

# Cardiff Airport Airspace Change Proposal (ACP)

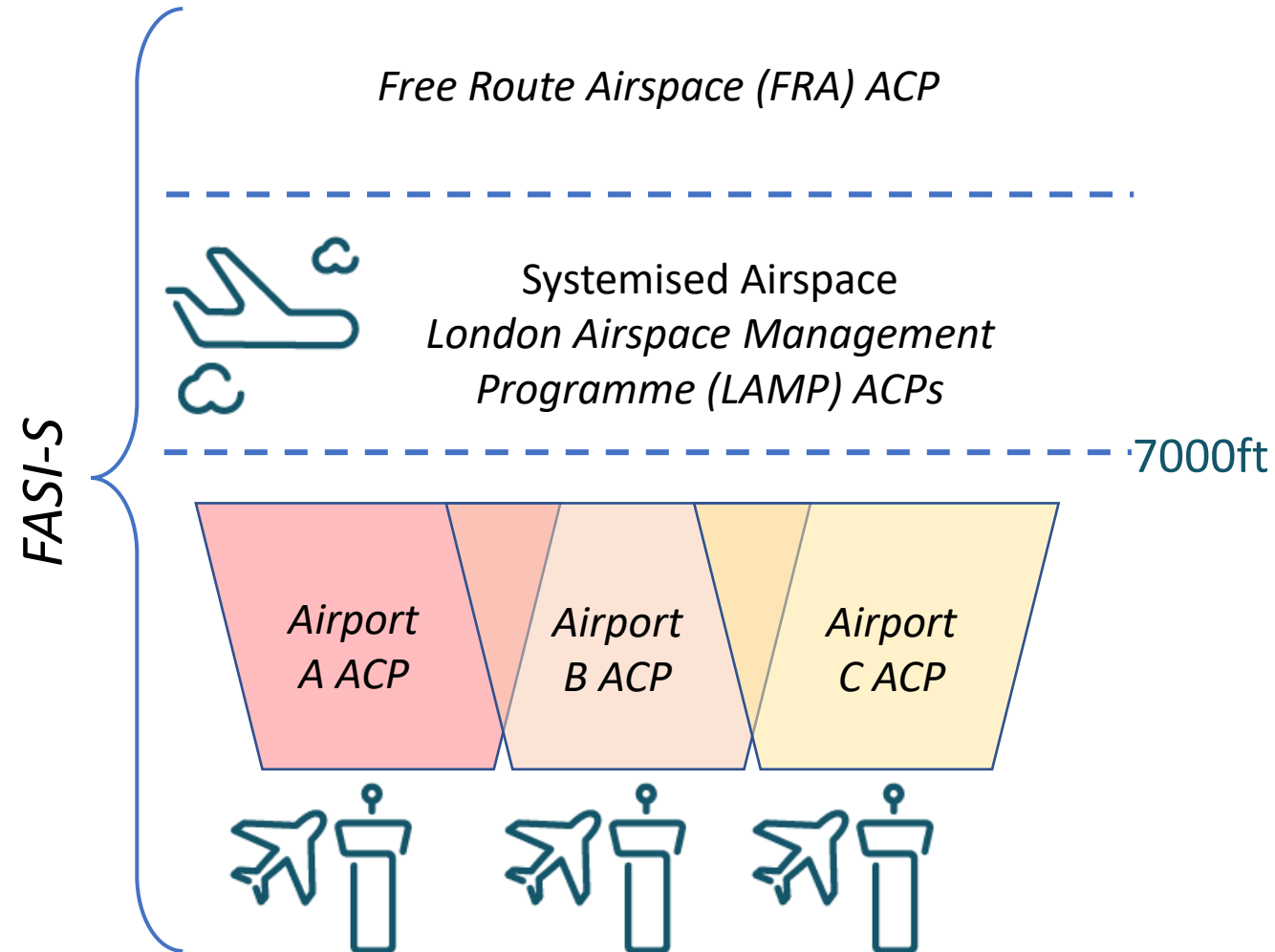
Stage 2 Develop and Assess  
Step 2A Options Development

# Agenda

- Introductions
- UK Airspace Modernisation
- ACP requirements
- ACP progress
- Options Development Work

# UK Airspace Modernisation

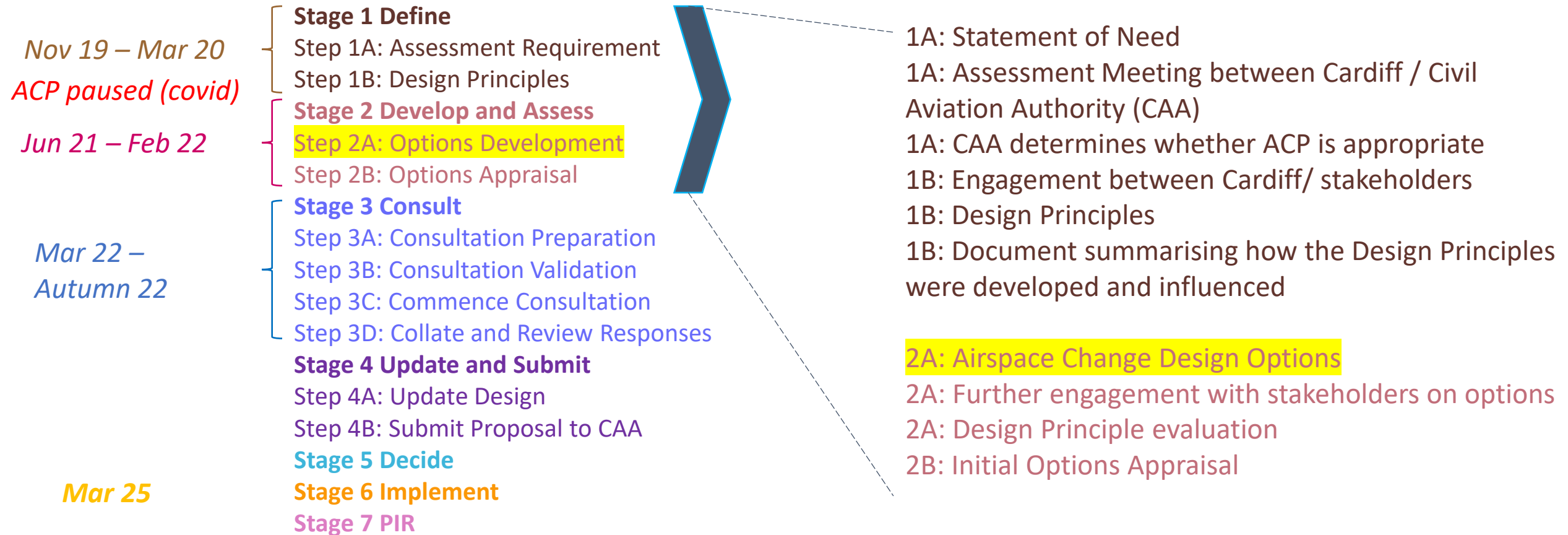
- Cardiff Airport's ACP is part of the Future Airspace Strategy Implementation South (FASI-S) alongside:
  - 14 other airport ACPs;
  - High-level systemisation and free route ACPs (NERL)
- These linked ACPs can achieve collective benefits such as:
  - Enhance operational resilience of the ATC network;
  - Reduce the environmental impact of flights;
  - Improve efficiency from more precise and direct flights;
  - Facilitate airspace access for all users;
  - Reduce the impact of aviation noise.



# Cardiff Airport ACP Requirements

- As covered in our Statement of Need, Cardiff Airport seeks to achieve the following benefits from its airspace change:
  - Remove reliance on ground-based navigation aids
  - Introduce more efficient, precise and environmentally friendly routes
  - Support future traffic growth of Cardiff Airport and surrounding airspace
  - Limit environmental and noise impacts of flights in/ out of Cardiff Airport

# ACP Progress To Date



# Next Steps

- Stage 2 design workshops
- Collation of material
- Design updates
- Re-engagement planned (virtual presentation)
- Design Principle Evaluation and Initial Options Appraisal
- Final documentation and submission to CAA (Jan 2022)

# Options Development

The designs will work towards achieving the following final published procedures:

- Replication of 5 existing SID routes using RNAV-1
- Design of up to 4 new SID routes using RNAV-1 (1 westerly and 1 south easterly per runway)
- Assessment of the suitability of a hold being shared with neighbouring Bristol Airport or dedicated hold(s) or point merge techniques for Cardiff Airport
- Develop an RNAV-1 Hold and up to 6 Transitions to connect to the existing “T” Bar approaches.

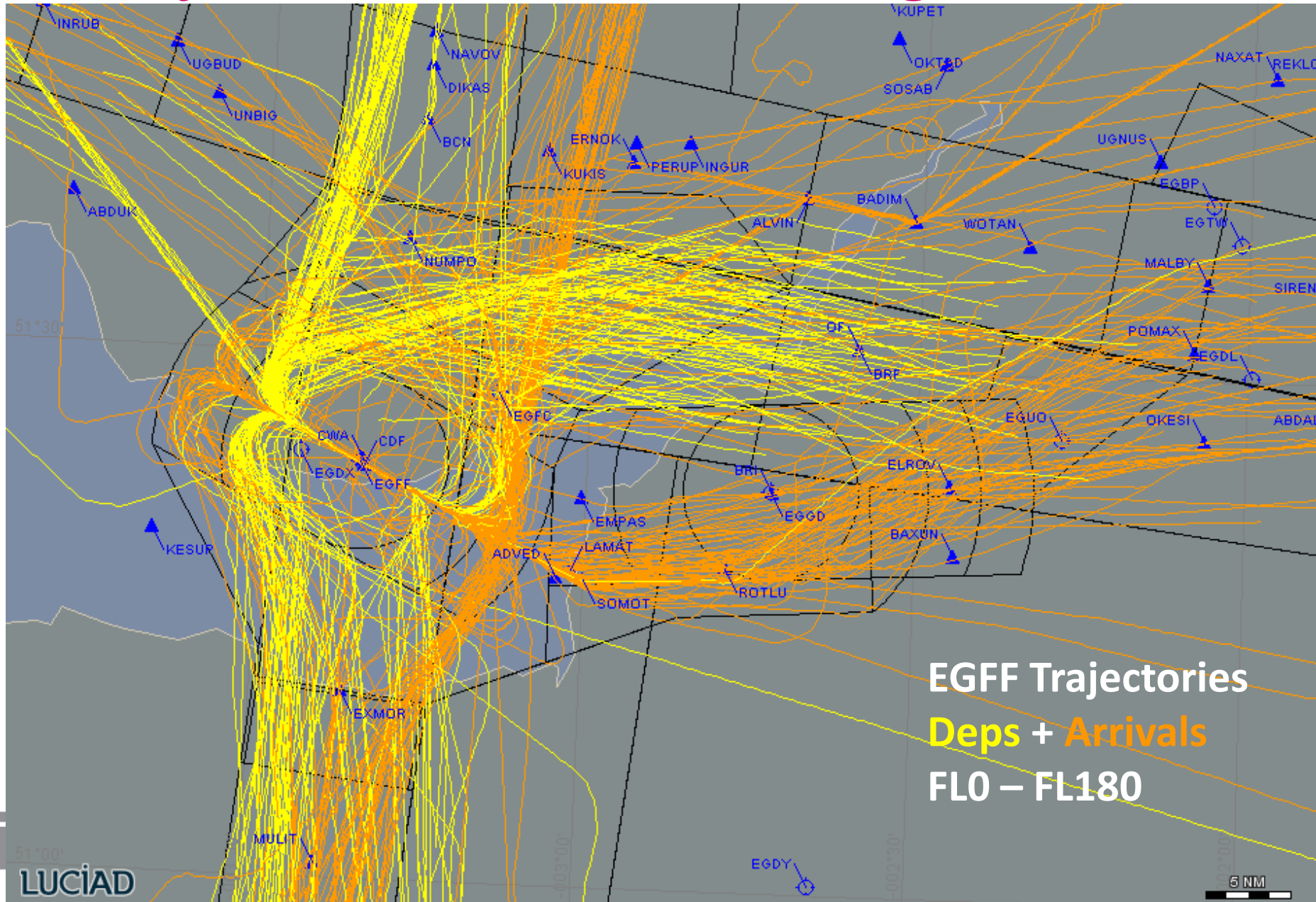
# Options Development

Alternative design options:

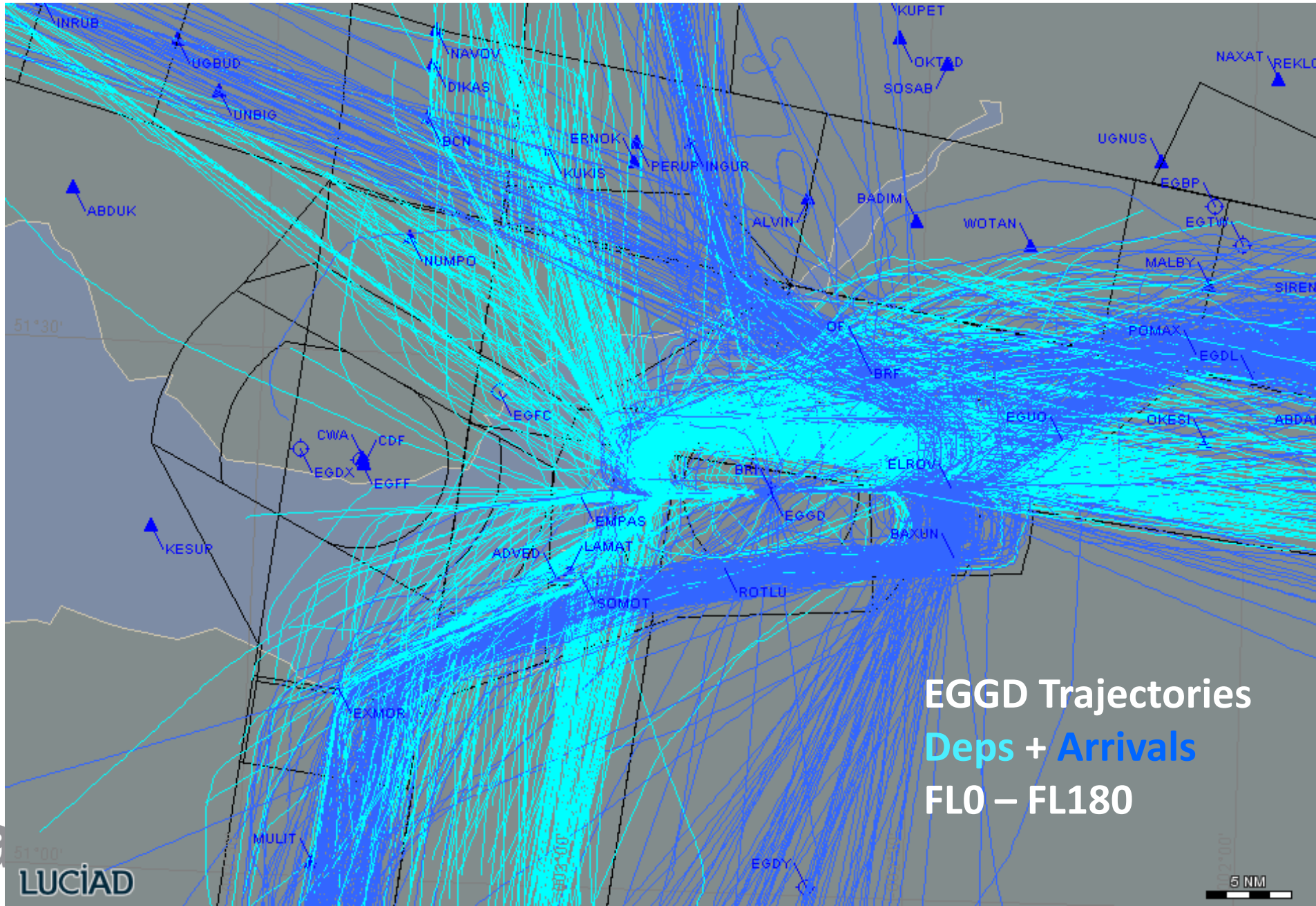
- Trombone procedures
- Point Merge



# EGFF Trajectories 6<sup>th</sup> – 12<sup>th</sup> August 2018

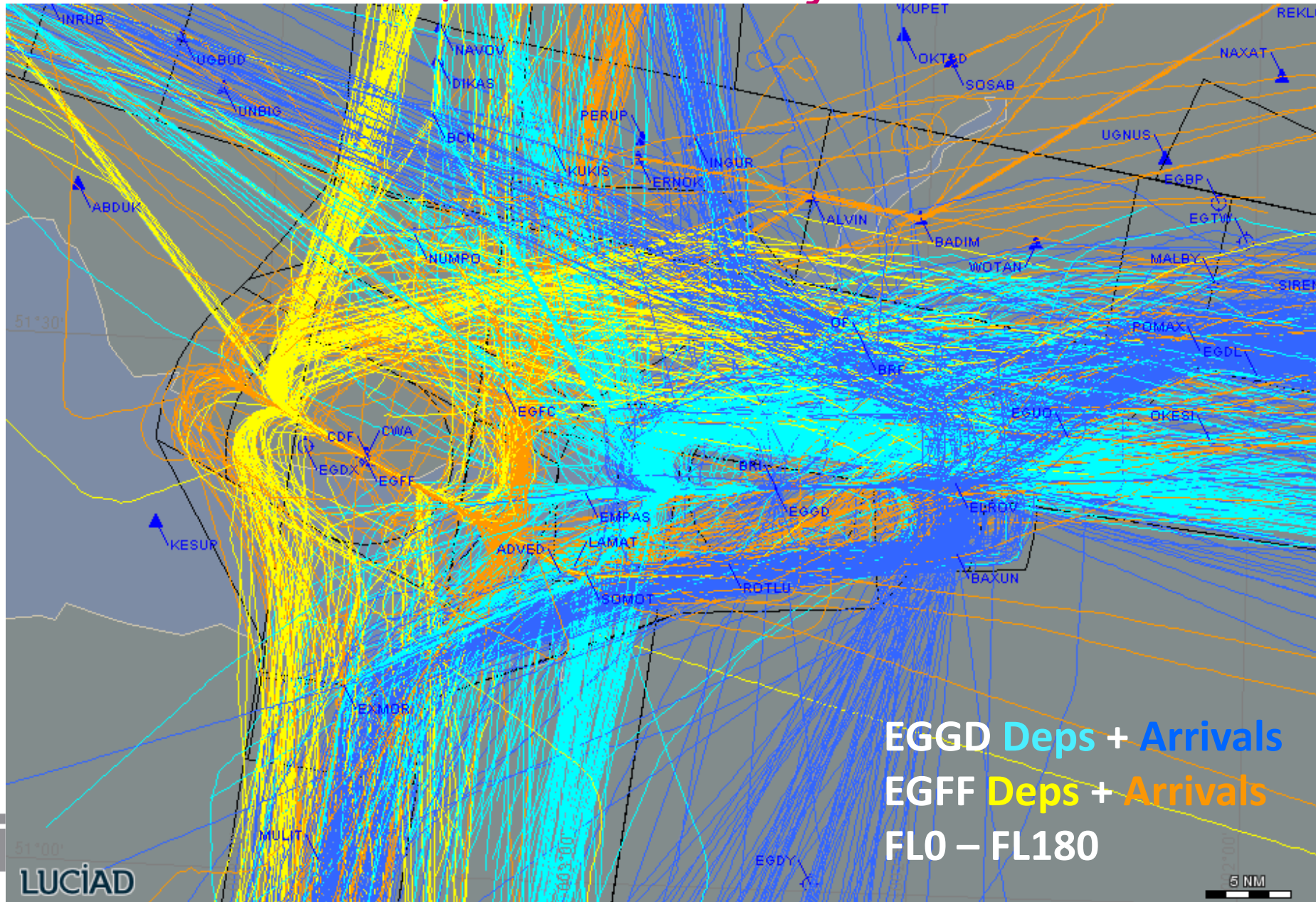


# EGGD Trajectories 6<sup>th</sup> – 12<sup>th</sup> August 2018





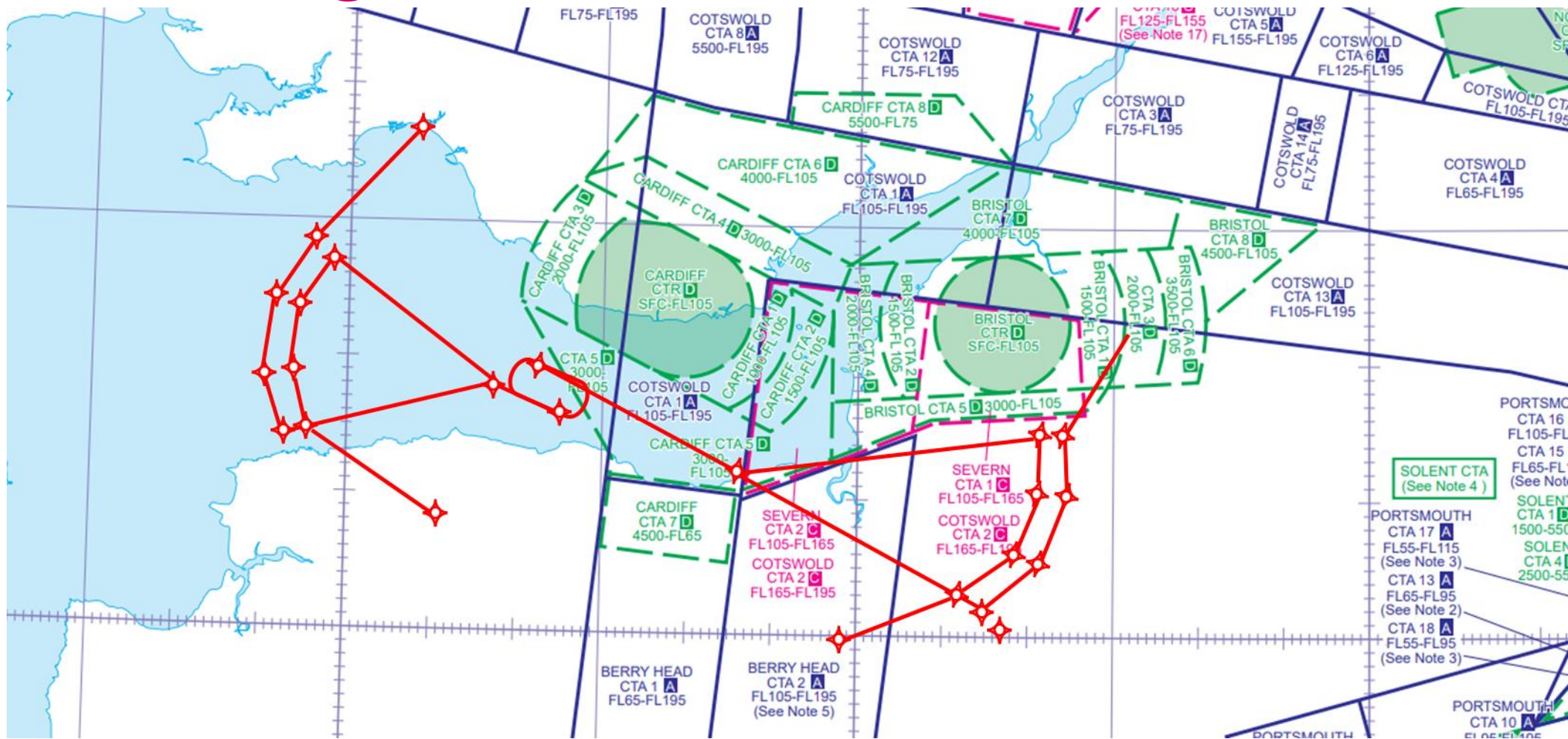
# Combined EGFF/ EGGD Trajectories







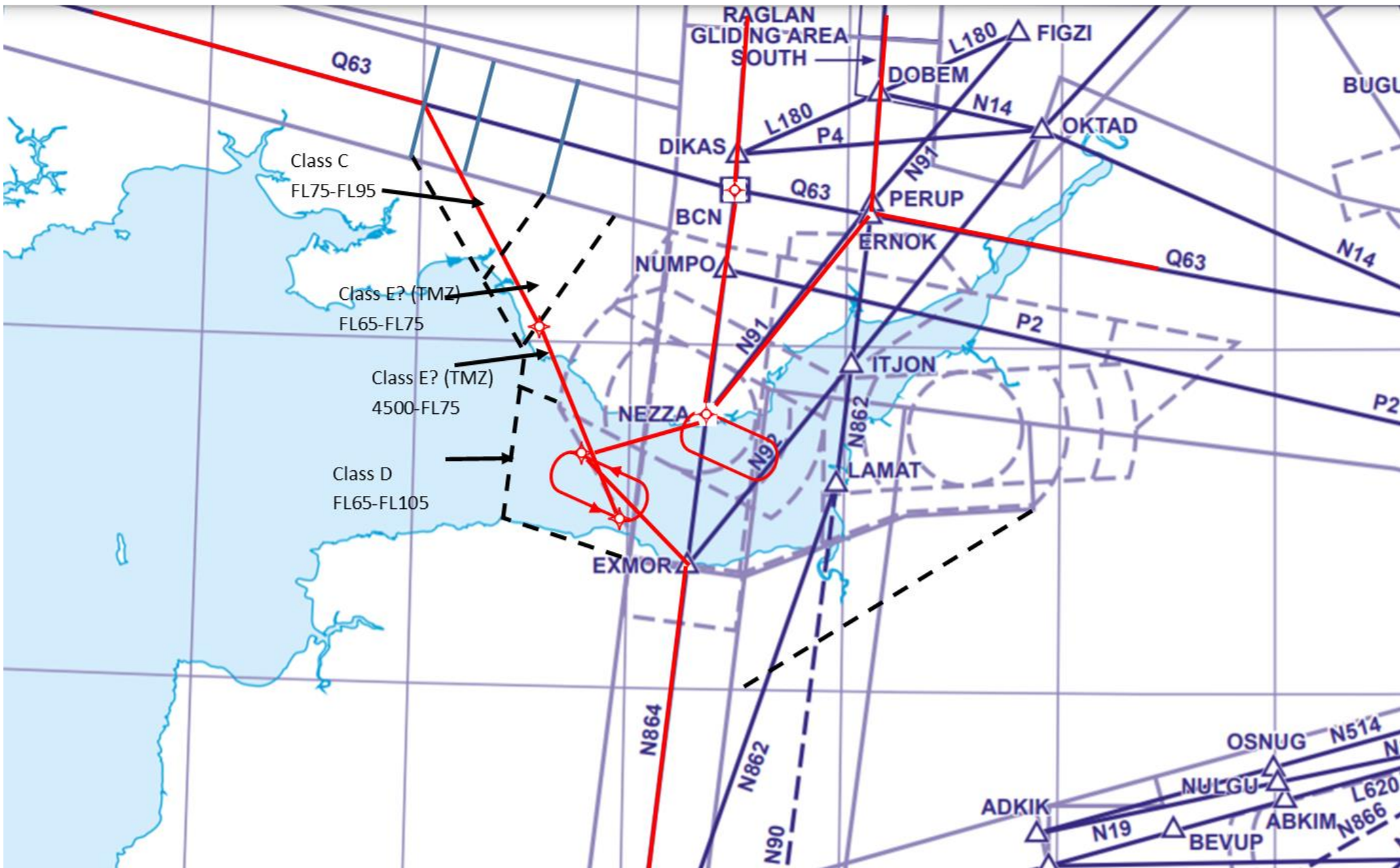
# Point Merge



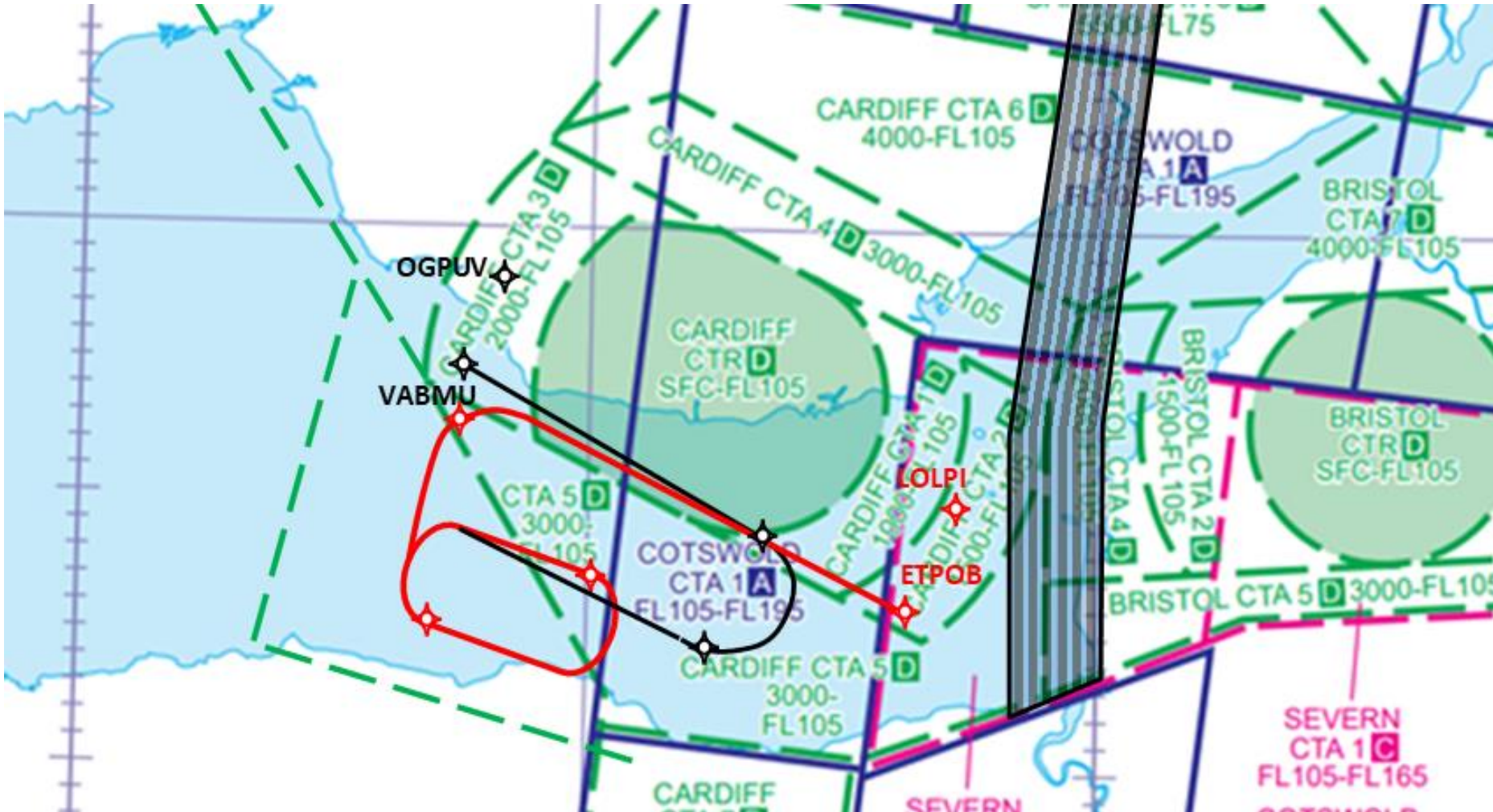


# Point Merge - Considerations

- Procedure based to the south East:
  - Suits most arrivals which are from the South and East, however impractical due to the interaction with Bristol traffic
  - Big impact on military and GA/BGA
- Procedure based out to the West:
  - Requires a huge chunk of Class G airspace
  - Away from the main arrival streams of traffic
  - Will entail increase in fuel planning requirements
  - Most (probably all) traffic would be vectored away from the procedure



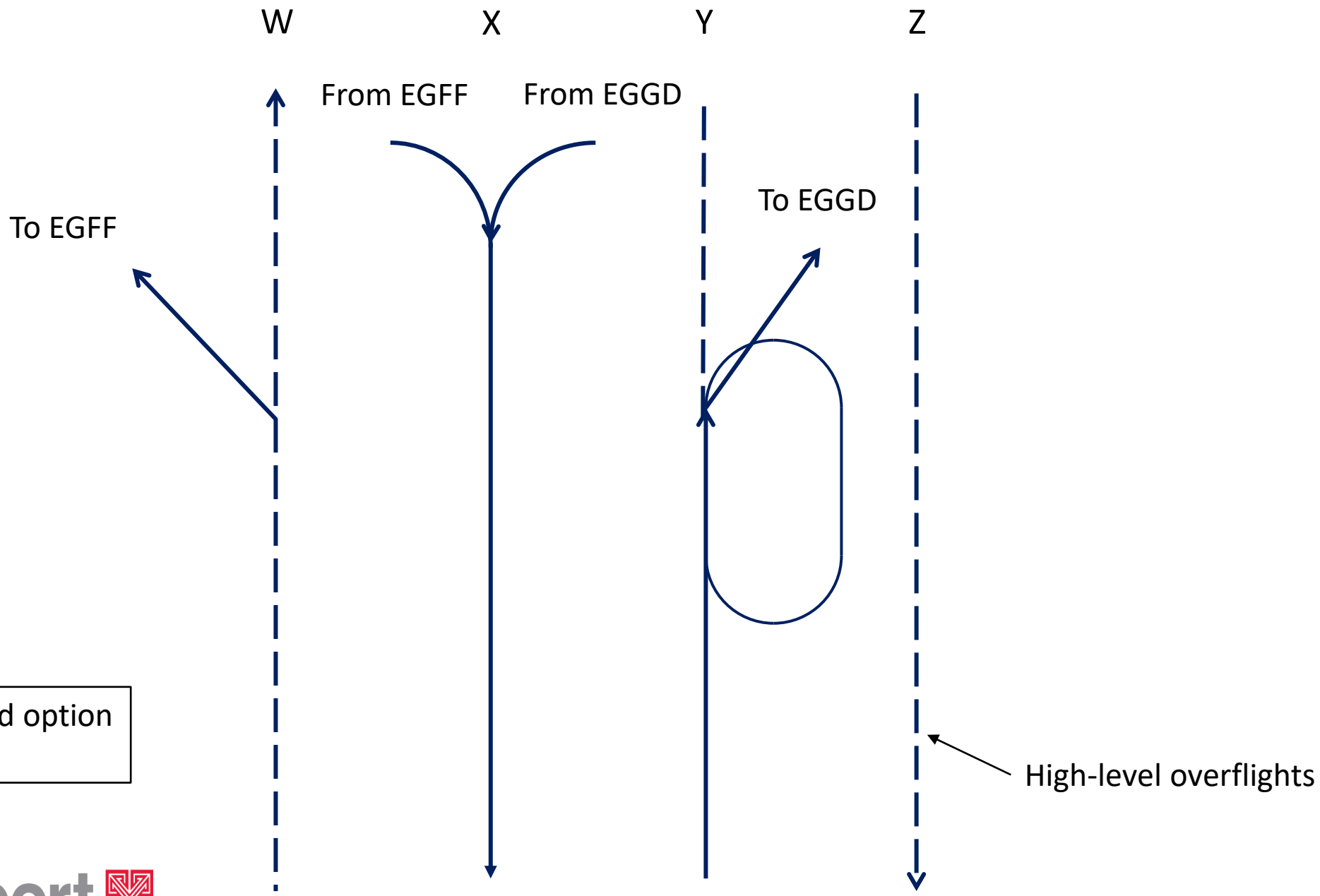
# RNAV Transitions





# SIDS (North, West, East)





Route/ South Hold option  
03 March 2020