

Future Airspace Strategy  
Implementation North (FASI-N)

PLAS ScTMA  
Gateway documentation:  
Stage 2 Develop and Assess

2A: Airspace Change Design Options

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**NATS Unclassified**

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## 1. Introduction

- 1.1 This document forms part of the document set required in accordance with the requirements of the CAP1616 airspace change process.
- 1.2 This document aims to provide adequate evidence to satisfy Stage 2 Develop and Assess Gateway, Step 2A Airspace Change Design Options.

## 2. Options development – brief history

- 2.1 This document evaluates the options considered against the design principles and hence presents the basis upon which decisions to proceed or reject options has been made. The following six proposals for changes to the route structure in the ScTMA were considered (as presented in the Assess Briefing).
  - 1. Change to EGPF hold (LANAK) to accommodate proposed routes.
  - 2. EGPB/PF arrivals and departures from/to east (SAB/NATEB).
  - 3. Additional Class D CAS to the east of the EGPB CTA & Scottish TMA to facilitate new route(s) to the east of the EDIBO hold.
  - 4. Dual track structure on Y96
  - 5. Three track inbound route structure from the south serving EGPB/PF,
  - 6. Three track structure going southbound from EGPF
- 2.2 The design principles used to evaluate these options are as described in detail in the [Design Principles document](#) (approved during Stage 1 Gateway Assessment).

### 3. Proposal 1 – Move LANAK Hold

#### Description

- 3.1 Figure 1 below shows the proposed new position of the hold compared to the existing LANAK hold.
- 3.2 The proposed hold will be FL90–FL140, right hand turns. Arrival STARS will change to terminate at the new hold (but otherwise will replicate the extant STARS).

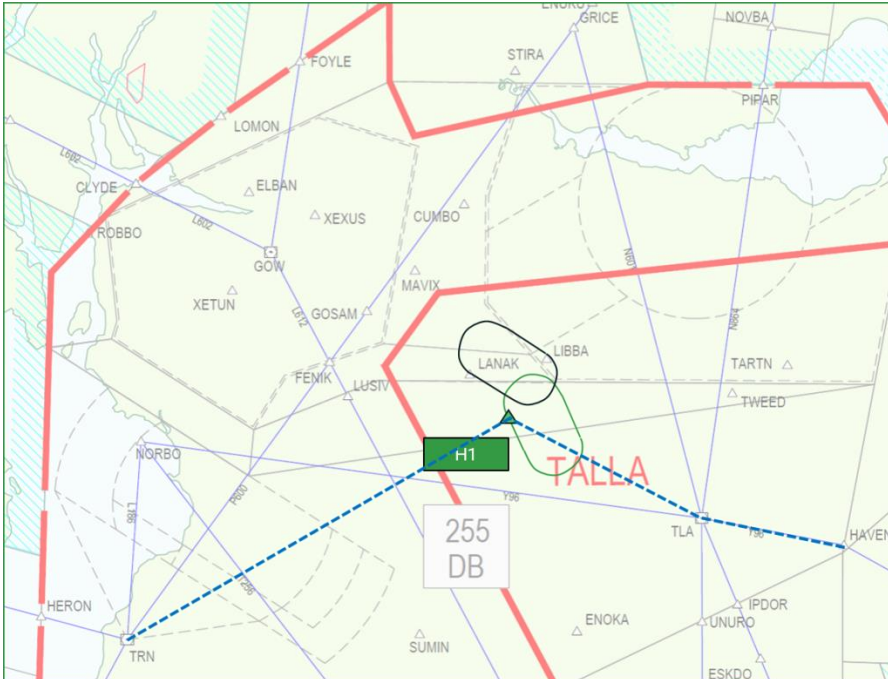


Figure 1 Proposal to move the LANAK hold

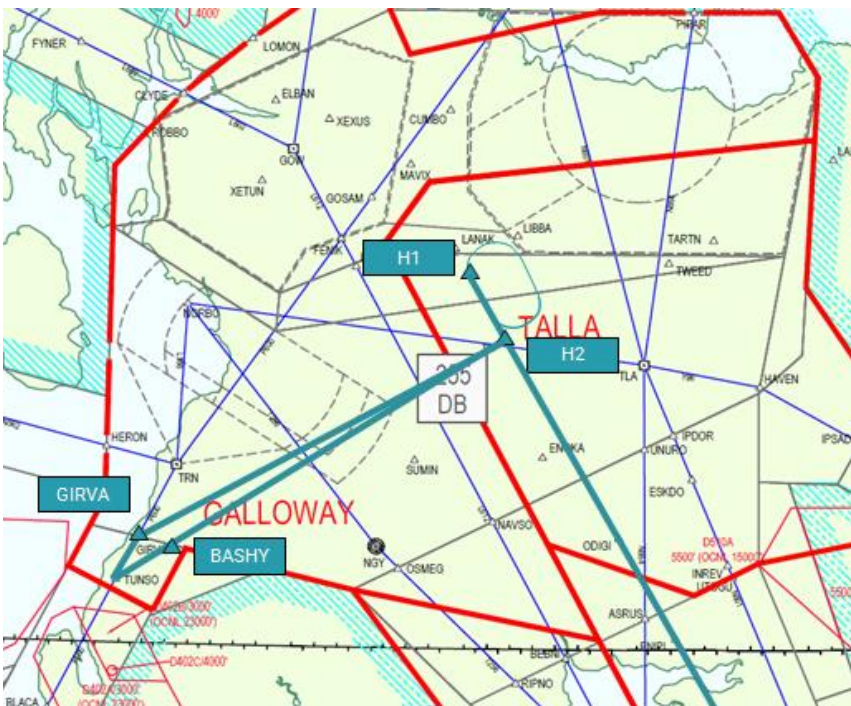


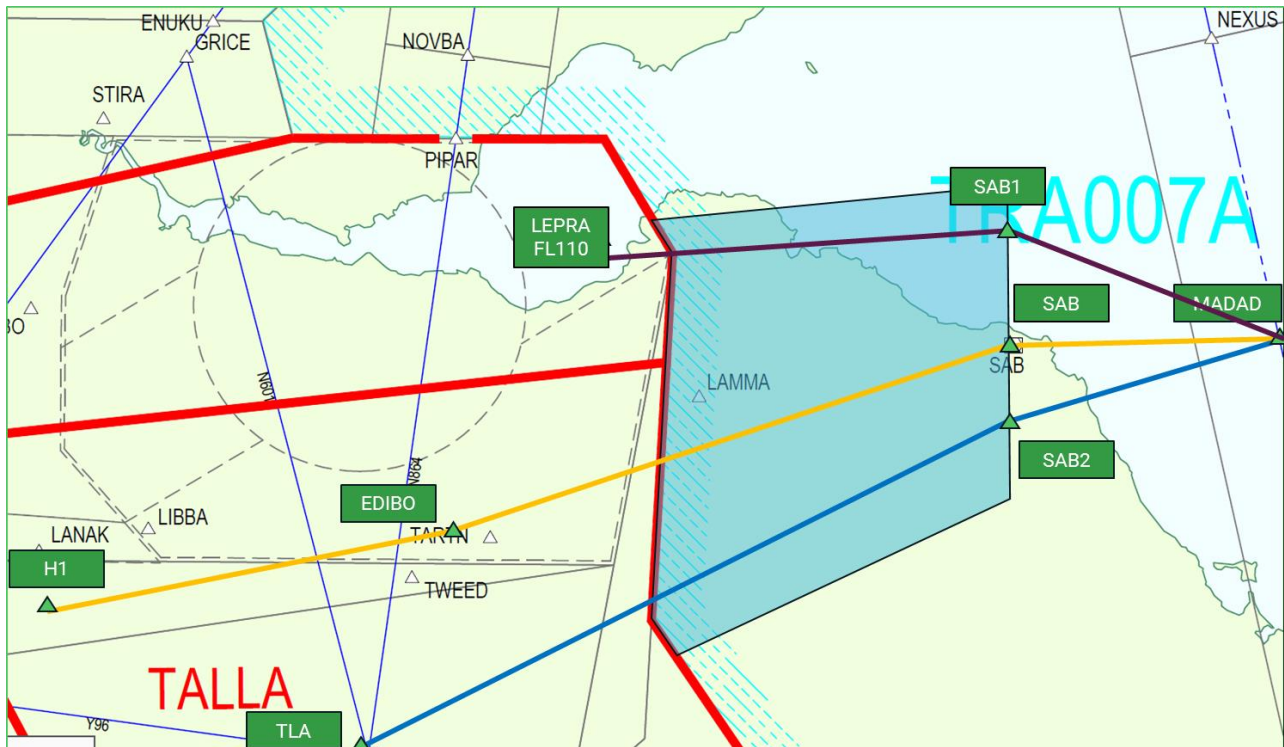
Figure 2 Proposal to move the LANAK hold with entry via H2

### Options Considered

1. **Do Nothing** (keep LANAK hold in the current position for flights inbound to EGPF).
2. **Move the LANAK hold to the position H1** dictated by the EGPF route design. This option was tested during real-time simulations. With traffic entering the hold at H1 it created some conflict between inbound and outbound traffic, hence the design was modified to option 3 below.
3. **Move the LANAK hold to the position H1 with entry at H2.** This option was tested during real-time simulations. (Note the proposed new position of the hold was agreed with EGPF, and was constrained by the EGPF and EGPH departure routes (as proposed in their separate ACPs). By routing the inbounds via H2 this removed the conflict between the between inbound and outbound traffic. This also ensures that aircraft enter the hold using a direct entry procedure which results in improved containment, and hence a smaller protected area.

## 4. Proposal 2 – EGPH/PF arrivals and departures from/to east (SAB/NATEB)

4.1 Figure 1 & Figure 2 below shows the proposed options for additional CAS to the east of the EGPH CTA and ScTMA.



### Options Considered

1. Do Nothing
2. Introduce new CAS "St Abbs CTA" as shown in Figure 3 below to facilitate to the introduction of three new ATS routes from LEPRA, EDIBO and TLA to MADAD. The CAS above FL110 would enable these three routes to be established to allow flights from Scotland to Northern Europe and beyond to flight plan shorter routes via St Abbs across the North Sea. .

## 5. Proposal 3 – LAMMA Triangle

- 5.1 Introduction of a triangle of new Class D CAS adjoining the east of the ScTMA as shown below to facilitate the introduction of a new ATS route from LEPRA to point E4 (east of HAVEN, north of IPSAD). This route would facilitate departures from EGPH to be separated from the EDIBO hold with no necessity for controller intervention.

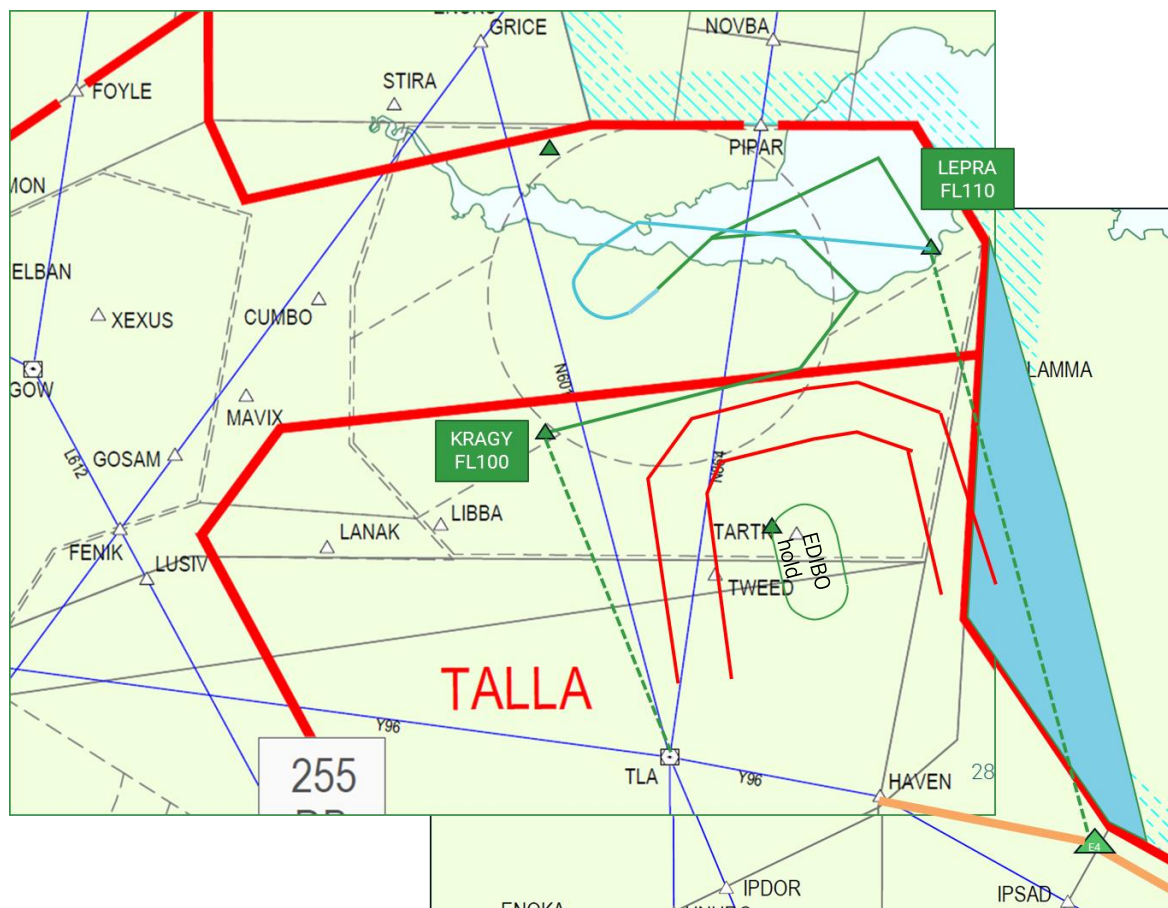


Figure 4 Proposed CAS – LAMMA triangle

### Options Considered

1. Do Nothing
2. Introduce "LAMMA Triangle" of new CAS as shown above.

**6. Proposal 4 – Dual track structure on Y96**

6.1 Figure 1 below shows the proposed dual route structure between HAVEN and NATEB. This would provide systemised routes for arrivals & departures to/from EGPH, EGPF and EGPK.

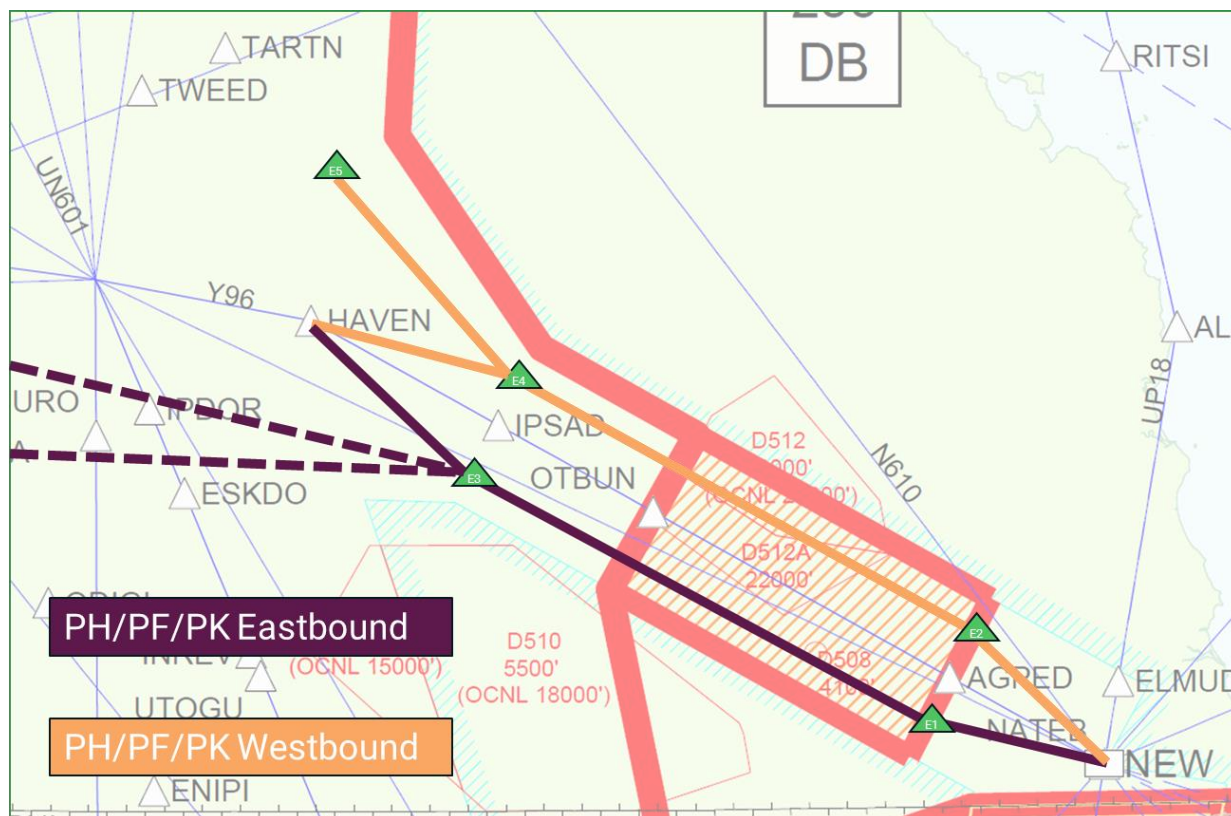


Figure 5 Proposed HAVEN-NATEB dual route structure on Y96

**Options Considered**

1. Do Nothing
2. Introduce dual route structure on Y96, with associated link routes as shown above.



**7. Proposal 5 – Three track inbound route structure from the south serving EGPH/PF**

7.1 Figure 1 below shows the proposed 3 track structure northbound to the holds for EGPH and EGPF.



Figure 6 Proposed three track inbound route structure from the south

**Options Considered**

1. Do nothing
2. Introduce three track inbound route structure from the south serving EGPH/PF as shown above.

## 8. Proposal 6 – Three track structure going southbound from EGPF

8.1 Figure 1 below shows the proposed three track structure going southbound from EGPF. This is designed to systemise traffic flows and provide segregated flows for jet & non-jet traffic.

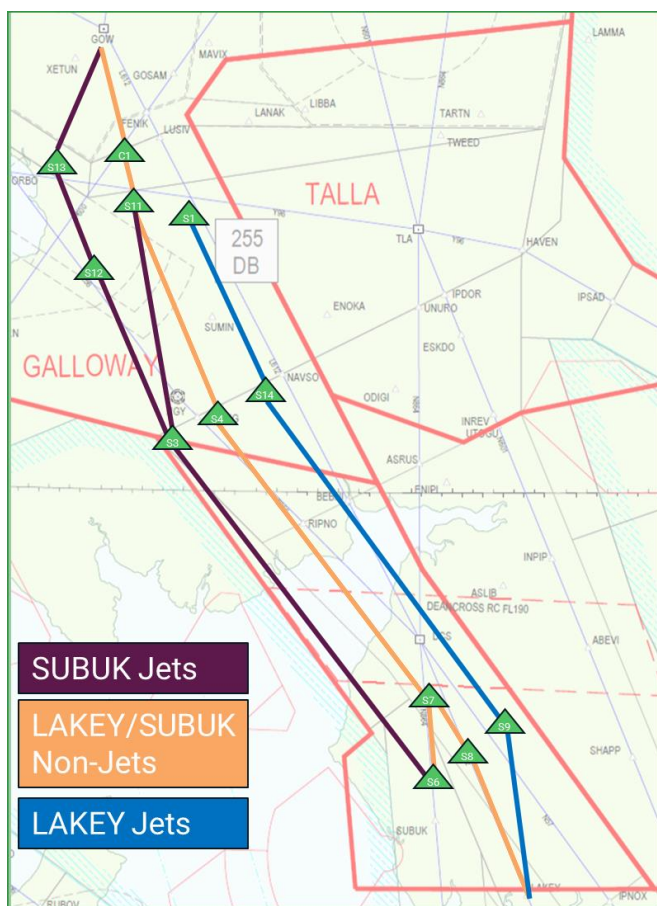


Figure 7 Proposed three track structure going southbound from EGPF

### Options Considered

1. Do nothing
2. Introduce three track structure going southbound from EGPF as shown above.

## 9. Proposal 7 – Additional ATS routes

9.1 In order to provide flexibility and network resilience for traffic using the SIDs and STARs as proposed by EGPH, EGPF and EGPK in their separate ACPs it may be necessary to introduce additional low level ATS routes.

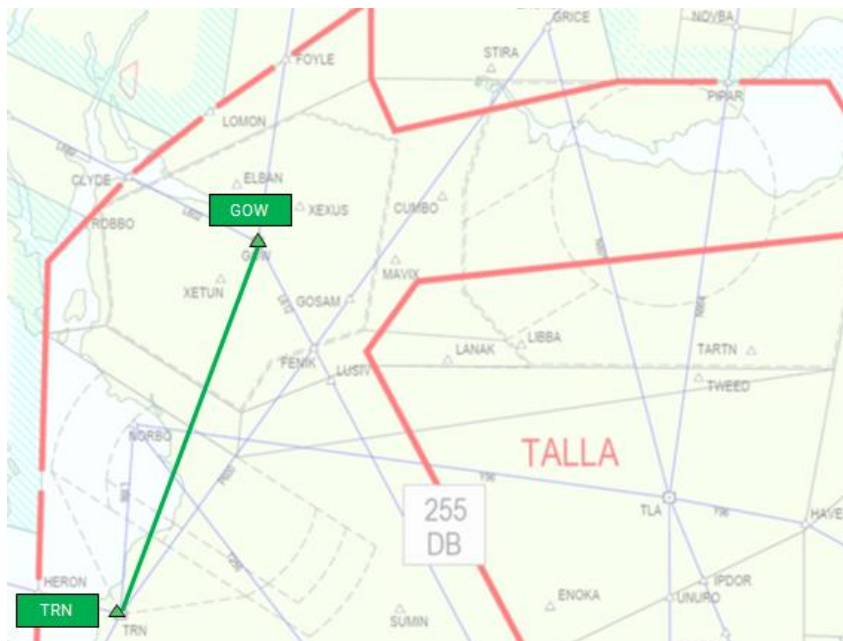


Figure 8 Proposed ATS route between GOW & TRN

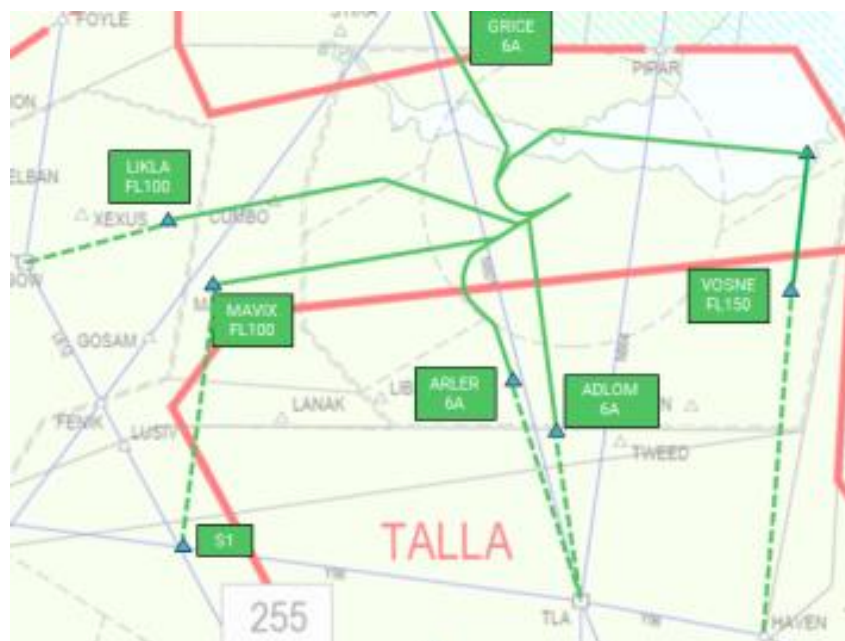


Figure 9 Proposed ATS route between MAVIX & S1

### Options Considered

1. Do nothing
2. Introduce ATS route between GOW-TRN (suggested levels FL245 – FL90, to be clarified)
3. Introduce ATS route between MAVIX-S1 (ICARD 5LNCfor S1 tbd)(suggested levels FL245 – FL90, to be clarified) S1 is on intersection of Y96 and L612.