



# DSNA Summer 2018 ATFCM plan :

## MAC18 BRIEFING For Airline's Operations Control Centers



**Valide information at the date of the version 2.0:  
14/05/2018**



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# DSNA SUMMER 2018 ATFCM PLAN



**Starts  
(postponed  
by NM)  
APRIL 26th  
2018**

**Amended & new  
MAC18 scenarii made  
available by NM  
between 26th April &  
14thMay 2018**

**R**oute **A**vailability **D**ocument  
**C**ollaborative **A**dvanced **P**lanning  
**F**light **L**evel & **R**e**R**outing **S**cenarios  
**M**andatory **C**herry **P**icking  
**S**hort **T**erm **A**TFCM **M**easures



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# BUILDING ON EXPERIENCE

- ❑ **Team work of all French FMPs based on previous years experience and especially on May-Sept 2017 post Ops analysis**
- ❑ **Sustainable former measures kept**
- ❑ **New Scenarios/RAD :**
  - Maintain flexibility in daily usage
  - Increase responsiveness of global and french network to traffic uncertainty
  - Fine tuned measures to maximise capacity assets
  - Rationalise city pairing with « combing » strategy
- ❑ **Regulation strategy:**
  - Fine tuned coordination to push back the need for traffic regulations when other measures are not sufficient or available





# DSNA SUMMER 2018 ATFCM PLAN: MAC18 OBJECTIVES

- ❑ **MAC Objectives:**
  - Optimise use of DSNA airspace capacity
  - Coordinated measures between ACC (scenarii)
  - Collaboration with AOs to avoid regulations (CAP)
  
- ❑ **MAC 2018 measures:**
  - Level capping scenarii on more accurate city-pair & peak hours
  - ReRouting scenarii on more accurate city-pair & peak hours
  - RAD measures on more accurate city-pair & peak hours
  - CAP flows
  
- ❑ **MAC 2018 monitoring:**
  - Weekly teleconference with between all french ACC
  - Preceding week PostOps
  - Fine tuning of the measures (scenarios, regulations, new RAD measures)



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## ■ FL & RR SCENARIOS

Access to the description of the scenarii on Eurocontrol NOP portal  
<https://www.public.nm.eurocontrol.int/PUBPORTAL/gateway/spec/>

## ■ Rerouting Suggestions in case of Hotspot



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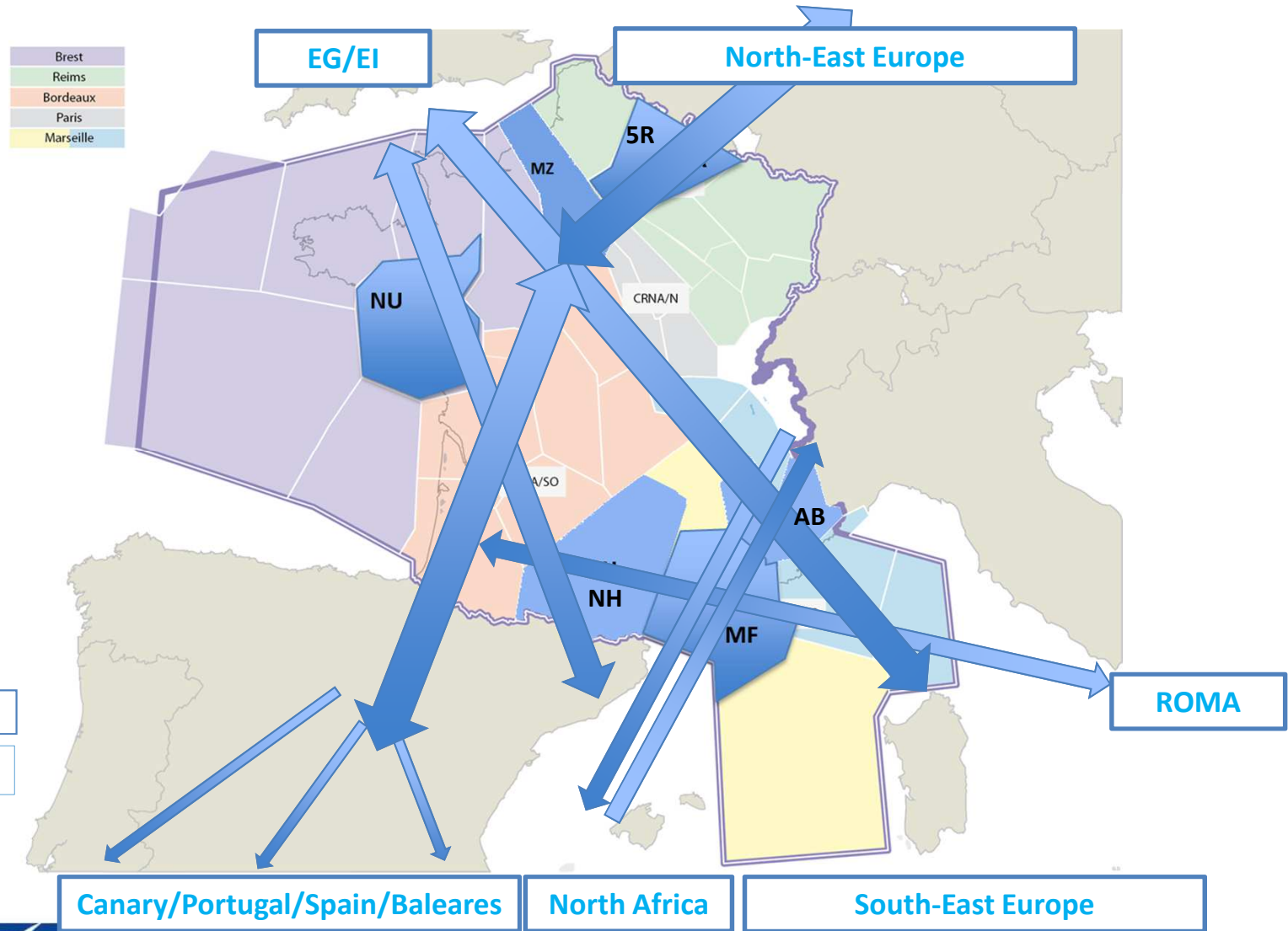


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# MEASURES ON THE MAIN TRAFFIC FLOWS



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# MEASURES BY FLOW (SCENARIOS

& Access to the description of the scenarii on Eurocontrol NOP portal  
& <https://www.public.nm.eurocontrol.int/PUBPORTAL/gateway/spec/>

# REROUTING SUGGESTIONS )

All detailed in dedicated briefing



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**FLOW :**  
**FROM: NORTH-EAST EUROPE**  
**TO : SOUTH-WEST EUROPE**

- **Information about Hotspot :**
  - Rerouting Suggestions
  - Airline has to find the best option for it



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# MAC18SCENARIOS & REROUTING SUGGESTIONS FROM NORTH-EAST EUROPE TO SOUTH-WEST EUROPE

**5 accurate Rerouting suggestions to off-load LFMMRAE  
(measures could be suggested in case of Hotspot at  
LFMMRAE) :**

DEP EDDL	ARR LEPA/LEBL
DEP EDDK	ARR LEPA
DEP EDDF	ARR LEMD
DEP ESSA	ARR LEMG
DEP EN/EKYT	ARR LEBL/LEPA/LEIB

**« combing » FL scenarios :**

DEP EHAM	> FL355
DEP EHEH/EHRD	> FL330
DEP EBBR	> FL 310
DEP EBCI/LFQQ	> FL290

**NB: Main MAC18 RAD  
restrictions  
During 09H-13H TU**

**North-East Europe**

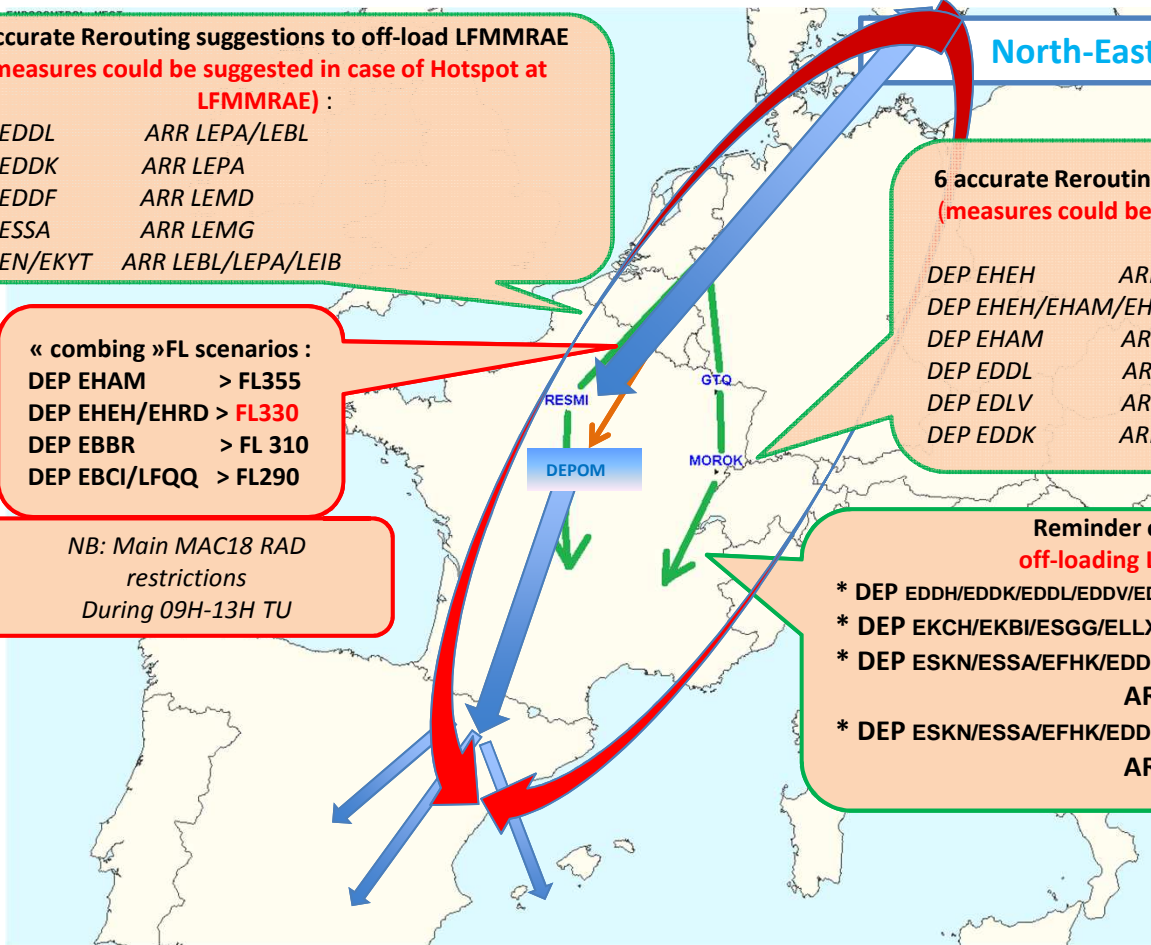
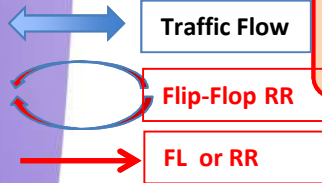
**6 accurate Rerouting suggestions to off-load LFEE5R  
(measures could be suggested in case of Hotspot at  
LFEE5R) :**

DEP EHEH	ARR LEPA/LEIB
DEP EHEH/EHAM/EHRD	ARR LFMN
DEP EHAM	ARR LFML/LFMT
DEP EDDL	ARR LEBL/LEPA/LEIB
DEP EDLV	ARR LEPA/LEIB
DEP EDDK	ARR LEPA/LEIB

**Reminder of RR Scenarios  
off-loading LFEE/LFRR/LFBB:**

- \* DEP EDDH/EDDK/EDDL/EDDV/EDDW ARR LEBL/LEPA/LEIB/LERS/LEG
- \* DEP EKCH/EKBI/ESGG/ELLX ARR LEBL/LEPA/LEIB/LERS/LEG
- \* DEP ESKN/ESSA/EFHK/EDDM/EDDB/EDDT/EDDS/EDFH/EDDF  
ARR LEBL/LEPA/LEIB/LERS/LEG
- \* DEP ESKN/ESSA/EFHK/EDDM/EDDB/EDDT/EDDS/EDFH/EDDF  
ARR LEBL/LEPA/LEIB/LERS/LEG

Legend



**Spain/Baleares**



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# SOUTH WEST AXIS: FROM NORTH TO SOUTH

## ❑ AMENDED SCENARIOS:

- FL1HYRZU/FL2HYRZU/FL3XKHRZ/FL1XKHZL : ... »DITAL or **DEPOM** or **ARKIP** » WPT in « level constraint/Refile» field
- FL2KHRZU/FL2KHRZI: **FL345** max & WPT in « levelconstraint /Refile» field → **amendments made available by NM on 26th April 2018**

**amendments of the scenarii → made available by NM on 26th April 2018**

## ❑ on going studied measures in case of Hotspot in LFEE/LFMM :

### To off-load LFMM:

<i>DEP EDDL</i>	<i>ARR LEPA/LEBL</i>
<i>DEP EDDK</i>	<i>ARR LEPA</i>
<i>DEP EDDF</i>	<i>ARR LEMD</i>
<i>DEP ESSA</i>	<i>ARR LEMG</i>
<i>DEP EN/EKYT</i>	<i>ARR LEBL/LEPA/LEIB</i>

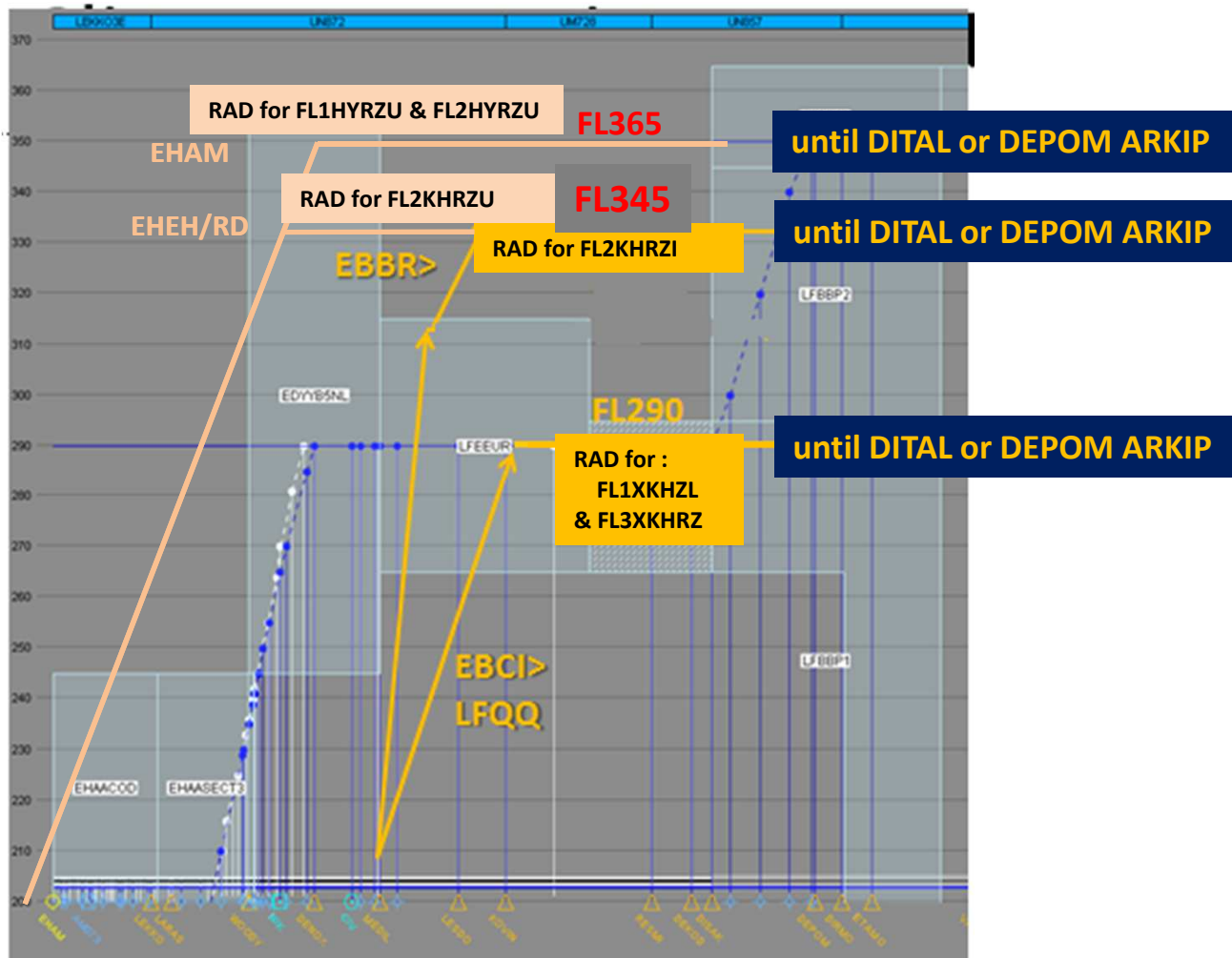
### To off-load LFEE:

<i>DEP EHEH</i>	<i>ARR LEPA/LEIB</i>
<i>DEP EHEH/EHAM/EHRD</i>	<i>ARR LFMM</i>
<i>DEP EHAM</i>	<i>ARR LFML/LFMT</i>
<i>DEP EDDL</i>	<i>ARR LEBL/LEPA/LEIB</i>
<i>DEP EDLV</i>	<i>ARR LEPA/LEIB</i>
<i>DEP EDDK</i>	<i>ARR LEPA/LEIB</i>





## « COMBING FL MEASURES »

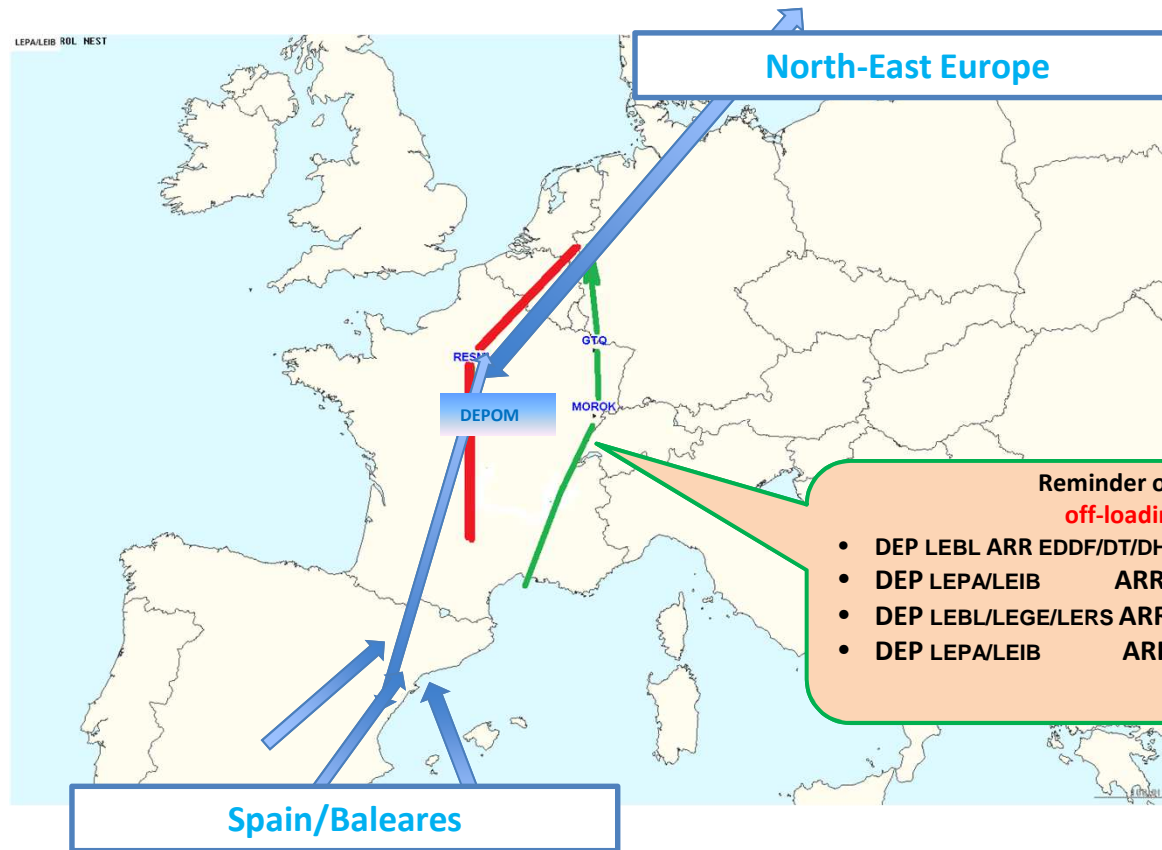


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# SCENARIOS MAC18 FROM SOUTH-WEST EUROPE TO NORTH-EAST EUROPE



### Legend

- Traffic Flow
- Flip-Flop RR
- FL or RR

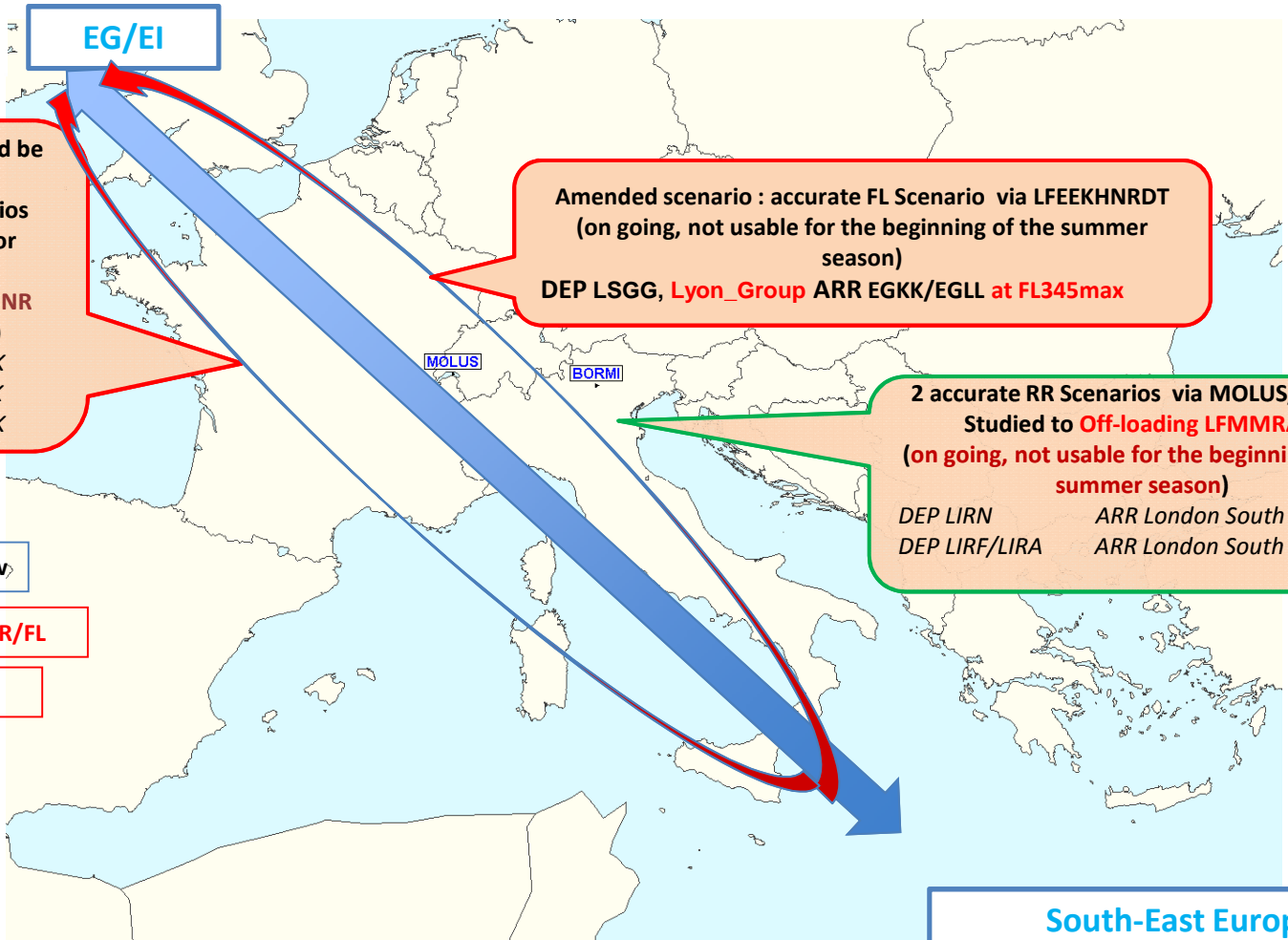
**Reminder of RR Scenarios  
off-loading LFBCTA:**

- DEP LEBL ARR EDDF/DT/DH/DL/DV ESSA/EKCH/ELLX/EFHK
- DEP LEPA/LEIB ARR EDDL/DH EKCH EFHK EHEH
- DEP LEBL/LEGE/LESA ARR EDDH EF.. EK.. ES..
- DEP LEPA/LEIB ARR EDDH EF.. EK.. ES..





# SOUTH-EAST EUROPEAN COUNTRIES → EG



2 FL scenarios deleted and be replaced by 4 accurate FL Scenarios studied via LFEEHNR or LFEEKHNR (LG/LI>EGKK via LFEEKHNR refused by NM Strat)

DEP LI	ARR EGKK
DEP LG	ARR EGKK
DEP LT	ARR EGKK

Amended scenario : accurate FL Scenario via LFEEKHNRDT (on going, not usable for the beginning of the summer season)  
DEP LSGG, Lyon\_Group ARR EGKK/EGLL at FL345max

2 accurate RR Scenarios via MOLUS/BORMI Studied to Off-loading LFMMRAE: (on going, not usable for the beginning of the summer season)

DEP LIRN	ARR London South
DEP LIRF/LIRA	ARR London South

**Legend**

- Traffic Flow
- Flip-Flop RR/FL
- FL or RR
- Sectors

South-East Europe : Italy/Greece/Turkey







## SOUTH-EAST EUROPEAN COUNTRIES → EG

### ❑ AMENDED SCENARIOS:

- FL1HNR1 : added DEP **Lyon\_Group**, & **FL345 max**
- FL2KHNRD: added DEST **EGBB/GW/LC/GD**

→ **amendments made available by NM on 29th April 2018**

### ❑ DELETED SCENARIOS:

- FL1KHNR/FL2HNR: deleted and replaced by **4** FL scenarios more accurate on citypair/peak hours (MAC18-Measure\_37 to -42)

→ **amendments made available by NM on 29th April 2018**

### ❑ 8 NEW SCENARIOS (on accurate citypairs and peak hours) impact DSNA, LI, LS:

- **4** FL scenarios MAC18-Measure\_37 to -40 (from LI, LG, LT to EGKK), FL N°41/42 refused.
- 2 RR scenarios MAC18-Measure\_31-E & 31-F (from LIRN, LIRF, LIRAT to **London South group**)

**amended and some of the new scenarii → made available by NM on 29th April 2018**



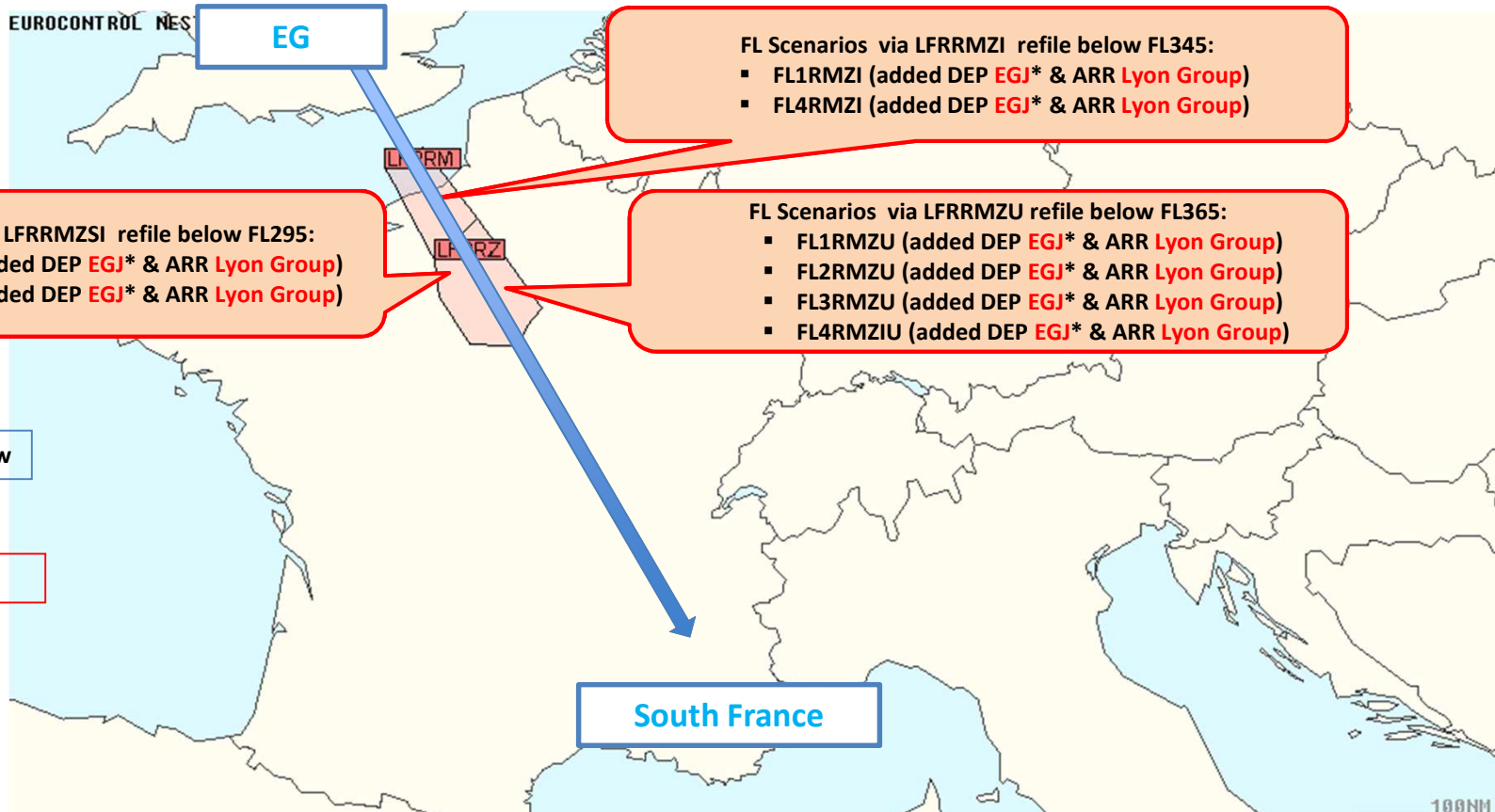
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# EG → SOUTH FRANCE



## Legend



Traffic Flow



FL or RR



Sectors



**amendments of the scenario → made available by NM on 28th April 2018**



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Ministère de la Transition écologique et solidaire



## EG → SOUTH-FRANCE

- ❑ **AMENDED SCENARIOS (impact DSNA) :**
  - FL1RMZI/FL1RMZSI/FL1RMZU/FL2RMZSI/FL2RMZU/ FL3RMZU/ FL4RMZI/FL4RMZU :
    - DEP **EGJ\*** added
    - DEST **Lyon Group** added

→ amendments made available by NM on 28th April 2018

amendments of the scenario → made available by NM on 28th April 2018



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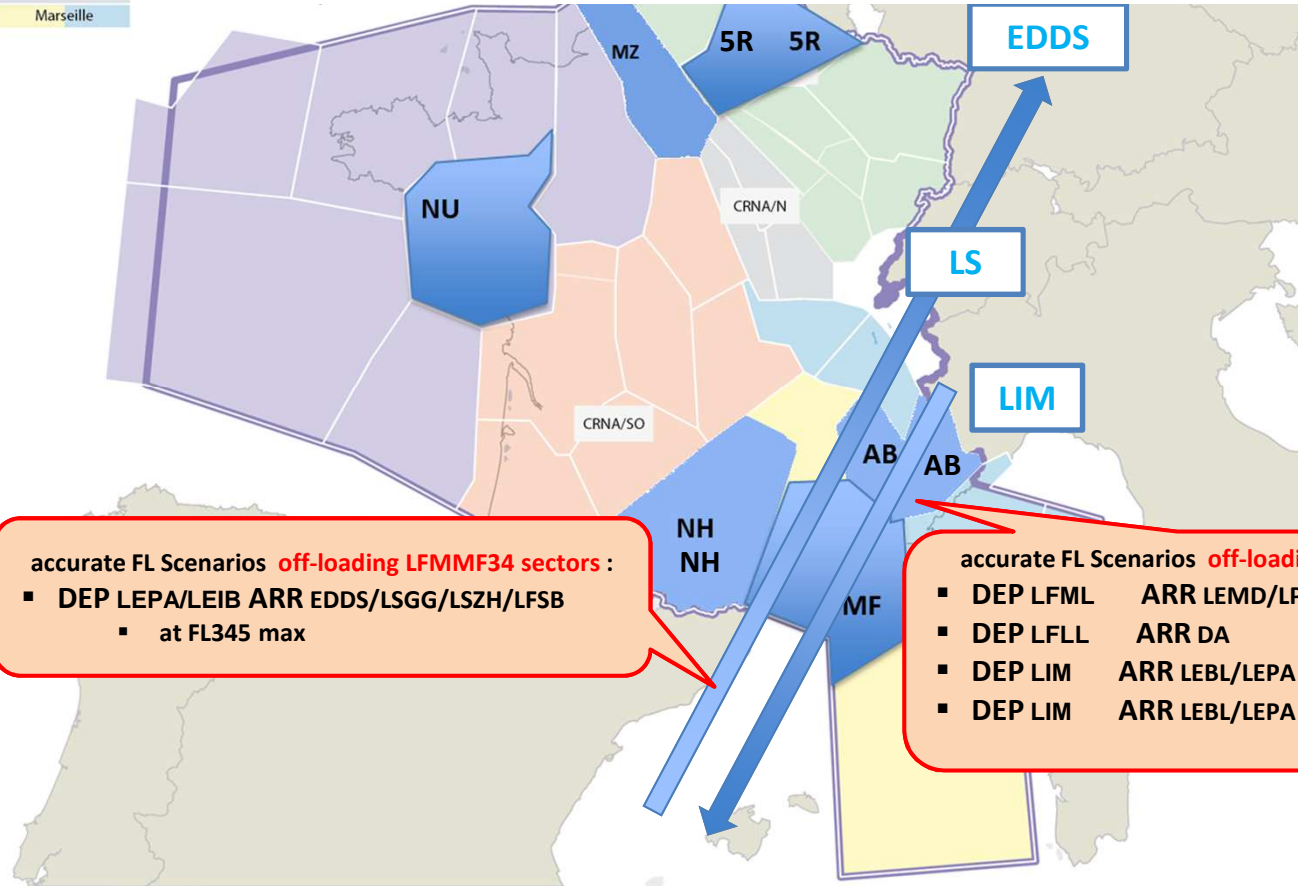


# SWISS/SOUTH FRANCE → NORTH AFRICA/PORTUGAL/SPAIN/BALEARE ISLANDS

- & -

## LEPA/LEIB → EDDS/ LSGG, LSZH, LFSB

- Brest
- Reims
- Bordeaux
- Paris
- Marseille



Legend



Traffic Flow



Flip-Flop



Sectors

accurate FL Scenarios **off-loading LFMMF34 sectors** :

- DEP LEPA/LEIB ARR EDDS/LSGG/LSZH/LFSB
- at FL345 max

accurate FL Scenarios **off-loading LFMM sectors** :

- DEP LFML ARR LEMD/LPPT at FL295 max
- DEP LFLL ARR DA at FL295 max
- DEP LIM ARR LEBL/LEPA at FL295 max
- DEP LIM ARR LEBL/LEPA at FL295 max

Canary/Portugal/Spain/Baleares

North Africa



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## SWISS/ SOUTH FRANCE → NORTH AFRICA/ BALEARE ISLANDS

- ❑ **3 NEW SCENARIOS (on accurate citypairs and peak hours, impact DSNA):**
  - 3 FL scenarios MAC18-Measure\_29-A, 29-C -30-D (from LIM,LFLL, LFML to DA, South & south-east Spain) at **FL295 max via LFMM sectors.**  
→ **amendments made available by NM on 09th May 2018**

## LEPA/LEIB → EDDS/LSGG, LSZH, LFSB

- ❑ **1 NEW SCENARIO (on accurate citypair and peak hours, impact DSNA):**
  - 1 FL scenario MAC18-Measure\_30-B (from LEPA/LEIB to EDDS, LSGG, LSZH, LFSB) at **FL345 max via LFMM sectors.**  
→ **amendments made available by NM on 09th May 2018**

**new scenarii → made available by NM on 09th May 2018**



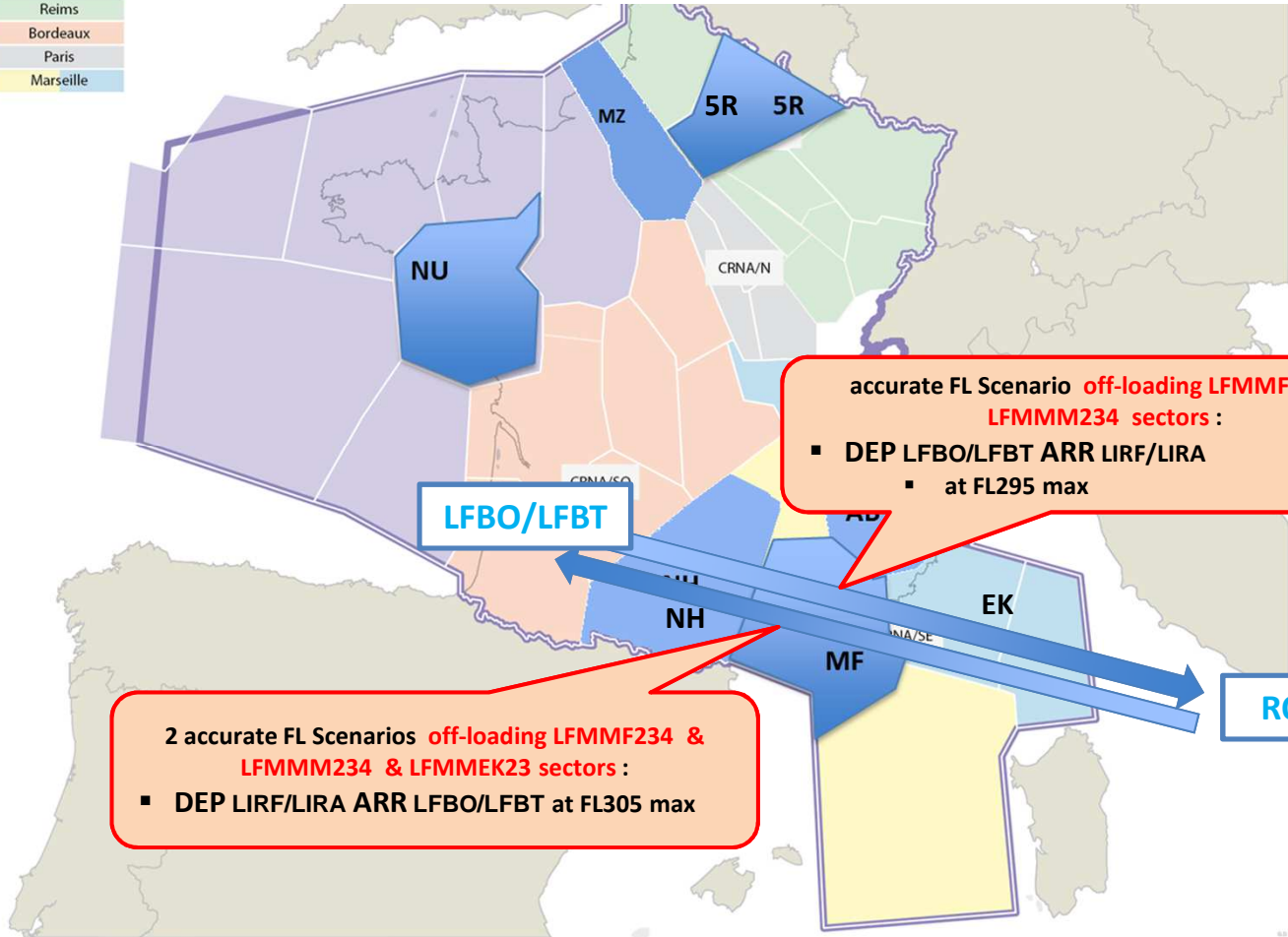
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# ROMA ↔ TOULOUSE/TARBES

- Brest
- Reims
- Bordeaux
- Paris
- Marseille



accurate FL Scenario off-loading LFMMF234 & LFMMM234 sectors :

- DEP LFBO/LFBT ARR LIRF/LIRA
  - at FL295 max

2 accurate FL Scenarios off-loading LFMMF234 & LFMMM234 & LFMMMEK23 sectors :

- DEP LIRF/LIRA ARR LFBO/LFBT at FL305 max

**Legend**

- Traffic Flow
- Flip-Flop
- Sectors





## ROME ↔ TOULOUSE/TARBES

- ❑ **3 NEW FL SCENARIOS (on accurate citypairs and peak hours, impact DSNA):**
  - 1 FL scenario MAC18-Measure\_29-D (LFBO/LFBT to LIRA, LIRF).
  - 2 FL scenarios MAC18-Measure\_29-G -H (LIRA, LIRF to LFBO/LFBT).

→ **amendments made available by NM on 09th May 2018**



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# REGULATIONS



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## REGULATION TO PROTECT SECTORS

- ❑ **Fine tuned coordination between the 5 french ACC for Regulation:**
  - Aims:
    - to be able to quickly coordinate between the 5 french ACC in case of traffic overload in order to implement the most efficient and precise regulations over the French area.
    - to ensure safety at a minimal cost for airlines.
  
- ❑ **Weekly PostOps/pretact teleconference between French ACC**
  - Weekly review process between the 5 french ACC in order to analyse the past week.
  - Learn lessons of the past week to adjust and plan the next week measures.



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# RAD APPENDIX 03

# RADAN PAN EUROPE

All detailed in dedicated briefing

Access to the RAD measures on Eurocontrol NOP portal

<https://www.public.nm.eurocontrol.int/PUBPORTAL/gateway/spec/>



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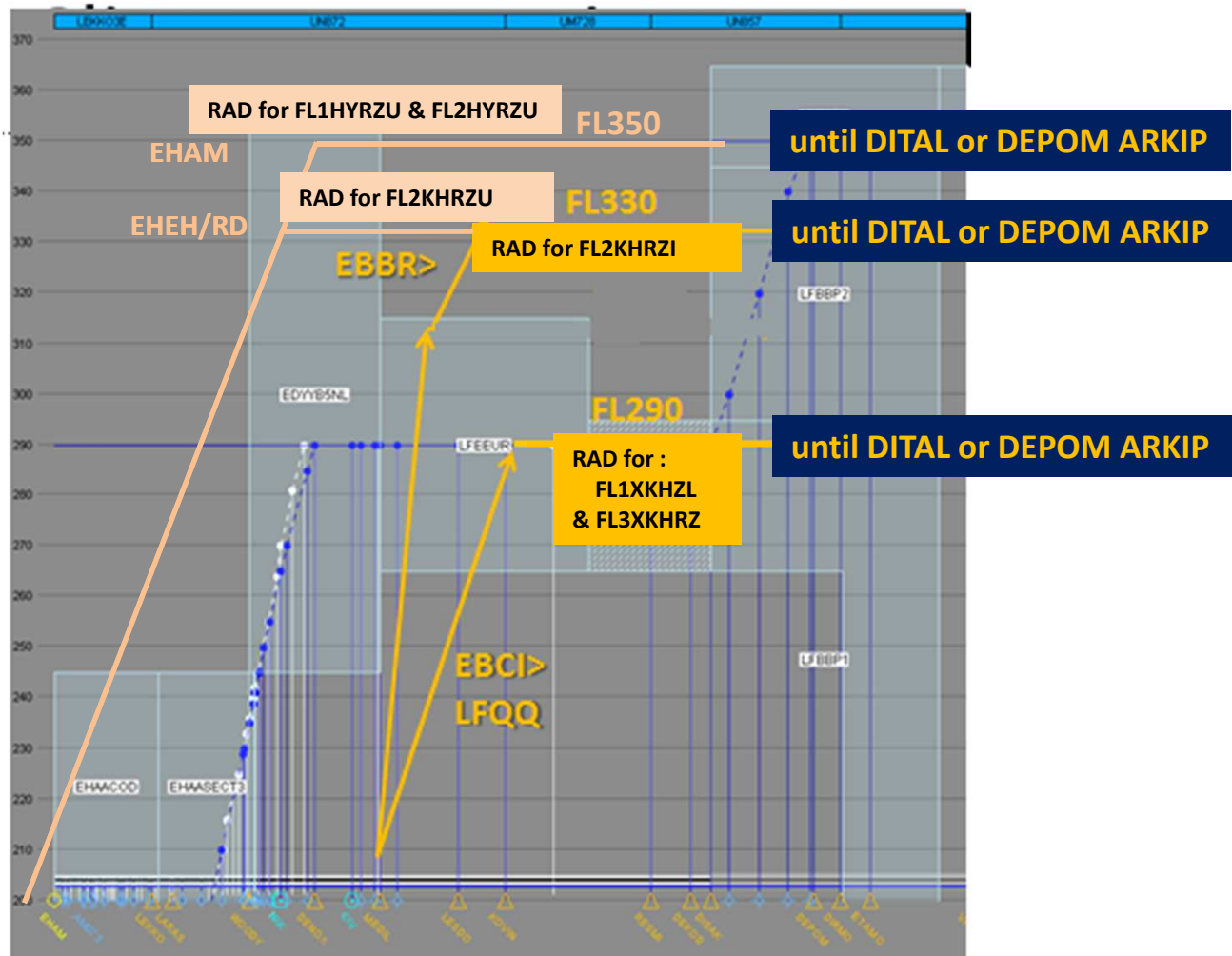
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# RANKING OF FLIGHT IN LEVEL

MAC OBJECTIVE : SPREAD THE DEMAND ON ALL THE LAYERS TAKING INTO ACCOUNT AIRPORT OF ORIGIN

5 MAC17 Scenarios (full-package) put into RAD measures during peak hours (09h/13h) : In order to stabilize the demand on the busiest traffic flow



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# COLLABORATIVE ADVANCED PLANNING

- Continuation of Collaborative Advanced Planning



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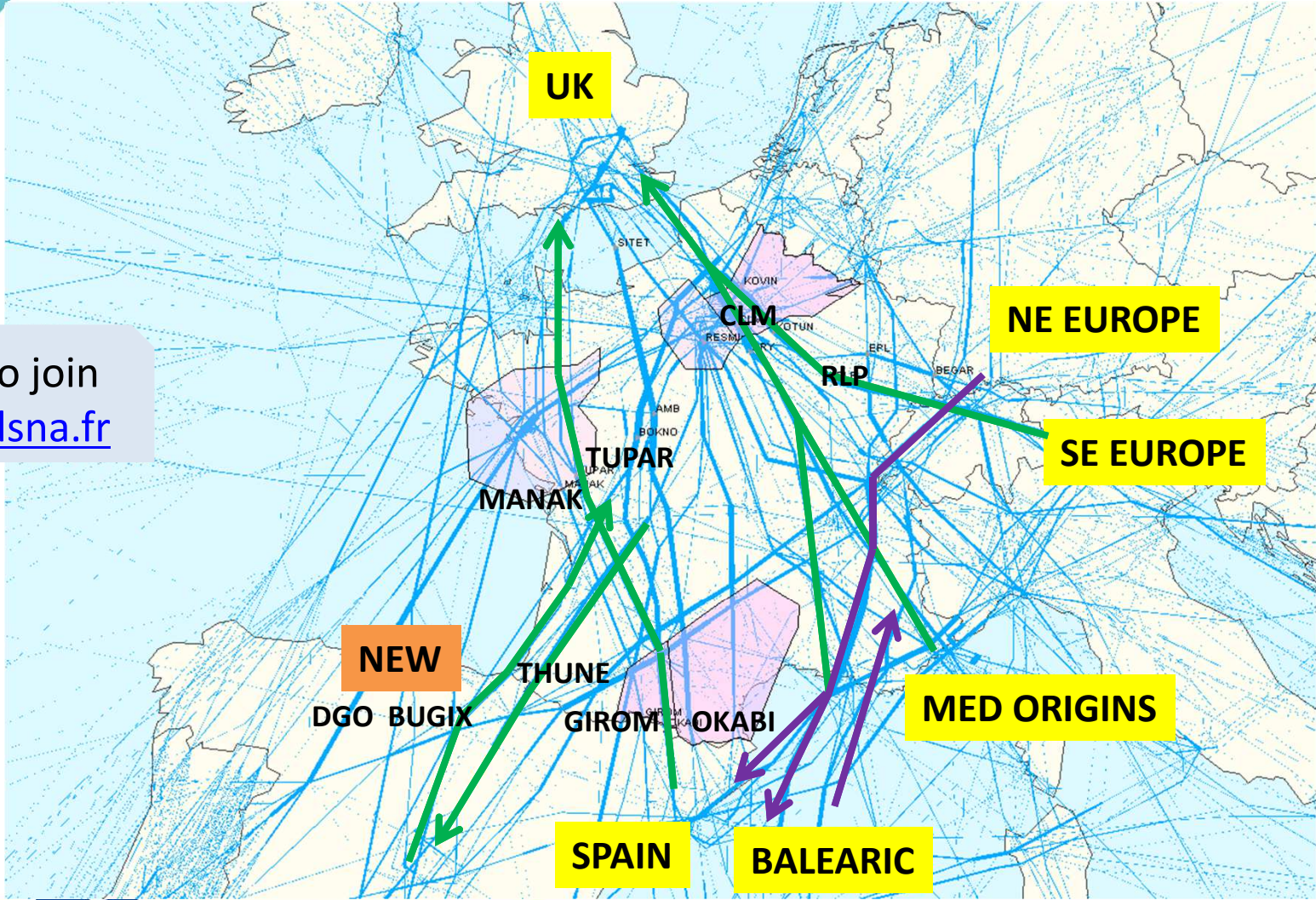
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# 10 CAP TRAFFIC FLOWS

Care to join  
[www.dsna.fr](http://www.dsna.fr)



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# NEW AIRSPACE DESIGNS in :

- **Bordeaux** GT ESSO
- **Paris** level reorganisation



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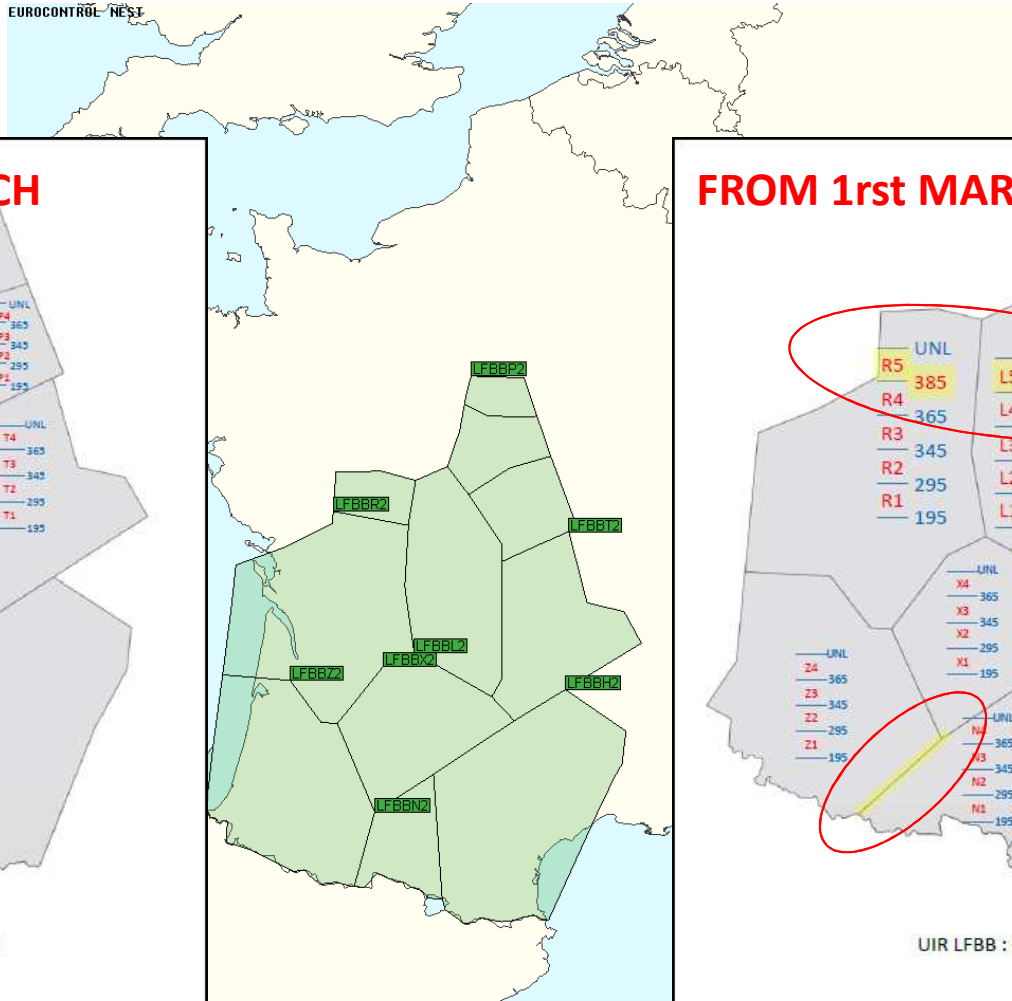


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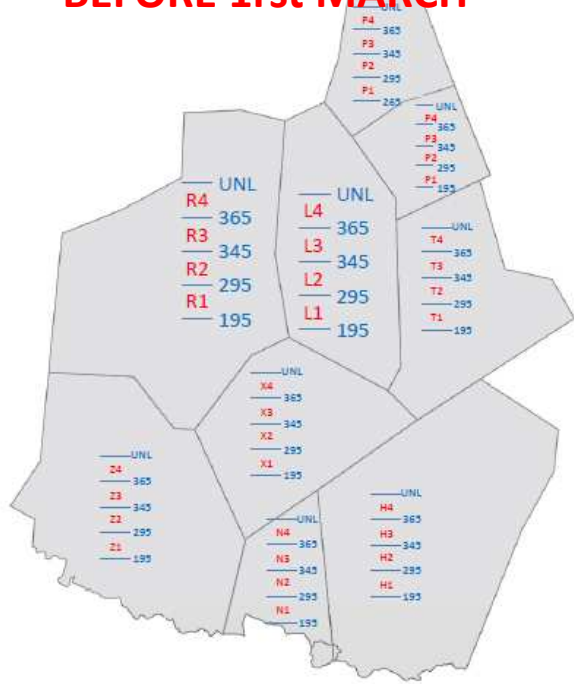
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# GT ESSO: BORDEAUX NEW AIRSPACES

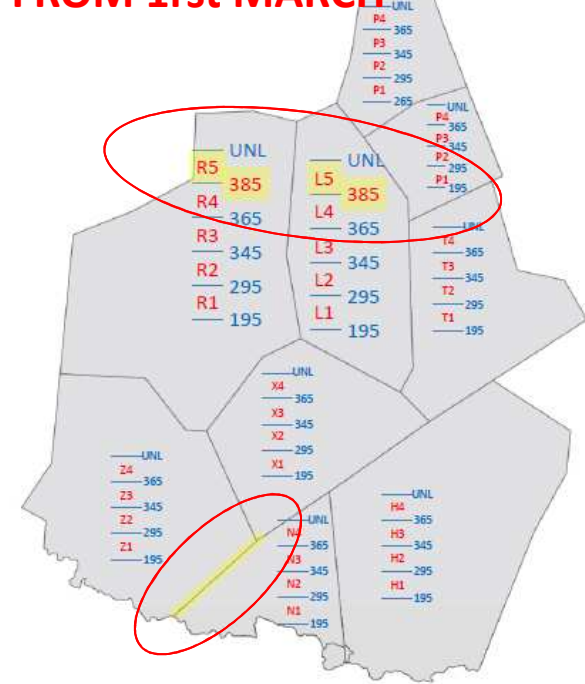


## BEFORE 1st MARCH



UIR LFBB: present situation

## FROM 1st MARCH



UIR LFBB : GT ESSO



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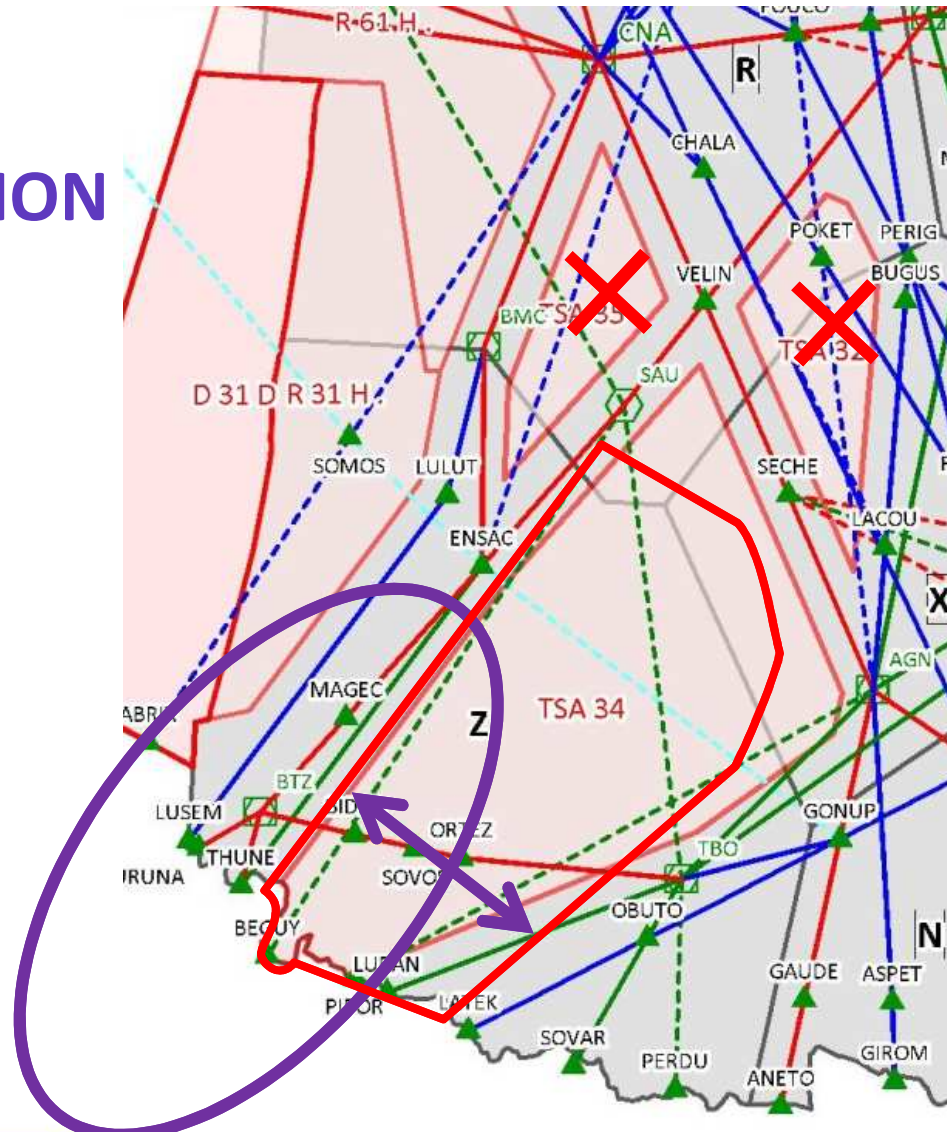
# GT ESSO: BORDEAUX NEW AIRSPACES

## TSA 32-34-35 EVOLUTION

Airspace transfer between civil and military users

To the benefit of civil traffic : removal of TSA32 and TSA35

To the benefit of military traffic : TSA34 widening



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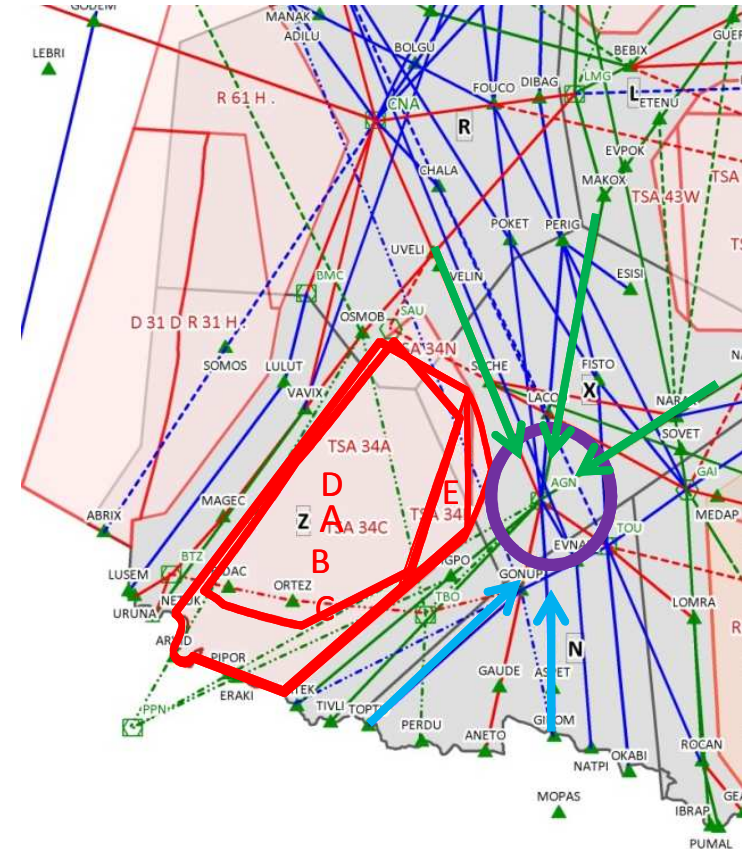




# GT ESSO: BORDEAUX NEW AIRSPACES

## TSA 34 ADAPTABILITY

Depending on traffic demand, different configurations of TSA34 will be used



These configurations will provide more space around AGN for tactical vectoring



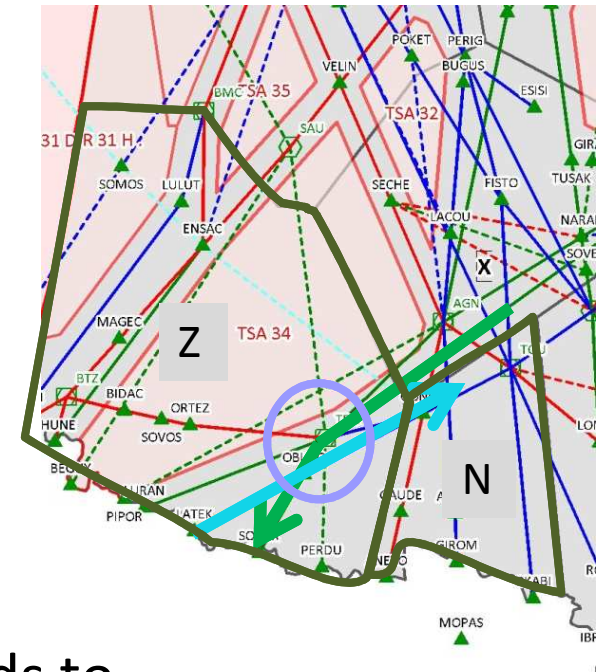


# GT ESSO: BORDEAUX NEW AIRSPACES

## BORDEAUX MADRID AXIS SWAP

Presently, Eastbound routes and Westbound routes present a twist

This creates more complexity and leads to some inefficiency since Eastbound flights are transferred to Z sector and few minutes later to N sector.

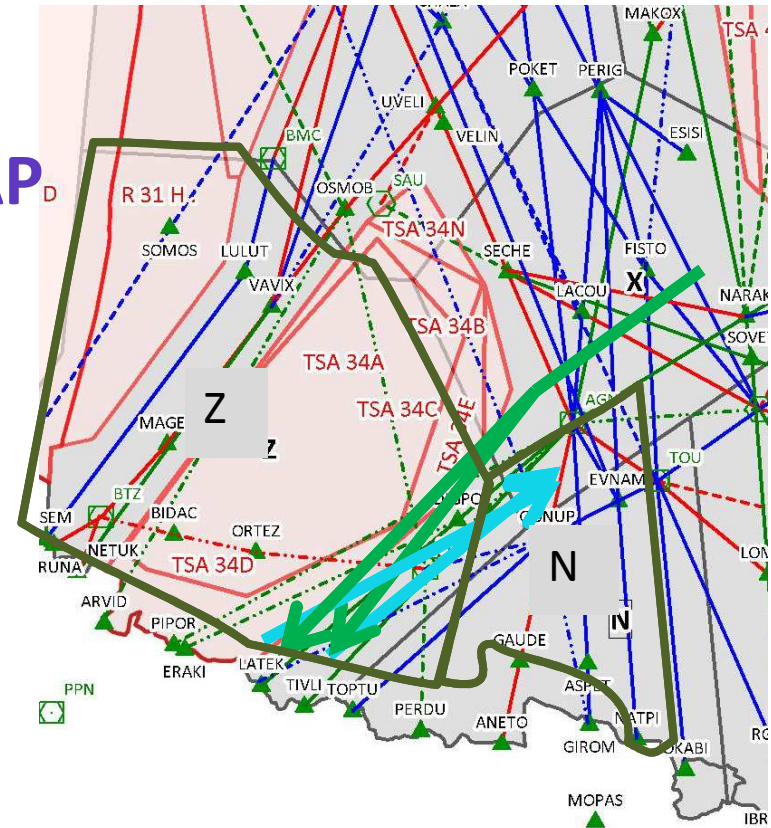




# GT ESSO: BORDEAUX NEW AIRSPACES

## BORDEAUX MADRID AXIS SWAP

With GT ESSO and benefiting from Madrid network reorganization, the axis are swapped



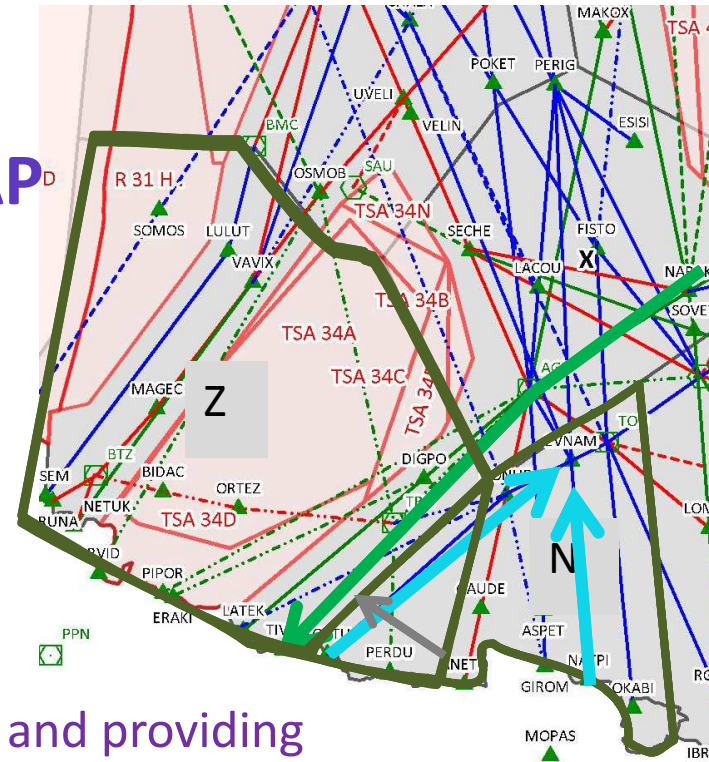




# GT ESSO: BORDEAUX NEW AIRSPACES

## BORDEAUX MADRID AXIS SWAP

Sectors are modified to allow Eastbound traffic to enter directly in N sectors.



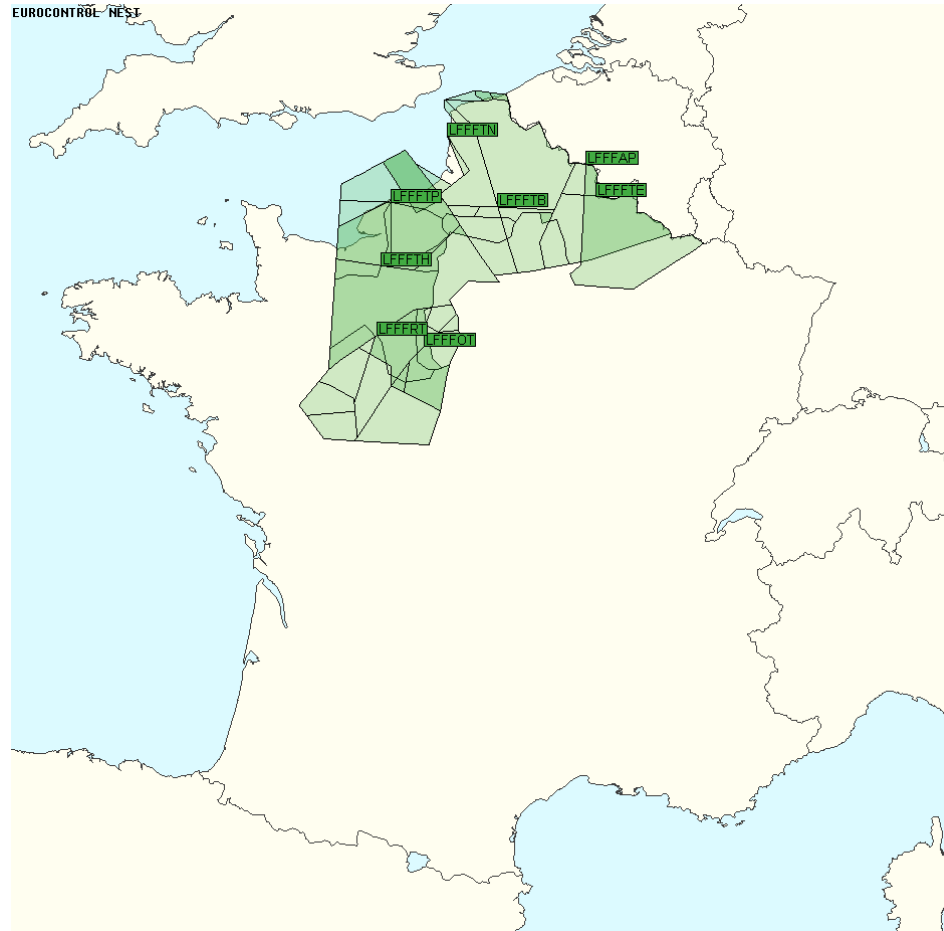
This will reduce frequency changes and providing separation with northbound flow will be made more efficient





# PARIS NEW FLIGHT LEVELS IN SECTORS

## FL340/FL350 in T & PW sectors



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