MINISTÈRE CHARGÉ DES TRANSPORTS

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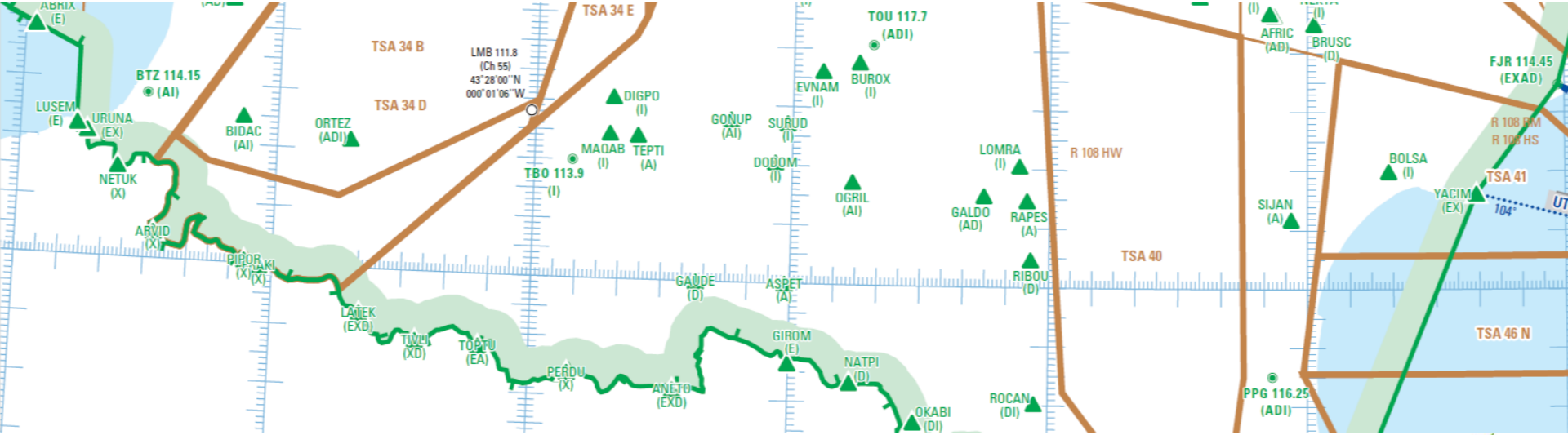
Égalité
Fraternité

DSNA FRA 2020-2025

16 NOV 2020 CFSPG 14

dgac direction générale de l'Aviation civile
DSNA



members of FABEC

SESAR

Summary

1.DSNA FRA program

- General principles
- Global timeline
- Detailed wave 1 timeline

2.Wave 1: 02 Dec 2021

- Brest ACC LFFRANW1 cell
- Bordeaux and Paris ACC LFFRASW cell
- Paris ACC LFFRAC cell

3.Next waves

- Wave 2 : Brest LFFRANW (1+2)
- Next waves
- Cells merger
- Crossborder FRA

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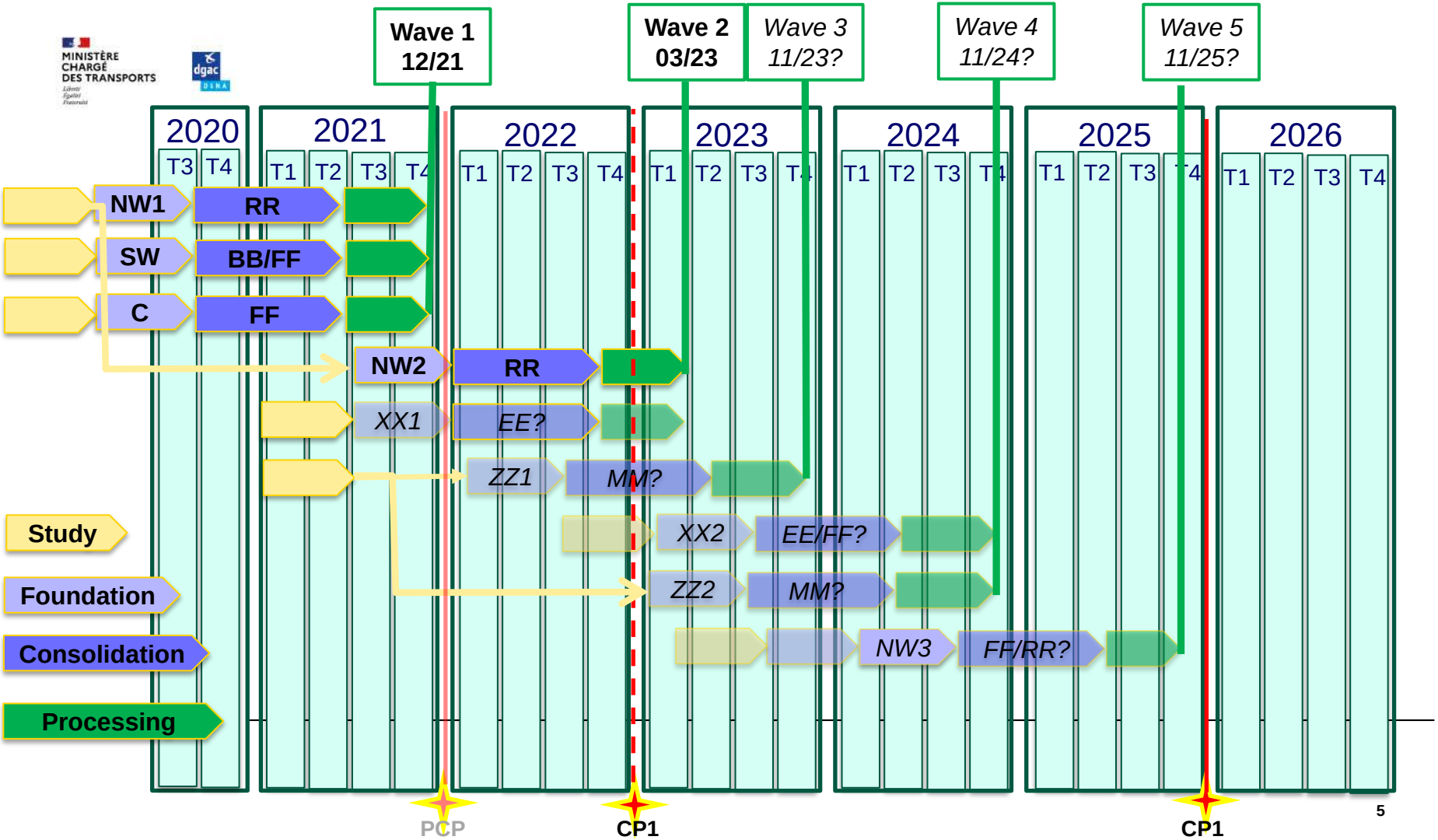
DSNA FRA Program

General principles

- Compliance with ERNIP requirements
- Close cooperation with the NM
- DSNA FRA CONOPS based on FABEC FRA CONOPS
- Structural limited FRA, no Lat-Long allowed
- H24 and FL195-FL660, simple shape cells (≠ ACC limits)
- Simultaneous Removal of published routes and DCTs

DSNA FRA Program

Global roadmap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Wave 1 12/21
Wave 2 03/23
Wave 3 11/23?
Wave 4 11/24?
Wave 5 11/25?
2020
2021
2022
2023
2024
2025
2026
T3 T4
T1 T2 T3 T4
NW1
RR
SW
BB/FF
C
FF
NW2
RR
XX1
EE?
ZZ1
MM?
XX2
EE/FF?
ZZ2
MM?
NW3
FF/RR?
Study
Foundation
Consolidation
Processing
PCP
CP1
CP1

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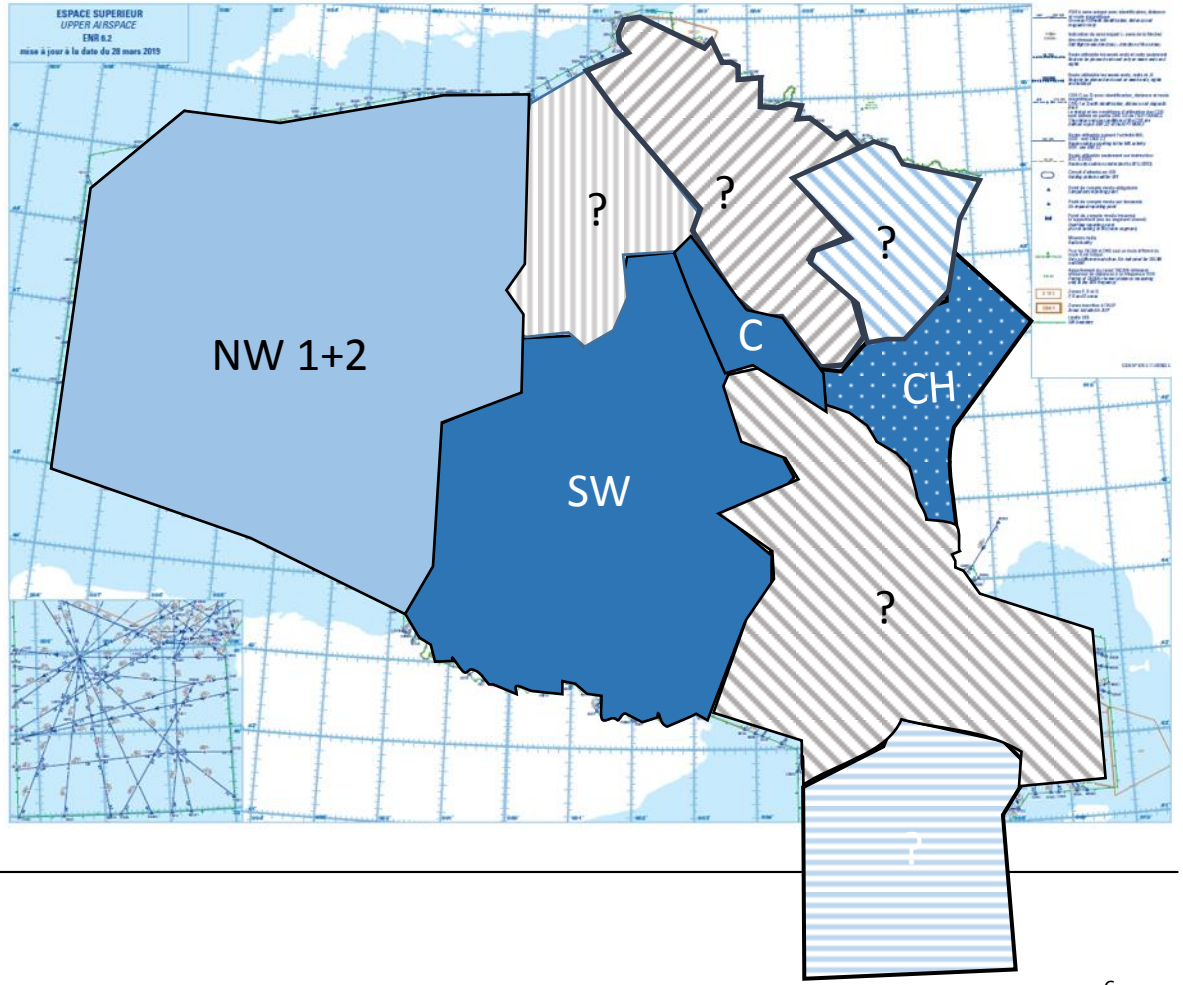
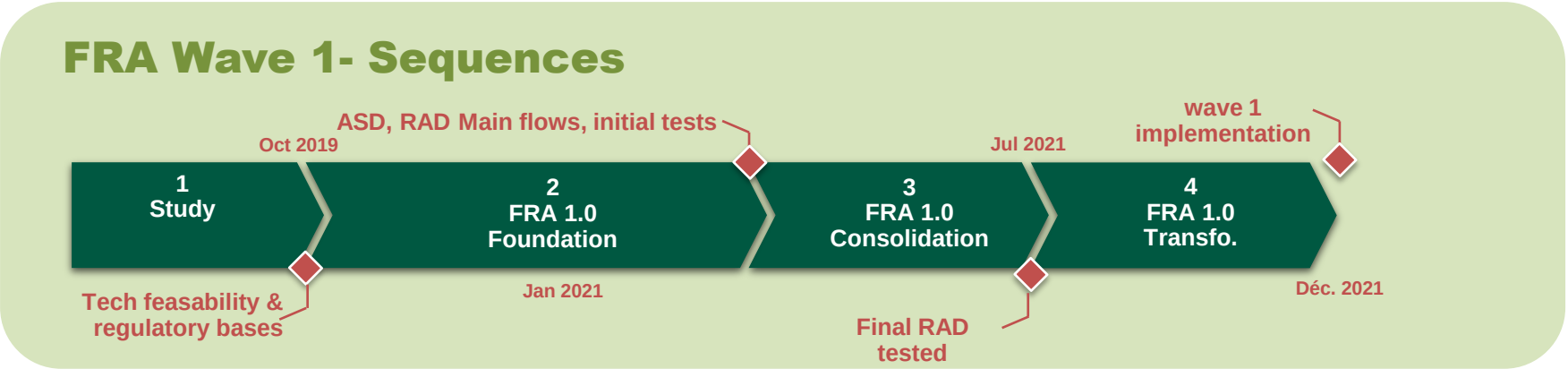
DSNA FRA Roadmap

- 12/2021 : 50%
- 03/2023 : 60%
- *11/2023 : 70%?*
- *11/2024 : 95%?*
- 12/2025 : 100%



DSNA FRA Program

Wave 1 roadmap : Bordeaux, Brest and Paris ACC with legacy FDPS



Brest ACC LFFRANW1 cell

- Part1 :
  - FL195-FL660
  - Sectors A, G, K, V and W
- Part 2 :
  - FL245-FL660
  - Delegation from London ACC (« PEMAK triangle »)

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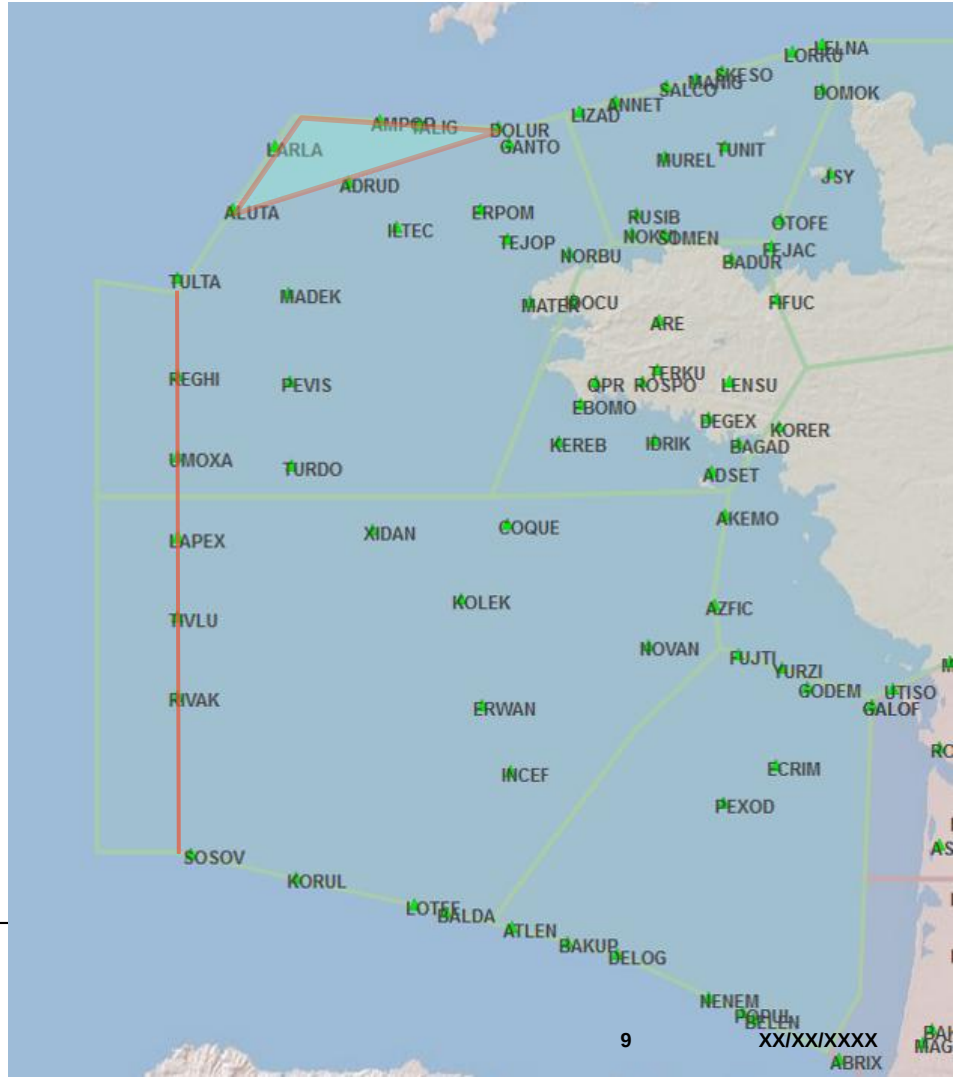
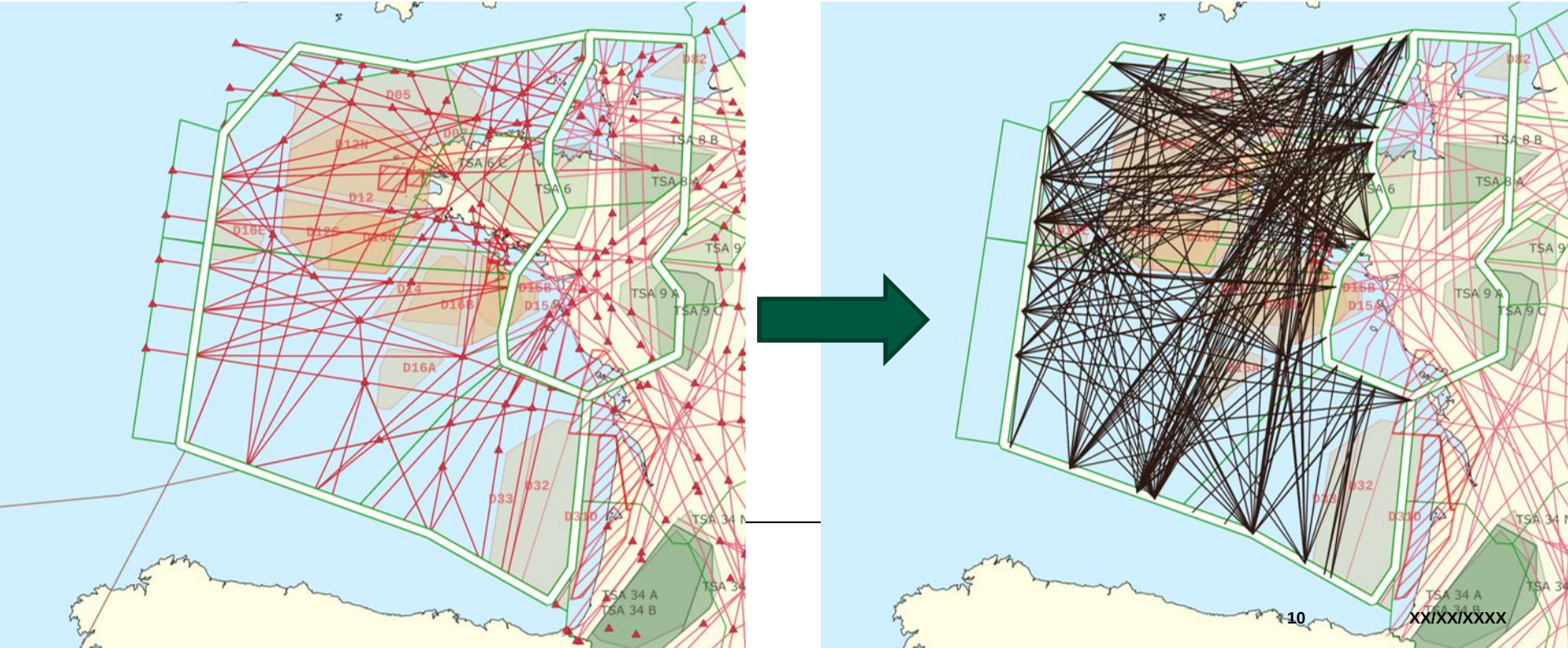
LFFRANW1

- 76 FRA significant points
- FRA(E) : 35 FRA(X) : 36
- FRA(I) : 24
- FRA(A) : 9 FRA(D) : 11



LFFRANW1 : huge increase of planning options



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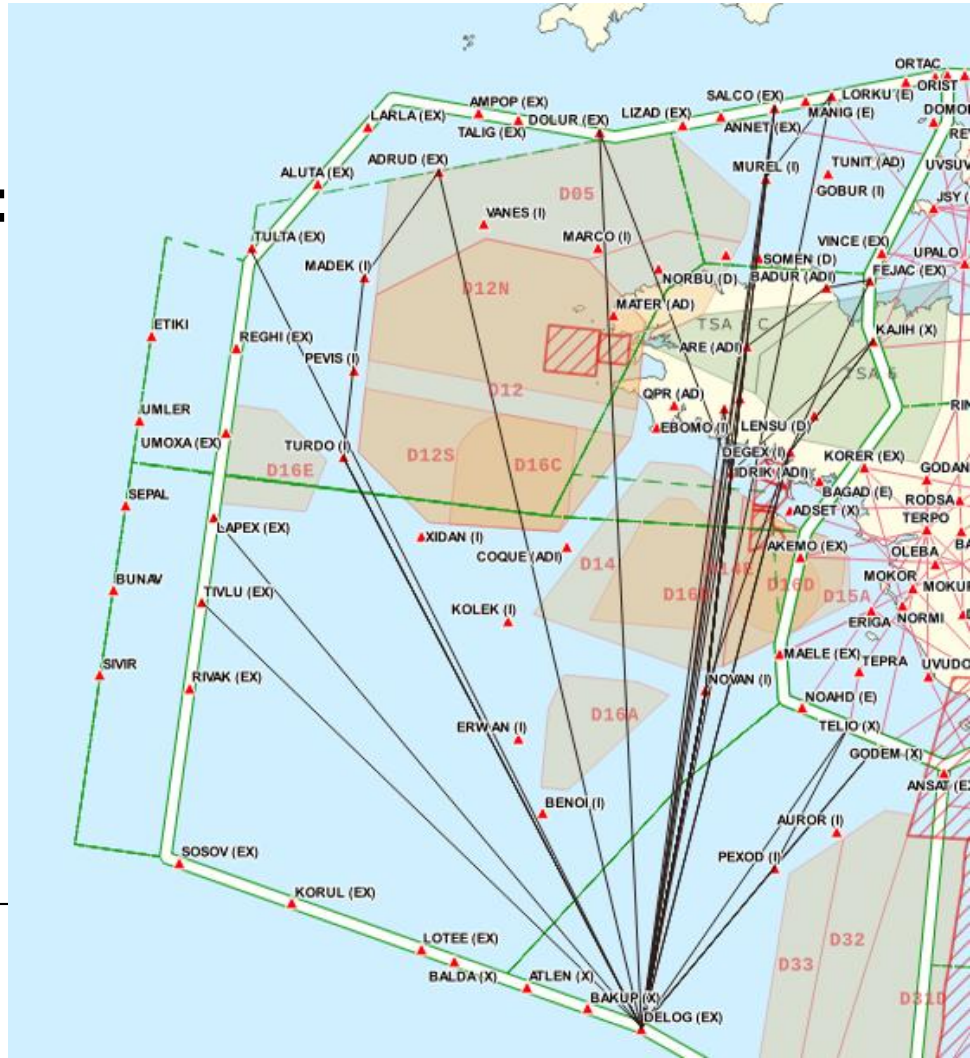
LFFRANW1 RAD principle 1 :

- Flow restrictions for (E) and (D) points, to list the allowed traffic flows

DELOG	Not Available for traffic via LECMCTA and then LFRRFRA Except via 1.TIVLU,LAPEX,TULTA,DOLUR,SALCO,SKESO,FEJAC,KAJIH,TELIO,GODEM,ADRUD 2. ARE,ROSPO,IDRIK



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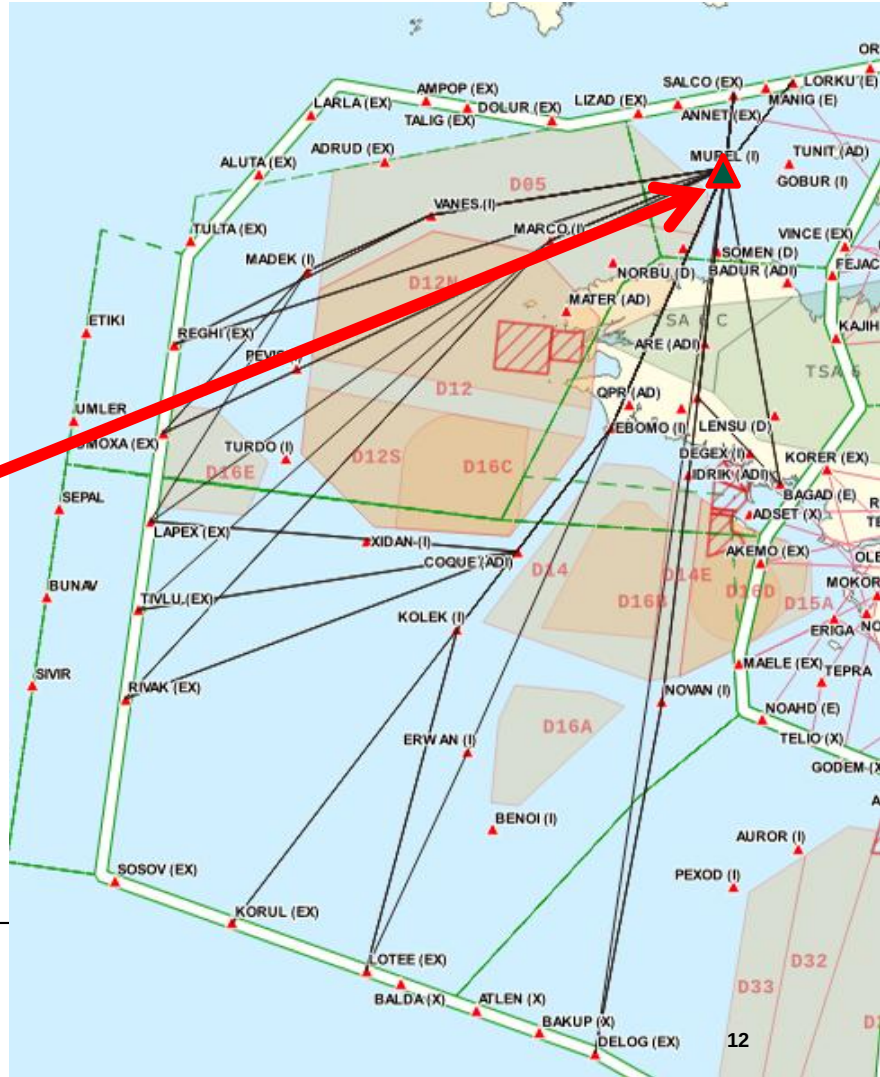
LFFRANW1 RAD principle 2 :

- Routing restrictions, to limit the number of available (I) waypoints for each flow

MUREL	Not available for traffic via LFRRFRA Except via 1. BAGAD And Then SALCO,SKESO 2. REGHI And Then SALCO,SKESO 3. UMOXA And Then SALCO,SKESO 4. LAPEX And Then SALCO,SKESO 5. TIVLU And Then SALCO,SKESO 6. RIVAK And Then SALCO,SKESO 7. KORUL And Then SALCO,SKESO 8. LOTEE And Then SALCO,SKESO 9. DELOG And Then SALCO,SKESO



LFFRANW1 RAD principle 3

Airport connectivity

RAD APP 5

LFRB (DEP)	QPR		Not available for traffic via LFRRFRA Except via ADSET,NENEM,DELOG,BALDA,LOTEE,KORUL,RIVAK, TIVLU,LAPEX,UMOXA,REGHI
LFRB (ARR)	QPR		Not available for traffic via LFRRFRA Except via LOTEE,KORUL,RIVAK,TIVLU,LAPEX,UMOXA

Bordeaux/Paris ACC LFFRASW cell

- FL195-FL660
- All Bordeaux Upper Airspace sectors (UBDX)
- Part of Paris DG sector above FL195

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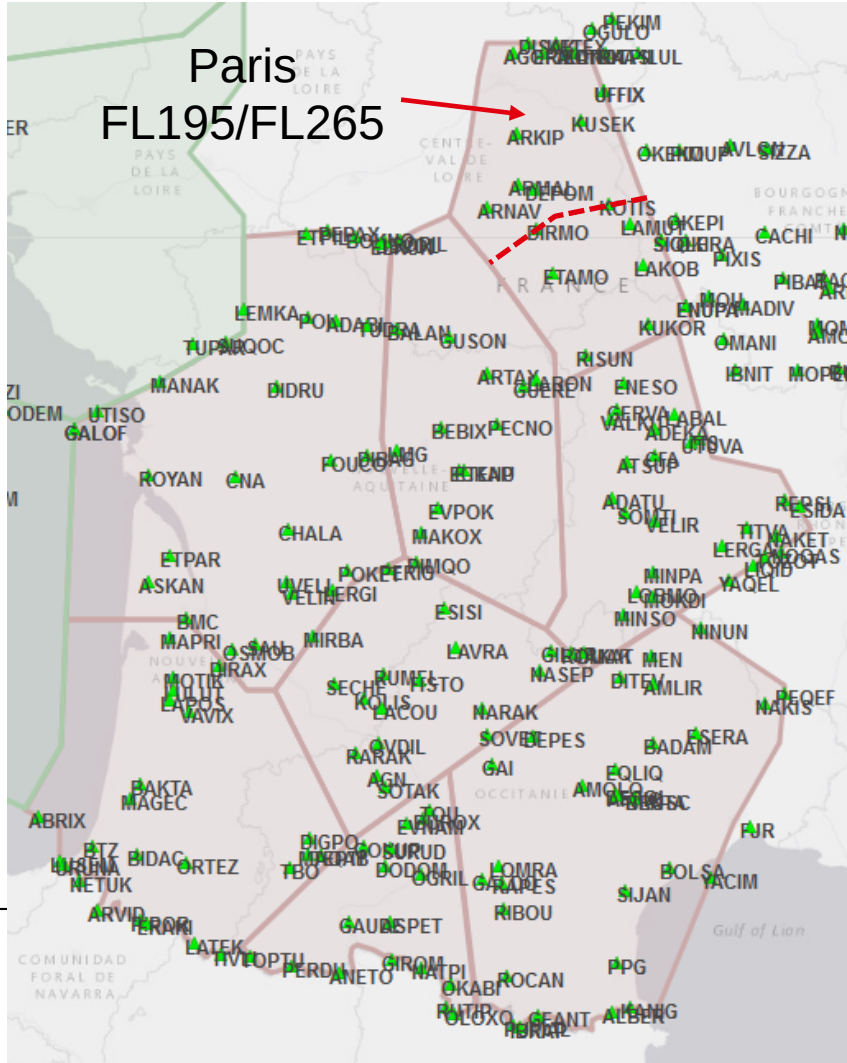
LFFRASW

- 169 FRA significant points
- FRA(E) : 28 FRA(X) : 32
- FRA(I) : 87
- FRA(A) : 55 FRA(D) : 60



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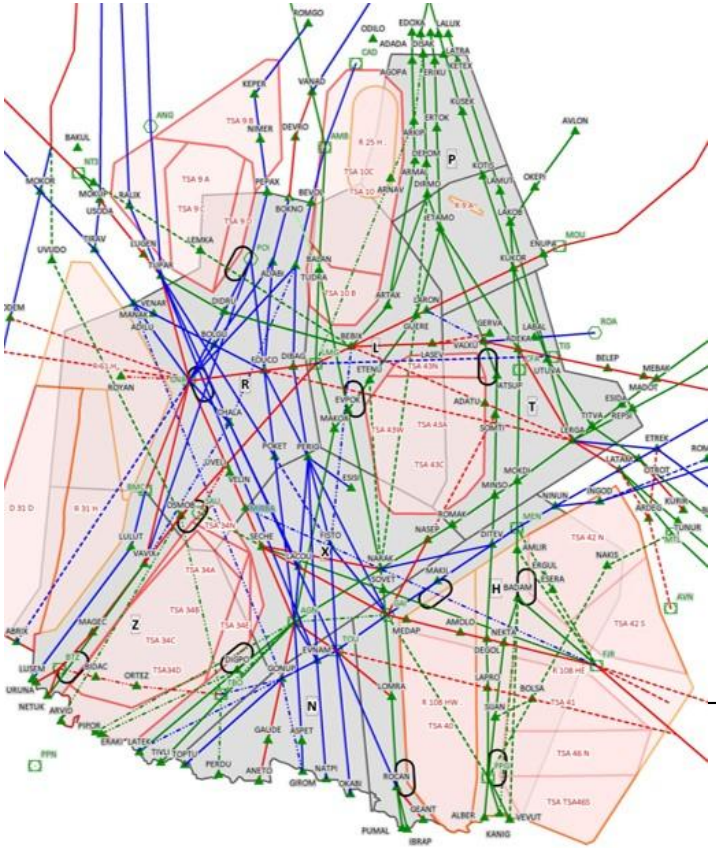
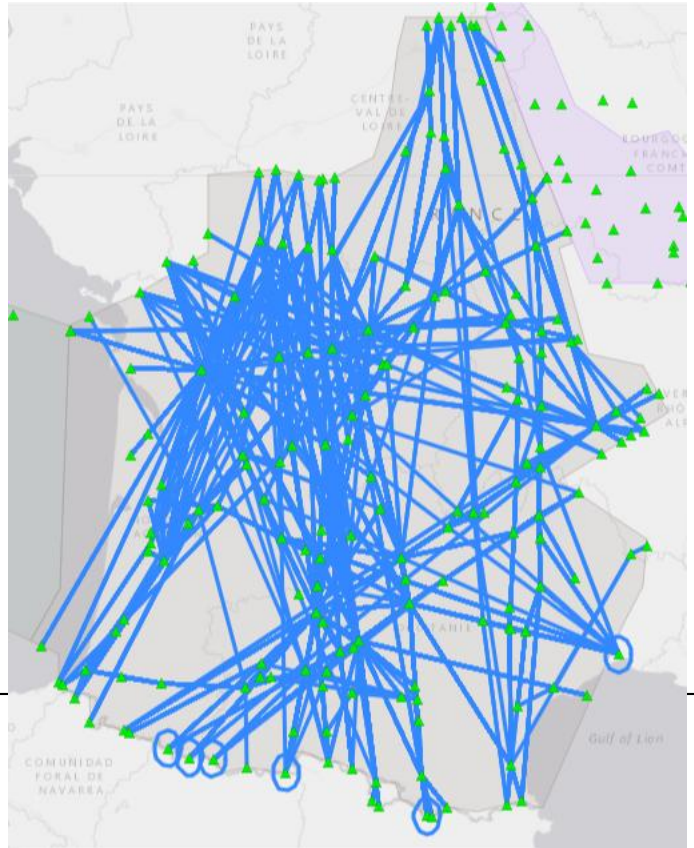
LFFRASW : increase of planning possibilities





Bordeaux/Paris ACC LFFRASW cell

- Principles :
  - Remaining close to fixed route network
  - Translating legacy RAD with FRA coding logic
  - Gradual implementation since summer 2020
  - Smooth transition in Dec 2021
  - Step by step additional planning possibilities 2022+

Bordeaux/Paris ACC LFFRASW cell

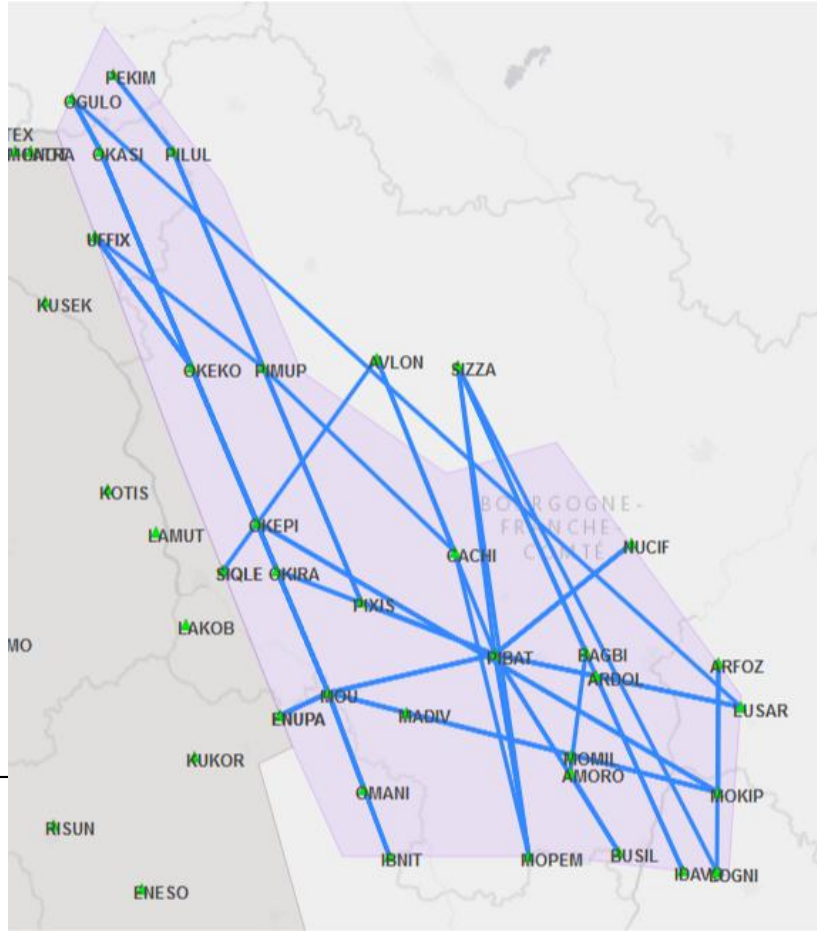
- RAD principles :
  - Flow restrictions for (E) and (D) points to list the allowed traffic flows (+/- same as today) with compulsory (I) points to avoid clipping sectors
  - Airport connectivity organized with RAD APP 5

Paris ACC LFFRAC cell

- FL195-FL660
- Paris LMH group of sectors (HP, PU, PW, TU, TW, UP1, UP2, UT)

LFFRAC

- 32 FRA significant points
- FRA(E) : 9 FRA(X) : 9
- FRA(I) : 16
- FRA(A) : 5 FRA(D) : 6



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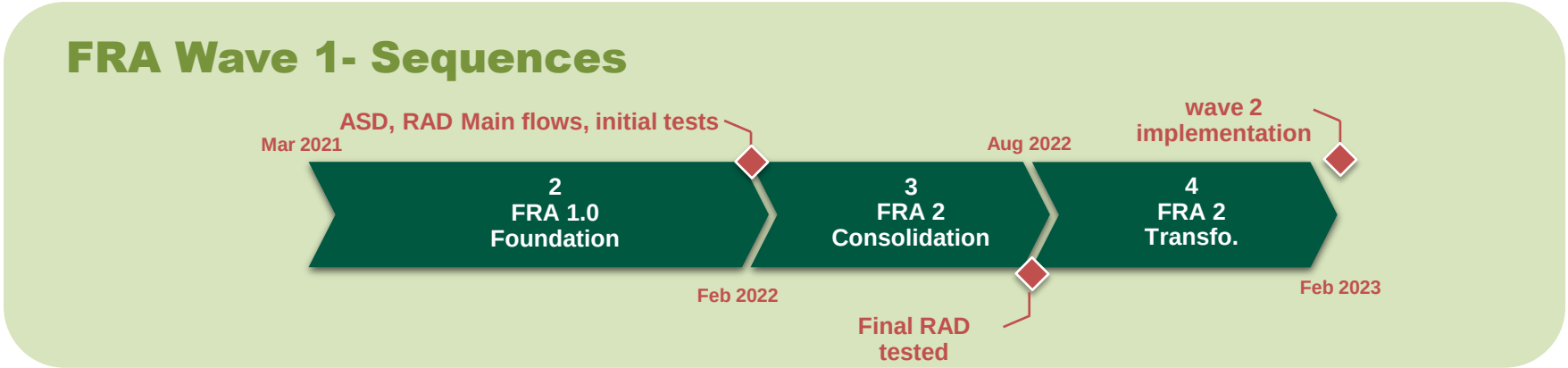
LFFRAC

- Based on existing fixed routes network
- RAD principles : cf. LFFRASW
- Why such a small cell?
  - FRA experience for Paris ACC before 4-Flight imp.
  - To be merged later with another cell (tbd)

Wave 2 : February 2023

Extension of Brest LFFRANW1 cell



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Wave 2 :

- Include J and N sectors in LFFRANW1
- Additional planning possibilities on major flows
- Still with the legacy FDPS
- Need an update of FDPS software (expected late 2022)

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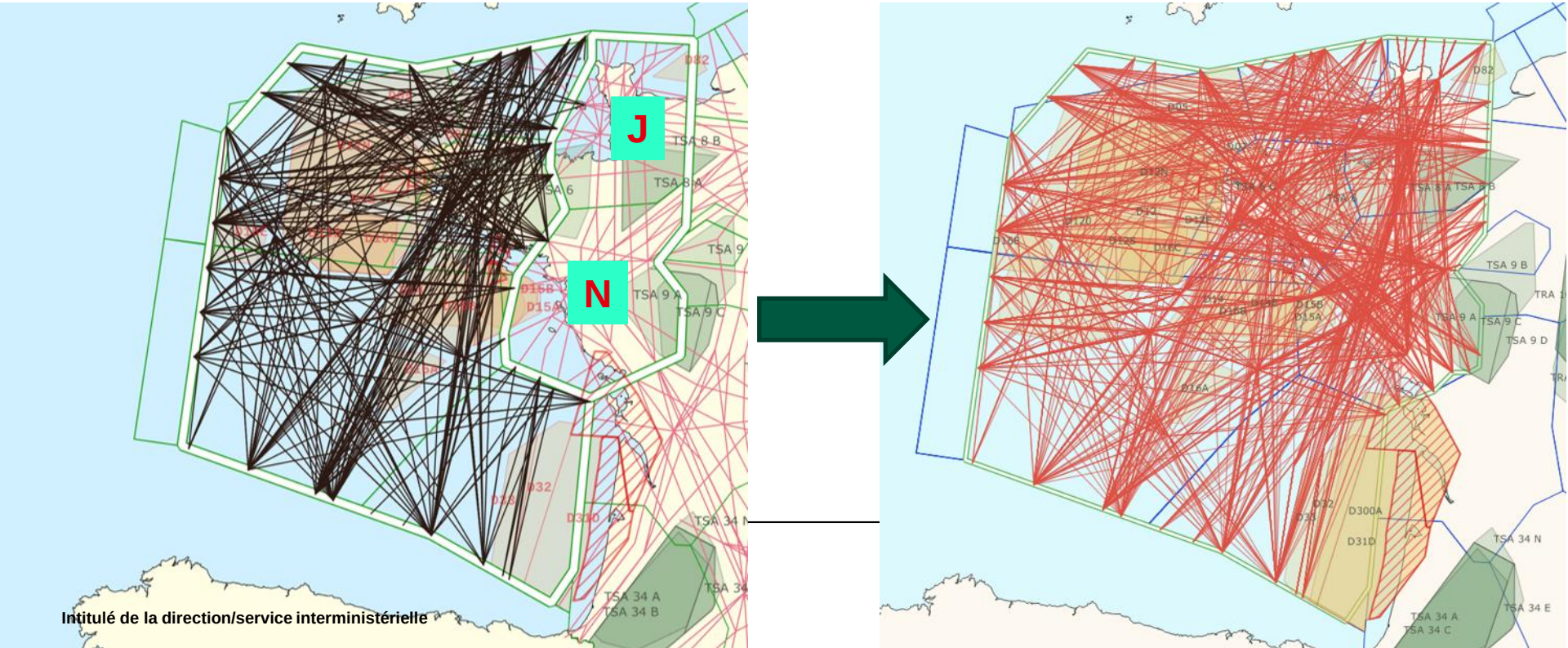
LFFRANW1 extended : increase of possible planning



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Next waves :

- Studies start in Reims and Marseille ACCs, for implementation in 4-Flight context (2023+).
- Design of cells and calendar updated byJune 2022

Merger of cells :

- Initial cells can extend (cf. LFFRANW1)
- Initial cells can merge together
- Final number of DSNA FRA cells not fixed

Crossborder FRA: a step by step approach till 2025

- Very limited possibilities with legacy FDPS => 4-Flight
- Between DSNA cells
- With FABEC : MUAC, DFS and Skyguide
- With other ANSPs : NATS, ENAV, ENAIRE

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Any questions?