

# FRA implementation in France - DSNA

FABEC Expert Workshop on FRA – Paris 12 February 2020

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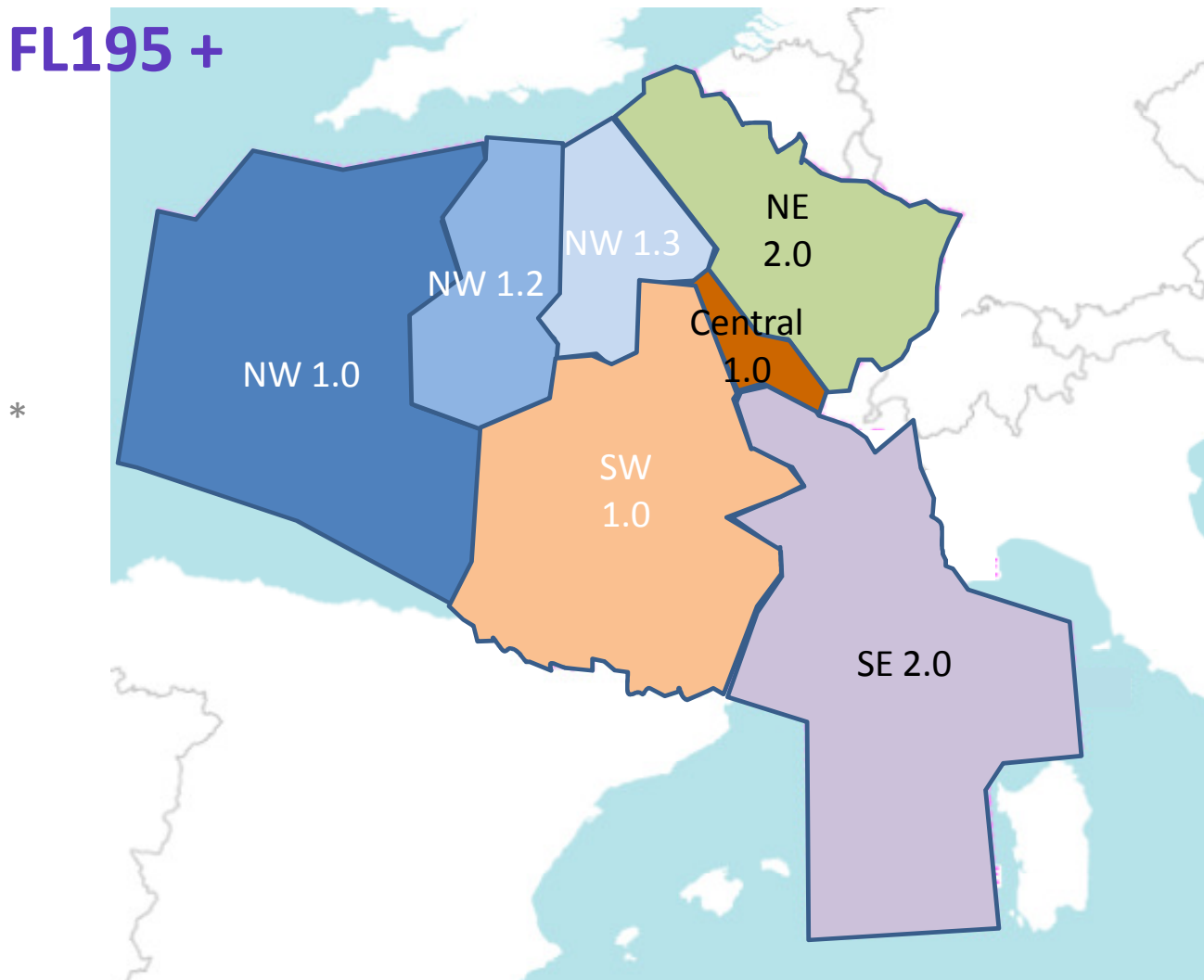


## CONOPS

- **FRA FRANCE will allow operators to freely plan a route between a defined FRA Horizontal Entry Point and a defined FRA Horizontal Exit Point, with the possibility to route via FRA Intermediate Points, without a reference to the ATS Route Network, subject to airspace availability.**
- **To keep a high level of capacity, the airspace will be structured with some RAD limitations.**
- **The ATS route network (CDR/PDR) will be deleted in FRA Airspace.**
- **All the military airspace in FRA cell will be FUA managed**



# FL195 +



Wave 1  
FRA 1.0 : dec 2021

Wave 2  
FRA 1.2 : mar 2023

Wave 3  
FRA 1.3 FRA 2.0 :  
End 2023



# Design

## ➤ Airspace organisation

No change on entry and exit COP points

Route will be deleted above FL 195 in FRA airspace

## ➤ Sectorisation and capacity

Sector shapes will remain unchanged compared to ATS route network operations.

RAD will allow to keep a high level of capacity

FRA cells are independent of ACC and sector

## ➤ Airspace management

Airspace management procedures will be accordingly adjusted with LARA System.

## ➤ Letter of Agreements and coordination procedures

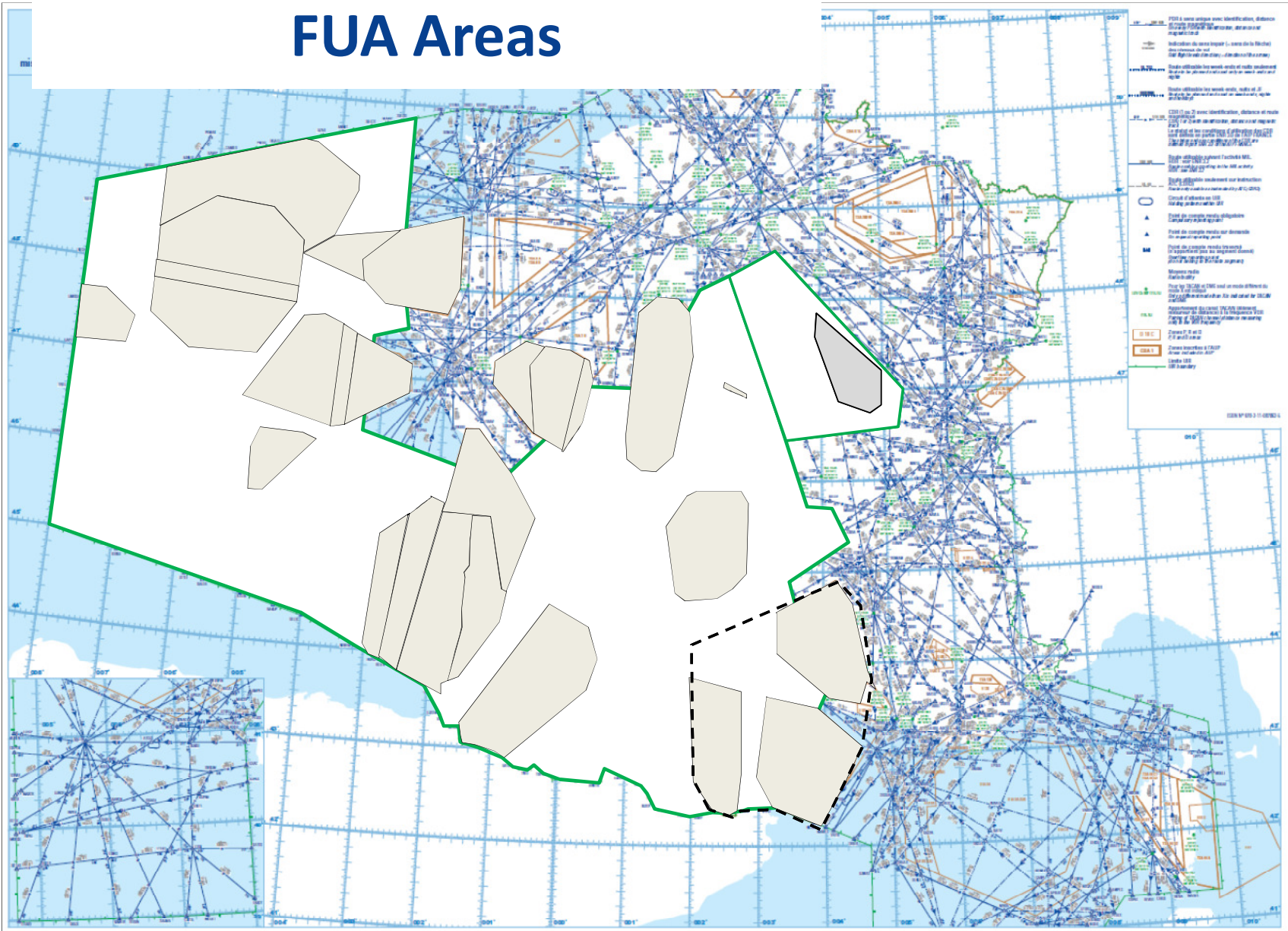
LoAs and coordination procedures will reflect the specifics of free route operations. If needed, new coordination procedures will be elaborated for entry/exit points.

## ➤ AIP Publication

Publication of FRA Operations will be done via AIP France as prescribed in ERNIP Part 1, Chapter 6, En-Route Design Methodology, para 6.5 Free Route Airspace Design.



# FUA Areas



# FLOS

## 1.7.7 CRUISING LEVELS

### 1.7.7.1 TABLE OF CRUISING LEVELS

The cruising levels to be respected are



Except for IFR flights in the upper control area (UTA) for which the table of cruising levels is modified, in order to accommodate predominant traffic directions, as follows (see ENR 1.3.5) :

- « From 090 degrees to 269 degrees » instead of « From 000 degrees to 179 degrees »
- « From 270 degrees to 089 degrees » instead of « From 180 degrees to 359 degrees »

1.7.7.2 The correlation of cruising levels to magnetic track prescribed in ENR 1.7.7.1 shall not apply whenever otherwise indicated :

in AIP ENR 3 for each ATS route segment or in RAD (Route Availability Document) for each direct (DCT) route segment ; or in air traffic control clearances.

MAGNETIC TRACK											
From 000 degrees to 179 degrees*						From 180 degrees to 359 degrees*					
IFR Flights			VFR Flights			IFR Flights			VFR Flights		
Level			Level			Level			Level		
FL	Feet	Metres	FL	Feet	Metres	FL	Feet	Metres	FL	Feet	Metres
010	1000	300	—	—	—	020	2000	600	—	—	—
030	3000	900	035	3500	1050	040	4000	1200	045	4500	1350
050	5000	1500	055	5500	1700	060	6000	1850	065	6500	2000
070	7000	2150	075	7500	2300	080	8000	2450	085	8500	2600
090	9000	2750	095	9500	2900	100	10000	3050	105	10500	3200
110	11000	3350	115	11500	3500	120	12000	3650	125	12500	3800
130	13000	3950	135	13500	4100	140	14000	4250	145	14500	4400
150	15000	4550	155	15500	4700	160	16000	4900	165	16500	5050
170	17000	5200	175	17500	5350	180	18000	5500	185	18500	5650
190	19000	5800	195	19500	5950	200	20000	6100			
210	21000	6400				220	22000	6700			
230	23000	7000				240	24000	7300			
250	25000	7600				260	26000	7900			
270	27000	8250				280	28000	8550			
290	29000	8850				300	30000	9150			
310	31000	9450				320	32000	9750			
330	33000	10050				340	34000	10350			
350	35000	10650				360	36000	10950			
370	37000	11300				380	38000	11600			
390	39000	11900				400	40000	12200			
410	41000	12500				430	43000	13100			
450	45000	13700				470	47000	14350			
490	49000	14950				510	51000	15550			
etc.	etc.	etc.				etc.	etc.	etc.			



# New way of RAD wording

Only flight

- Via FRA cell
- And point A

Availability time

Flying via the following sequence

Or arriving in LFBB FIR

Point or Airspace	Utilization	Restriction Applicability
ptA	<p>Not available for traffic via ptA and-then LFBBUBDX except</p> <ol style="list-style-type: none"> <li>1. via ptA DCT ptB DCT ptC</li> <li>2. via ptA DCT ptD DCT ptE</li> <li>....</li> <li>3. ARR LFBBFIR</li> </ol>	<ol style="list-style-type: none"> <li>1. H24</li> <li>2. WE + N+ JF + JPC</li> <li>3. H24</li> </ol>



# Arrival and Departure

## Appendix 5 : departure / arrival from LFBB FIR

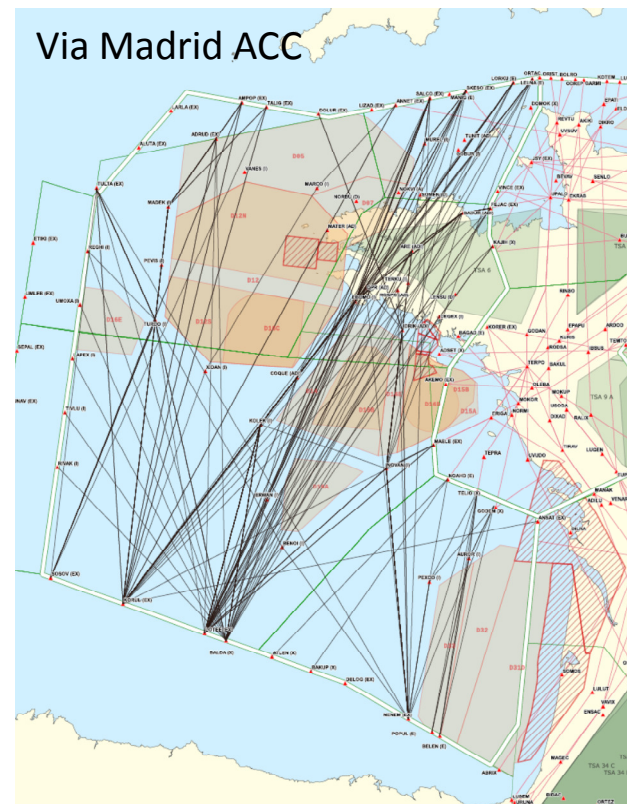
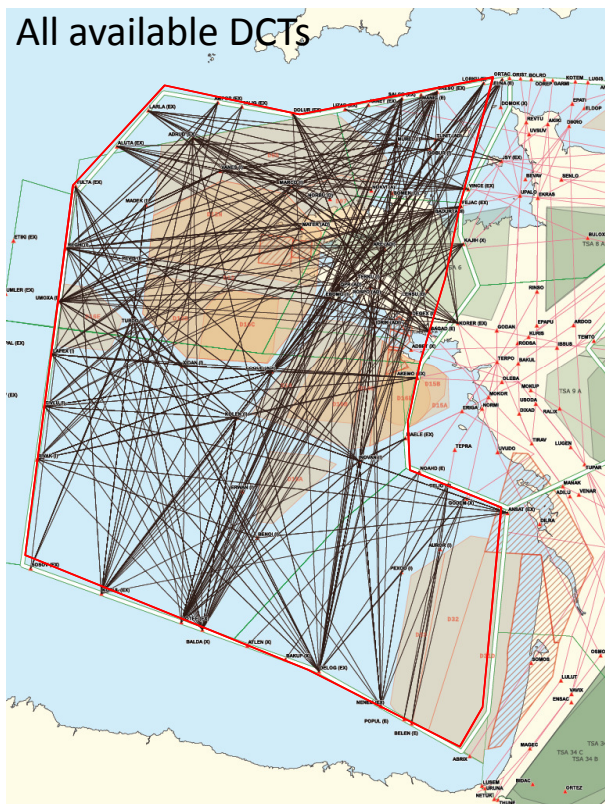
### PAN EU : departure/arrival nearby airfield (Barcelona , Paris ...)

Change record	AIRWAY	FROM	TO	Point or Airspace	Utilization	Restriction Applicability	ID Number	Operational Goal	Remark/s	ATC Unit	NAS/FAB
				LFBBUBDX	Not available for traffic DEP LFXX/.... except 1. Via ptA RXX ptB DCT ptC 2. Via ptA RYY ptD DCT ptE 3. Via ptA RZZ ptF DCT ptG	H24	LFXXXX X	To organize flow in LFBBACC		LFBBACC	LF

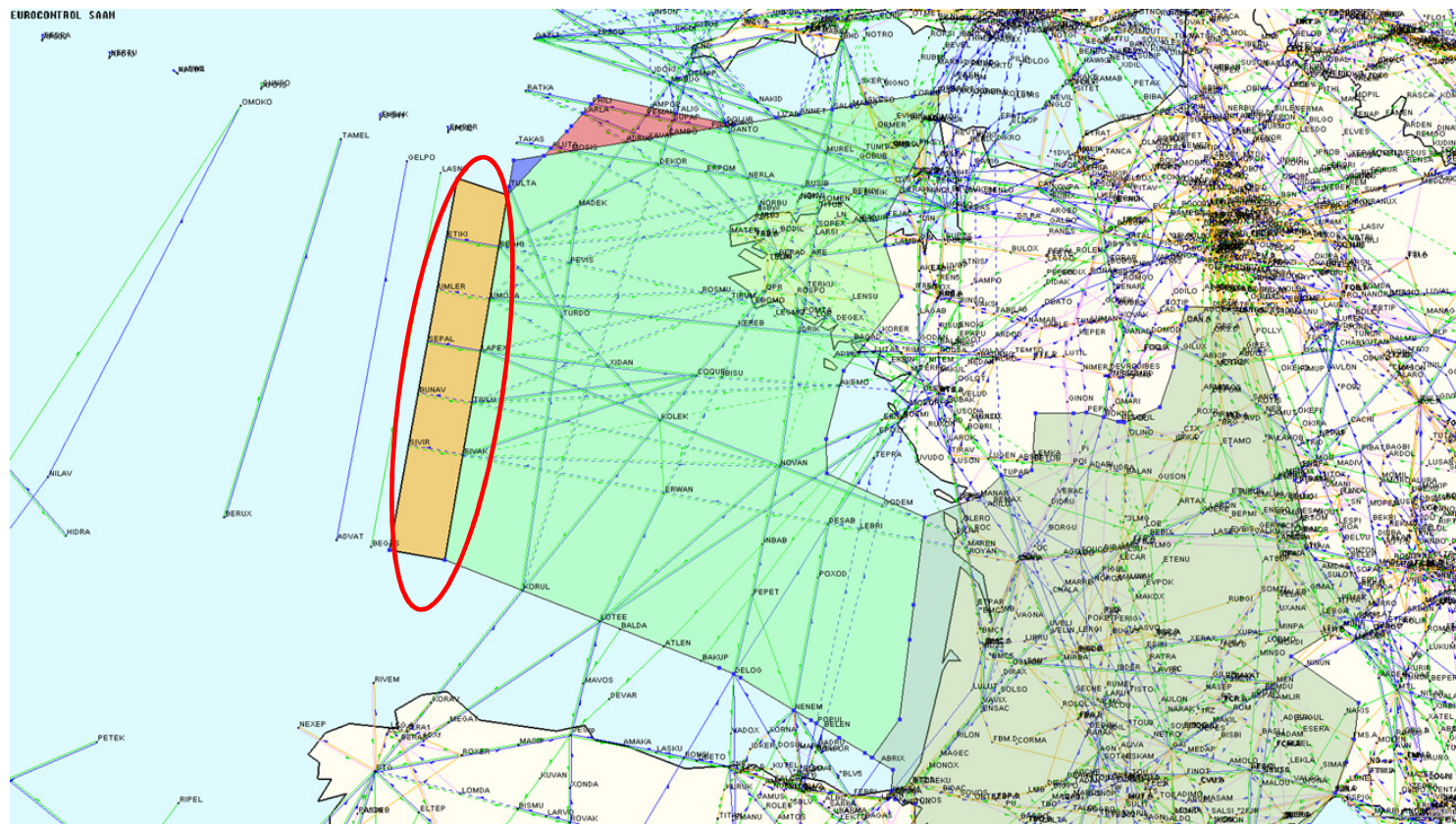




# NW cell part 1

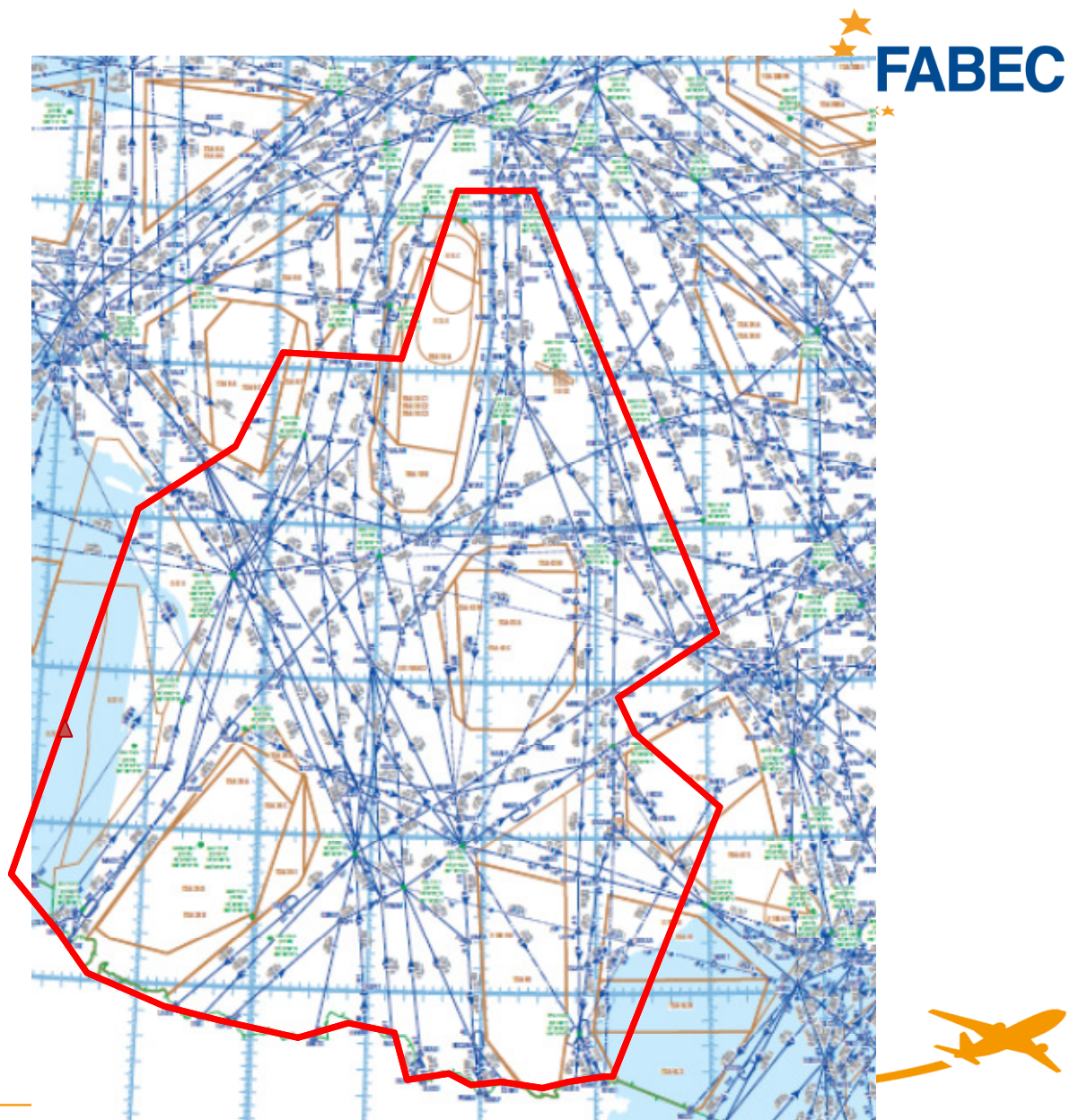


# BOTA Area

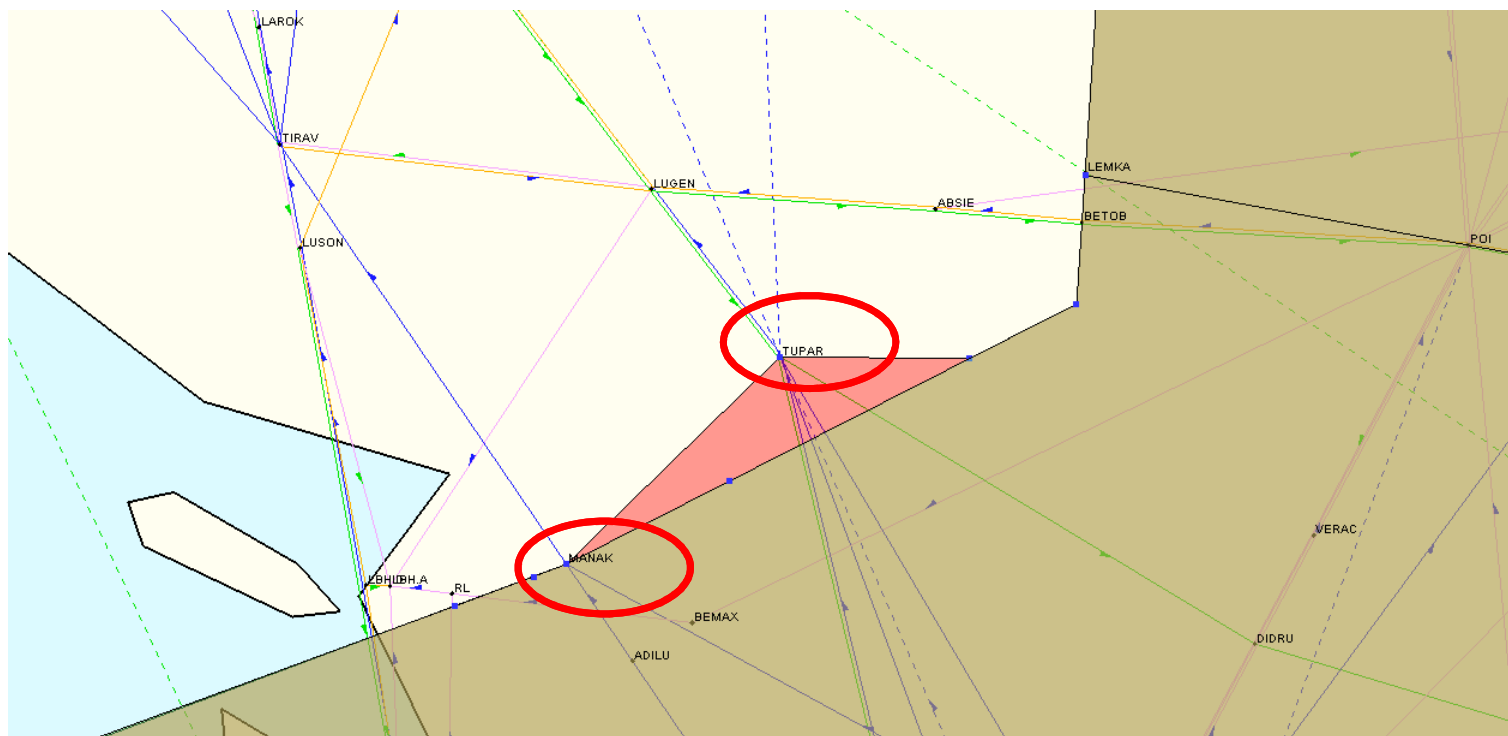


# SW FRA cell

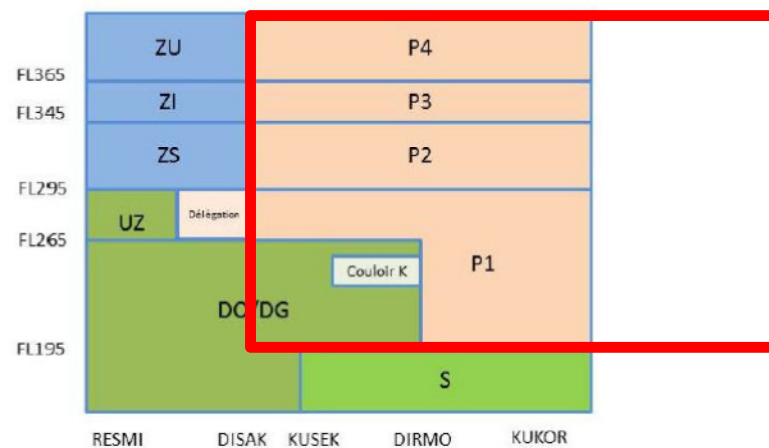
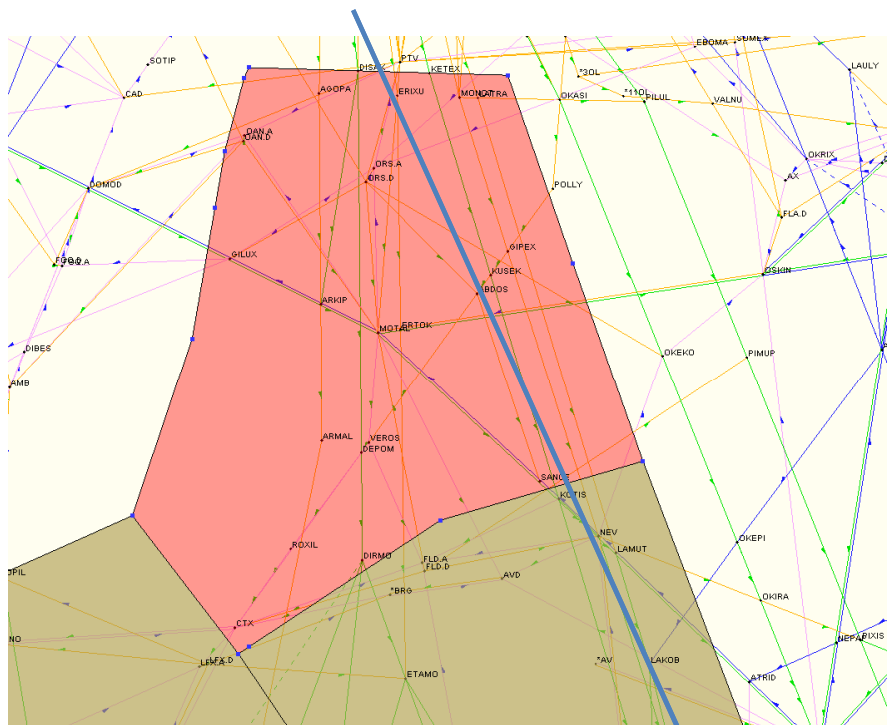
Horizontal limits  
= LFBB ACC above FL 295



# COP / FRA cell limit



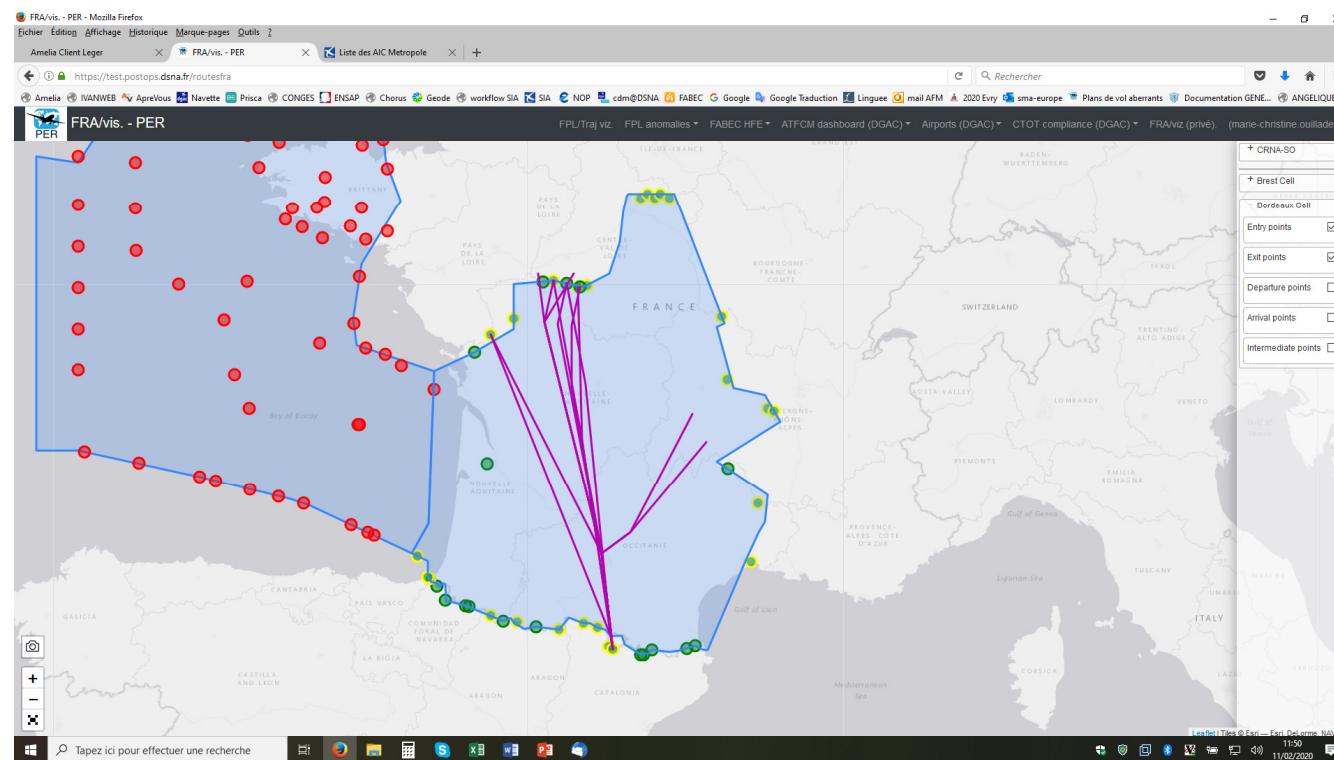
# ACC limits / FRA cell



# Online FRA

## Website

### - Testing trajectories and availability



**Thank you**

