGEM, ODERO and UDROS are connected to existing interface with Baghdad FIR and Tehran FIR.

- Traffic flows are organised on unidirectional flows based on imposed limitations by Bulgaria and Turkey and are as follows:
  - ARTAT → RATVO (OR) / LUMOM (OI) / BONAM (OI) (theoretically ALRAM (OI) but longer option is not used by AOs);
  - NEGEM ← NINVA (OR) / TESVA (OI);
  - ODERO ← DASIS (OI);
  - UDROS → AGINA (OI).

- Traffic load on above flows is unbalanced and is as follows for 28 JUN 2019:
  - ARTAT → RATVO - 256 flights;
  - ARTAT → LUMOM - 26 flights;
  - ARTAT → BONAM - 28 flights;
  - NEGEM ← NINVA - 240 flights;
  - NEGEM ← TESVA - 30 flights;
  - ODERO ← DASIS - 114 flights;
  - UDROS → AGINA - 66 flights.

- Potentiality exists for more balanced use of entry/exit points between Sofia FIR - Istanbul FIR / Ankara FIR and Ankara FIR - Baghdad FIR / Tehran FIR. Definitely traffic flow distribution to/from airports inside Istanbul FIR and Ankara FIR shall be considered.

ICAO EUR-MID Regions Interface Organisation
Baghdad FIR / Tehran FIR

- East-West / West-East traffic flows between EUR-MID Region are connected to existing interface with Baghdad FIR - RATVO / NINVA and Tehran FIR - ALRAM / LUMOM / BONAM / TESVA / DASIS / AGINA.

- Traffic load of **803 flights** between EUR-MID Regions via Baghdad FIR is as follows for 28 JUN 2019:
    - RATVO - 424 flights;
    - NINVA - 389 flights;

- Traffic load **447 flights** between EUR-MID Regions via Tehran FIR is as follows for 28 JUN 2019:
    - ALRAM - 7 flights;
    - LUMOM - 47 flights;
    - BONAM - 109 flights;
    - TESVA - 31 flights;
    - DASIS - 188 flights;
    - AGINA - 66 flights.

ICAO EUR-MID Regions Interface Organisation
Possible Improvements

Potentiality exists for improvements at EUR Network level and EUR-MID Regions interface which can be summarised as:

- Sofia FIR - Istanbul FIR / Ankara FIR:
  - Possible allowance by Bulgaria and Turkey of use of points ODERO and UDROS for traffic via Baghdad FIR.

- Ankara FIR - Tehran FIR:
  - More balanced use of existing entry/exit points considering that the load on some of the existing points is low;
  - Possible re-consideration of the traffic orientation in Tehran FIR in contingency situation allowing more flexible options - as an example use of AGINA for traffic to Gulf Area;
  - Possible new ATS route connections inside Tehran FIR - use by AGINA traffic for Gulf Area.

- Ankara FIR - Baghdad FIR:
  - Possible new entry/exit points for both Eastbound and Westbound traffic including possible re-opening of KABAN;
  - Existence of unbalanced number of entry/exit points between Ankara FIR - Baghdad FIR / Tehran FIR: Only 2 points with Baghdad FIR and 6 points with Tehran FIR;
  - Traffic flow distribution to/from airports inside Istanbul FIR and Ankara FIR shall be considered;
  - Possible new traffic flow organisation between Ankara FIR - Baghdad FIR, especially for Eastbound traffic cannot be considered optimum without improvement at interface between Baghdad FIR and Kuwait FIR.

ICAO EUR-MID Regions - Proposed Airspace Improvements

ICAO EUR-MID Regions Interface Proposal
## Ankara FIR - Baghdad FIR

- Proposal presented by Iraq at ICAO ATM SG/4, Amman, Jordan 29 April - 3 May 2018 and re-confirmed at EUROCONTROL Istanbul New Airport Regional Meeting 31 May 2018 - 1 June 2018.

- Proposal of establishment of additional 2 entry/exit points with Turkey.

- Challenges for routes implementation reported by Iraq:
  - Follow Iraq internal procedure for opening new routes;
  - Negotiations with Turkey for establishing new entry/exit points;
  - Negotiations with Kuwait for establishing new entry/exit points;
  - Negotiations with Tehran for establishing new entry/exit points;
  - Negotiations with Saudi Arabia for establishing new entry/exit points;
  - Consultation with the users

- Currently no developments reported.
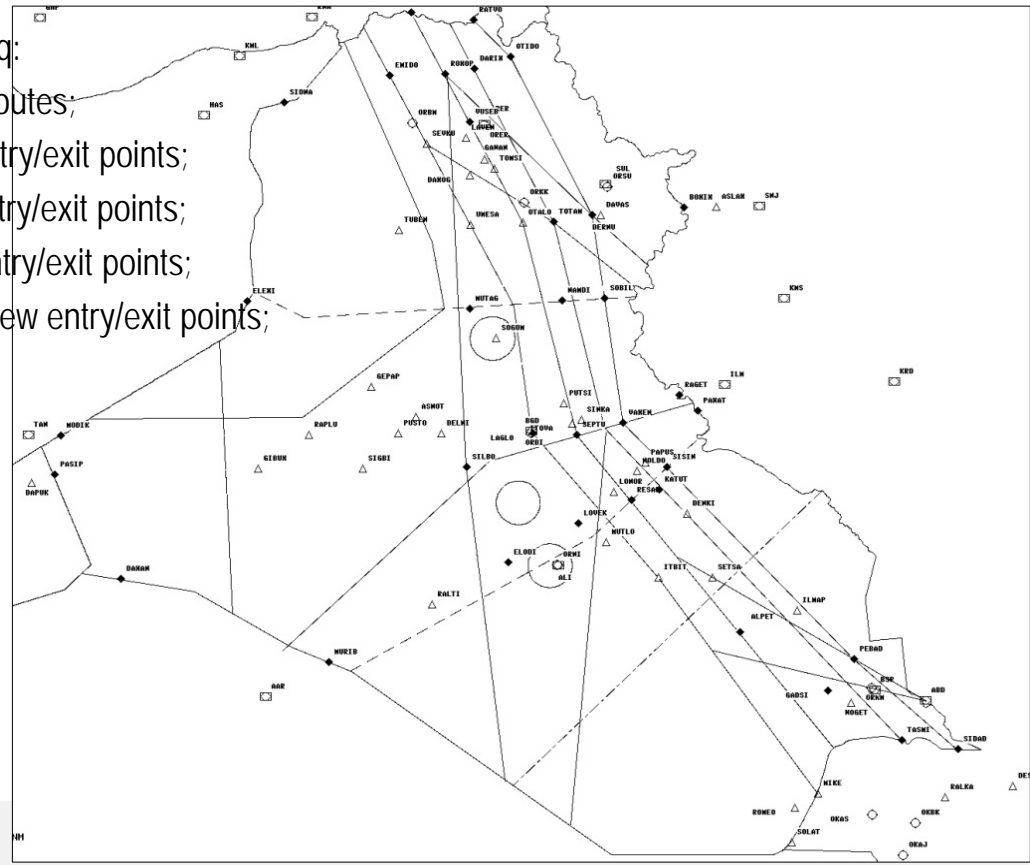
ICAO EUR-MID Regions Interface Proposal
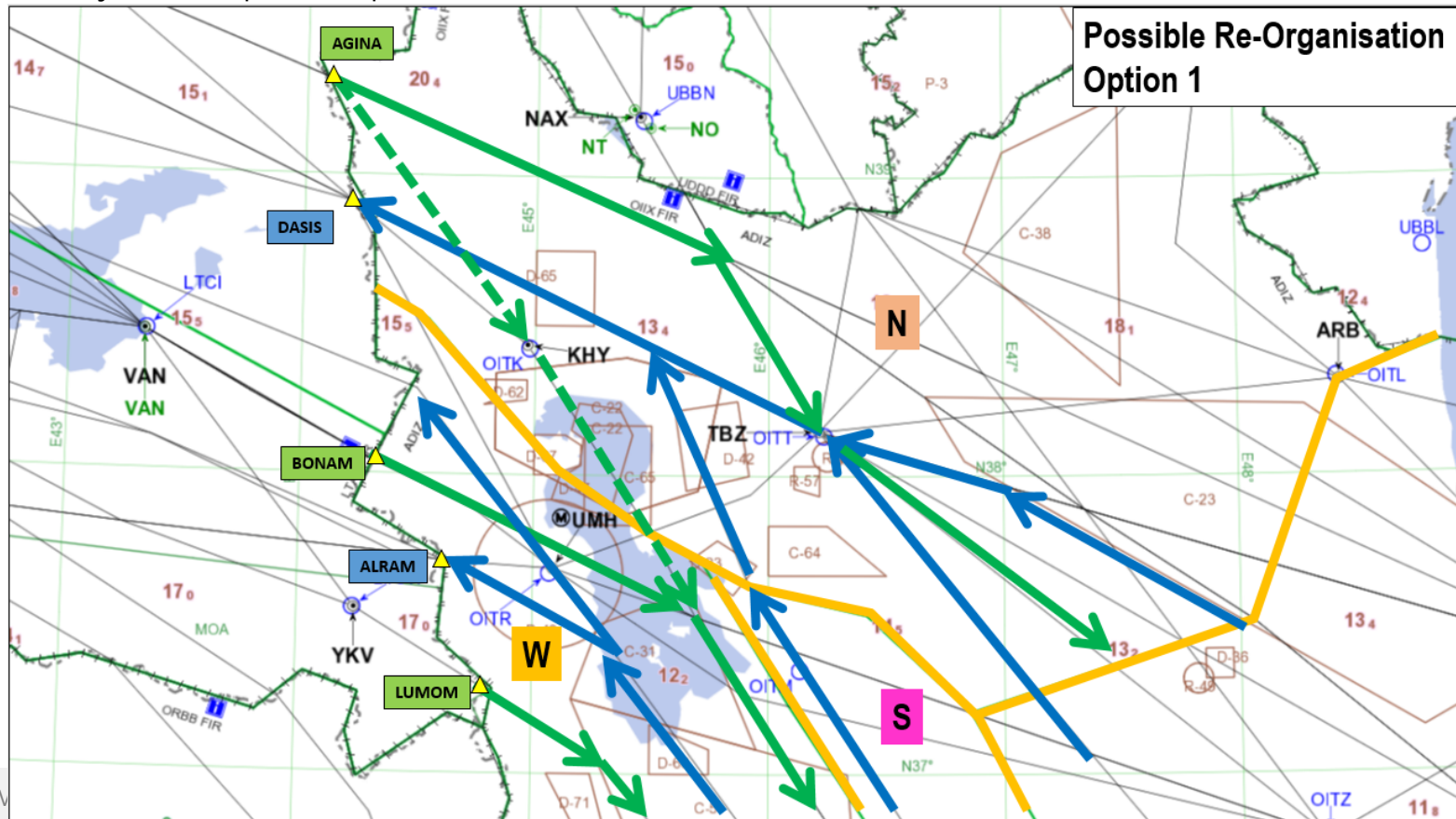## Ankara FIR - Baghdad FIR

- Proposal presented by Turkey at RDGE/30, Tallinn, Estonia, 1 - 5 April 2019;
- Proposal of re-opening of KABAN westbound supported by a SAAM/NEST evaluation provided by EUROCONTROL NM;
- Use of Westbound points KABAN and NINVA as follows:
  - KABAN - ARR LT.. and overflights via MAKOL, IBLAL, TUDBU, VADEN, GOLDO, RIKSO, VESAR, REDRA, SOTIV, BANRO, PIROX, TOMBI and VESAR;
  - NINVA - ARR LT.. and overflights via NEGEM, KUGOS, ODIRA, BALUM, TUDEK, ROLIN, SARPI, NOLGA, REBLO, INDUR, AGINA, DASIS, BONAM, LUMOM and ALRAM.
- Currently no developments reported.
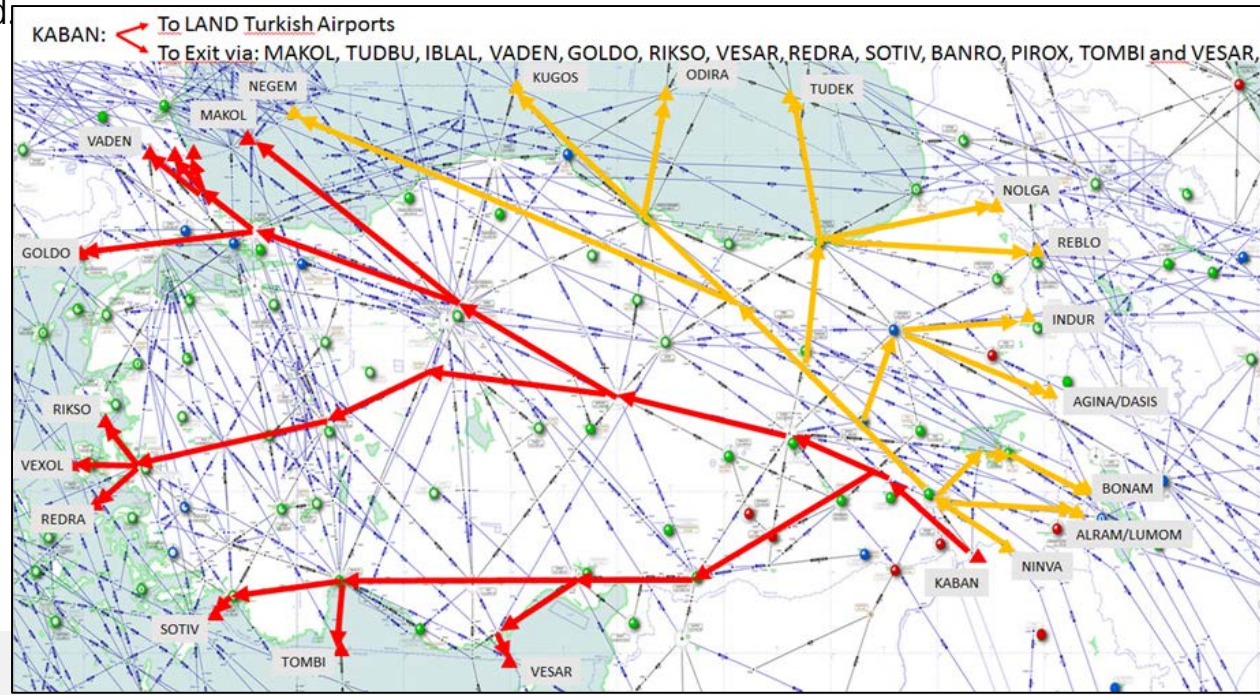
ICAO EUR-MID Regions Interface Proposal
Ankara FIR - Tehran FIR

- Proposal presented by Turkey at RDGE/30, Tallinn, Estonia, 1 - 5 April 2019;
- Proposal of establishment of additional ATS route connection (with 3 Options) inside Tehran FIR allowing options via AGINA to Bahrain FIR and Emirates FIR. Traffic orientation inside Tehran FIR also requires adaptation;
- Currently no developments reported.

Possible Re-Organisation Option 1

QUESTIONS and COMMENTS