



International Civil Aviation Organization

PBN

AIRSPACE CONCEPT

WORKSHOP

CASE STUDY



Introduction

Methodology

STEPS

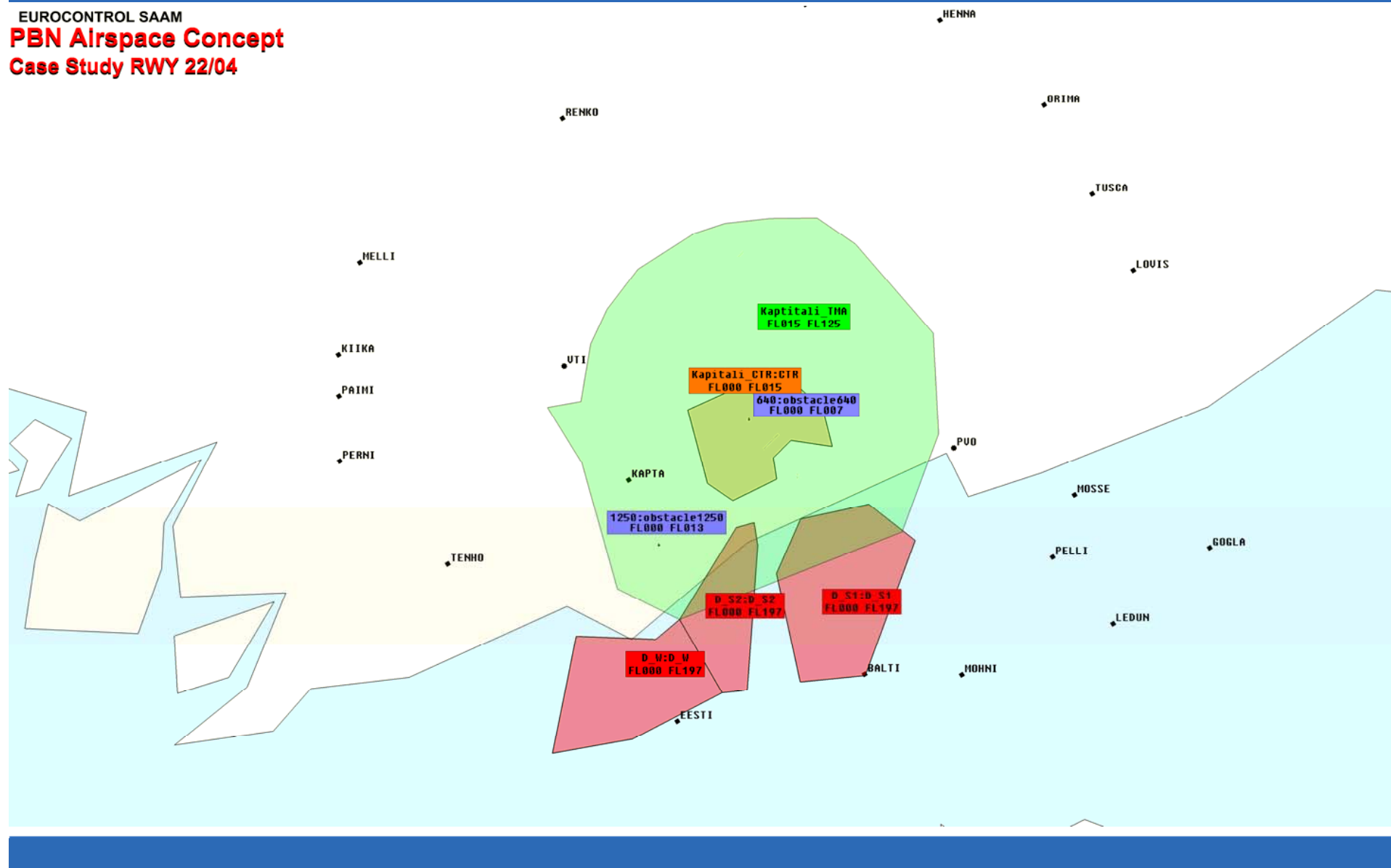
This module will provide data regarding a non existing TMA. It is a generic high level overview, which will provide a basis for understanding the TMA operations.



Kapitali TMA

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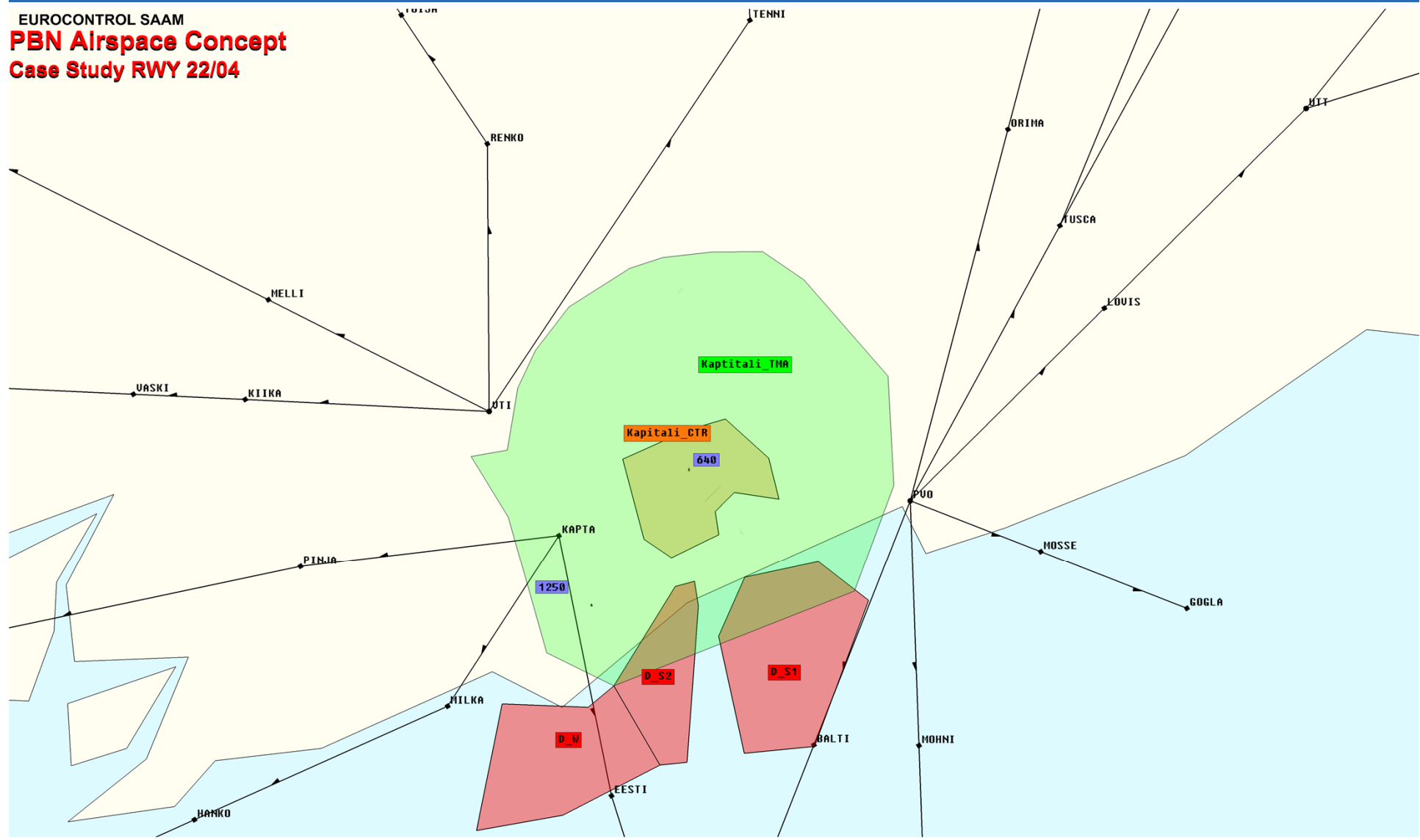




ISSUES

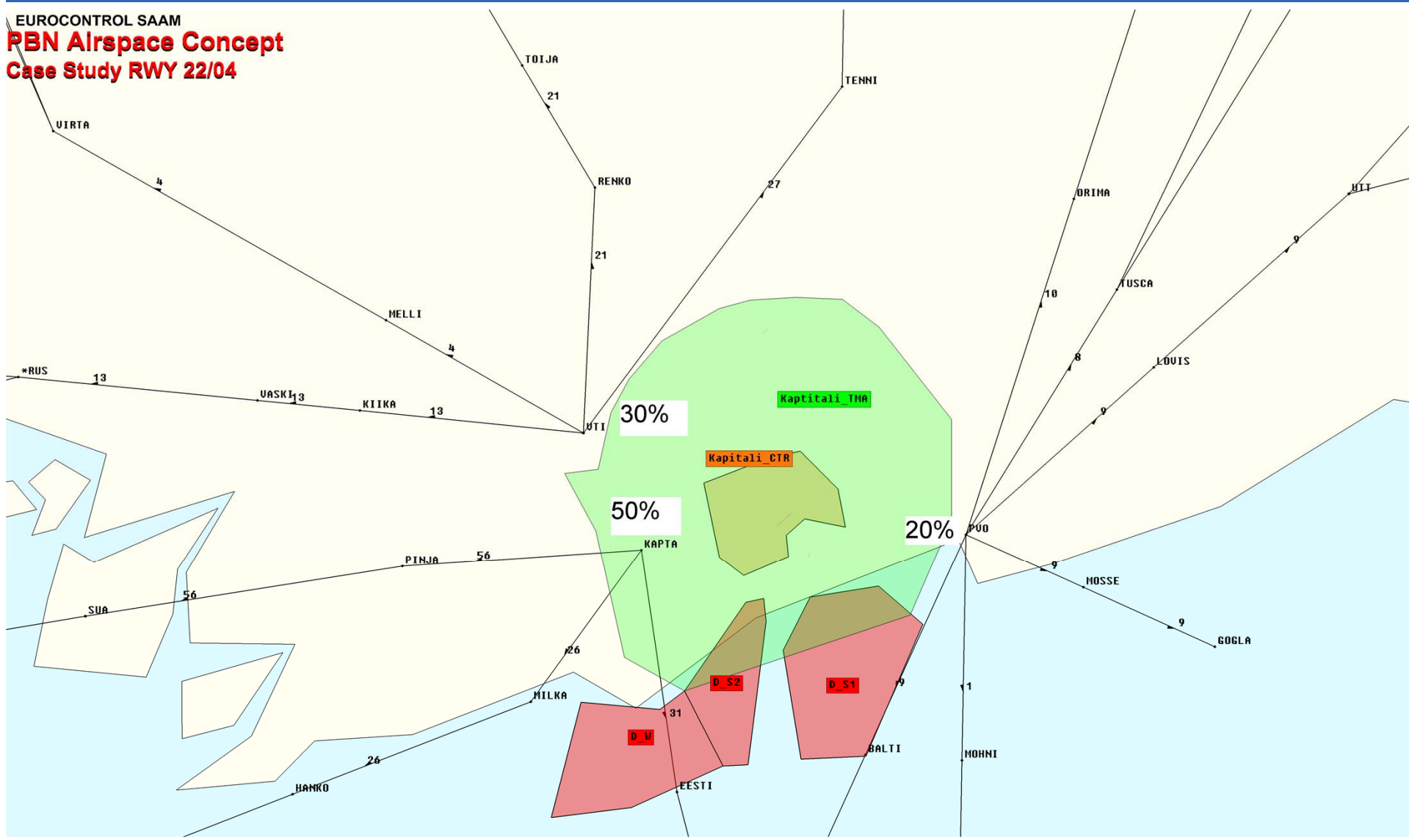
- RWY 04/22
- Mostly RV
- Environmental constraints
 - 2200
- Request for night flights
- Capacity limits
- Operator wants more efficient ATM

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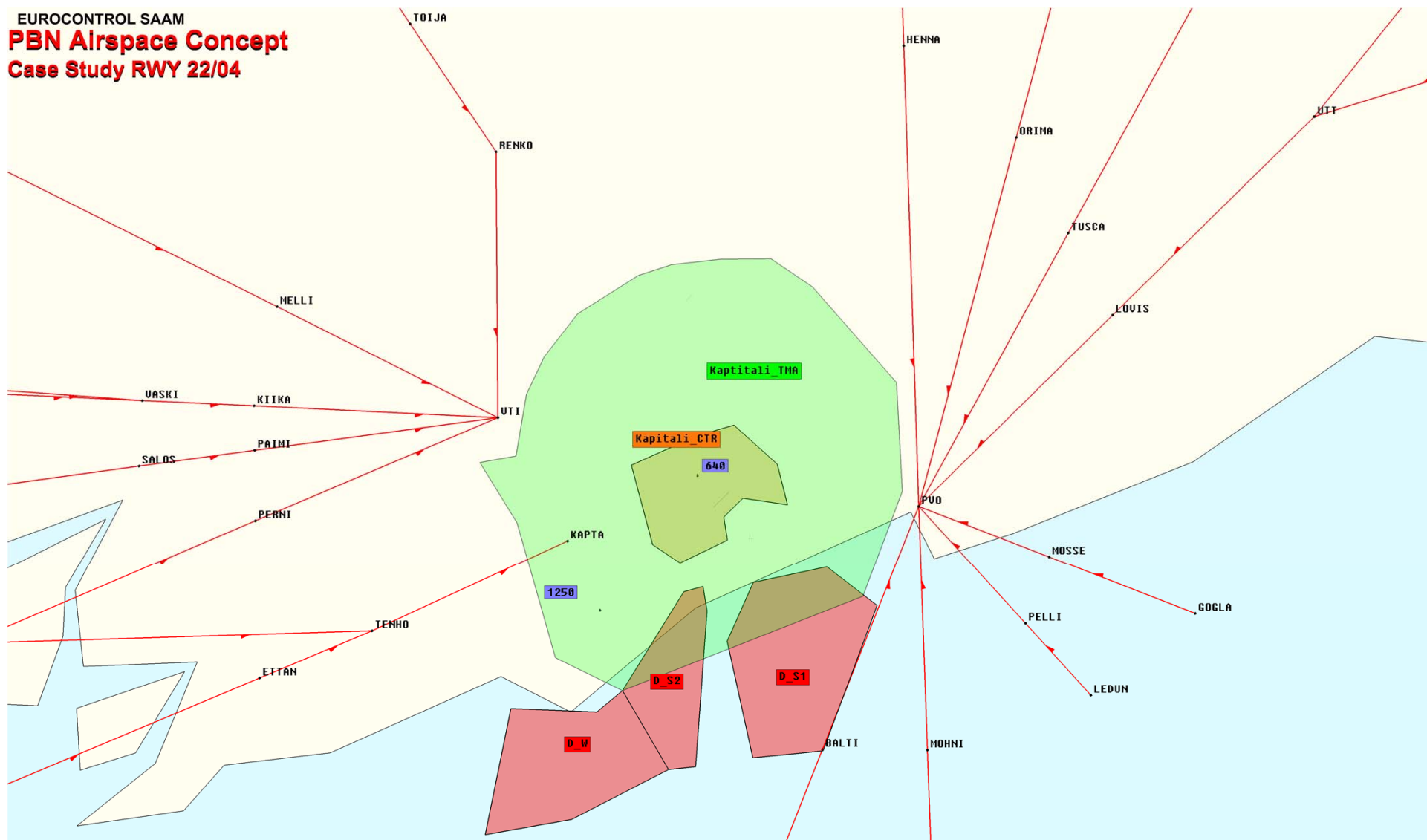




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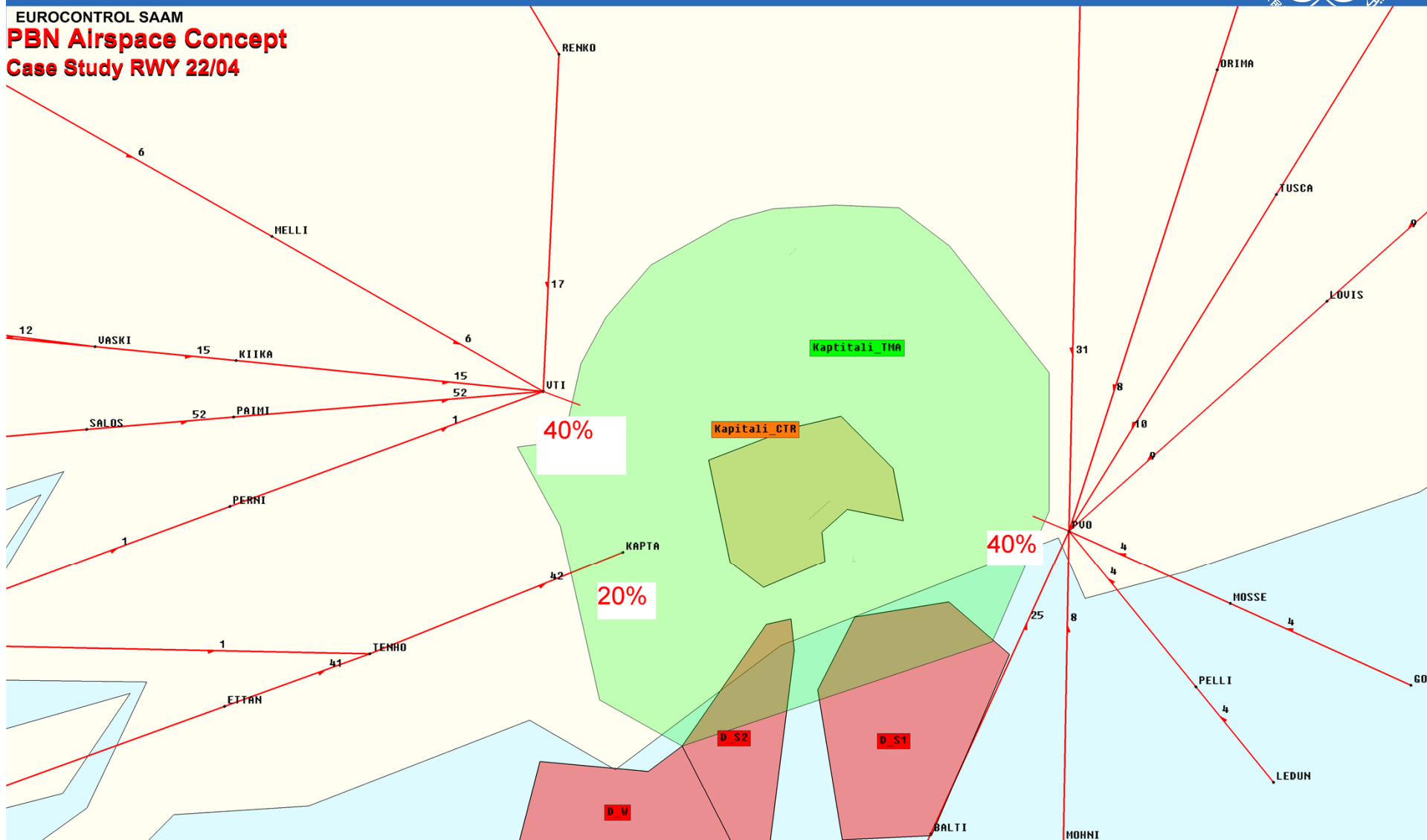


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ATM



- Functional Sectorisation
- Holds reactively activated
- NO use of SID and STAR
- High workload
- VFR ops
- TSA Mil

TRAFFIC



- 75 % GPS/DME EQUIPPED
- 95 % DME
- ALL RNAV-5 approved
- 65% RNAV-1 approved
- 25% Retro fittable
- 10 % to old



AIRSPACE

- Airspace classification C (inside and out side TMA as from 1500ft below uncontrolled)
- Airspace restrictions – TSA gnd FL 200
- Holding Areas on map
- MSA is 2500 ft
- TL 50
- MRVA is published 3000 ft



AIR TRAFFIC MANAGEMENT

- Arrival and Departures vectored
- No transit traffic
- Military VFR to TSA outside CTR
- VFR has no impact on TMA ops
- HOLDS managed by APP but located in ACC



INFRA and TECHNICAL

- Two radar (APP and feed from ACC) full coverage as from 2000ft update rate
- 10 per min
- Full RADAR and Flight plan data processing
- ILS both RWY ends Cat 3
- DME coverage as from 2000 ft Whole TMA
- NDB for NPA



METEO

- No serious impact on ATM and Low pressure has no impact as well
- Main use is RWY 22 80% of the time
- Moderate thunderstorm activity during summer, with normal disruption of traffic accommodated through flow control



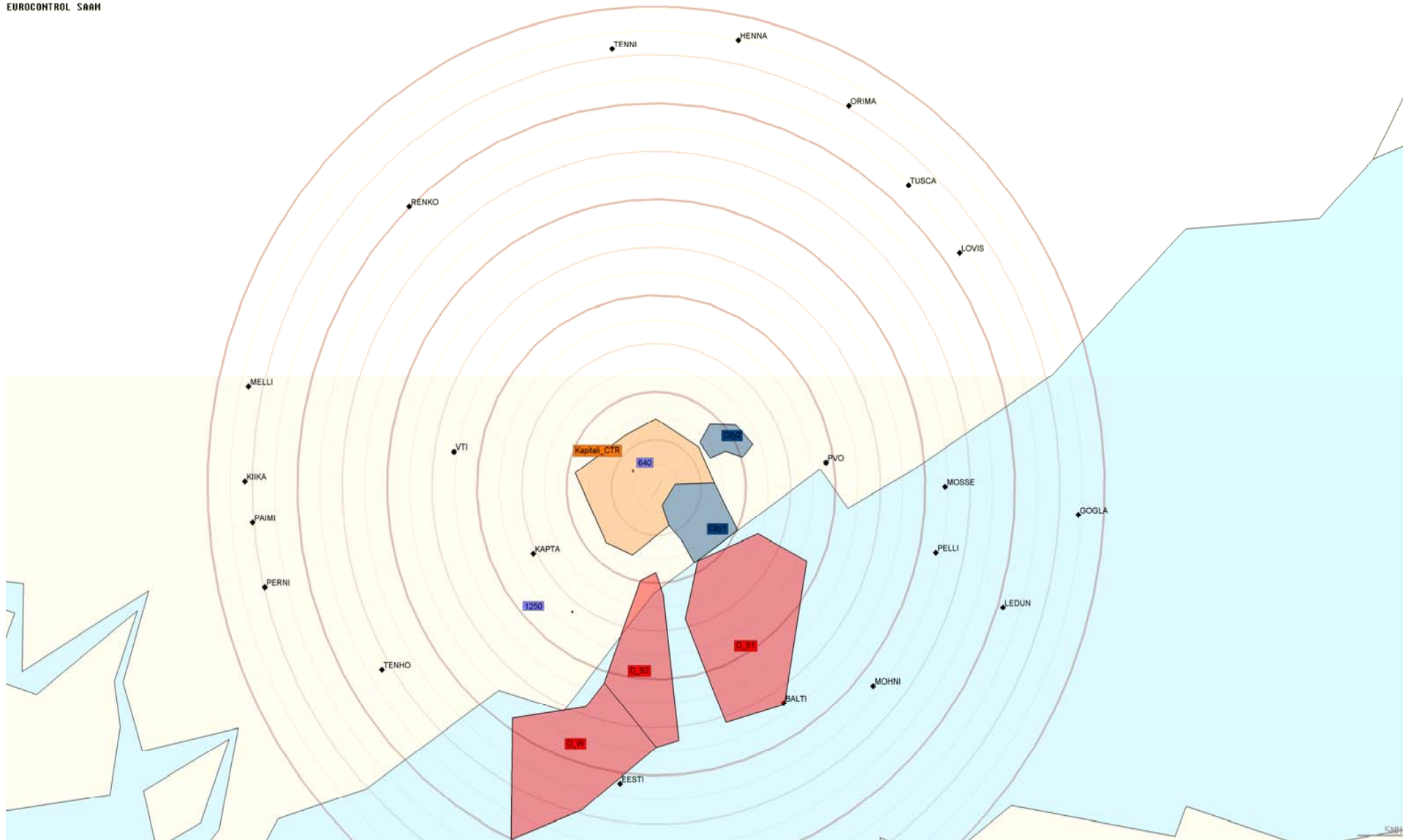
ENVIRONMENT

- Noise curfew after 2200
- Avoid city as much as possible
- Holding levels not below FL100
- CDAs are not implemented

TSA



- TSA is used for air-combat.
- Activated from 0800-2200.
- No formal agreement for the use of the TSA airspace outside actual Mil use.
- Occasional use is obtained through telephone coordination





QUESTIONS?