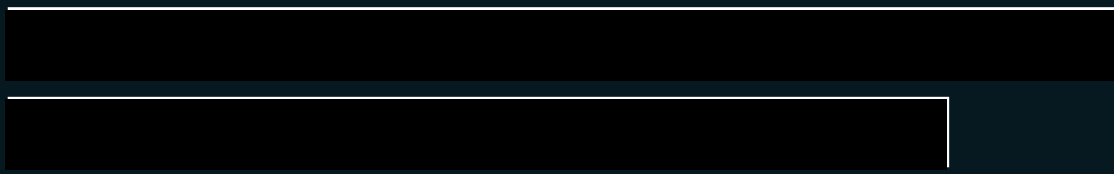


NATS ScTMA CAP1616 Stage 2

Stakeholder Engagement

8th April 2022



NATS

Attendance (TEAMS only meeting)

Date	Time	Location	Workshop Details	
06/04/2022		TEAMS	Reference No.	
			Topic/Title	Trax requested – SctMA ACP Vis sim 2 update

Organisation	Job Role	Attendance
NERL	• Airspace Implementation Manager	full
NERL	• Engagement Lead	full
GASGO	• GA Lead	full
Easyjet	• Sesar deployment manager	full
BHA	• CEO	full
UKFSC	• Representative	full

Organisation	Job Role	Attendance

Background



The overall aim of the project is to modernise the TMA in accordance with the AMS (See CAA Airspace Change Portal).

Previous ScTMA work had been developed through PLAS project (Prestwick Lower Airspace Systemisation) and supported ScTMA airport ACPs – Development options were simulated in Nov 2017.

ScTMA Design work has now resumed following COVID pause.

Some early concepts were developed based on previous design work and provided a basis for future options development and provided some initial analytical output.

Airports have also resumed their ACP activities and they are focusing on the changes below 7000ft.

Controller feedback has also been undertaken through questionnaires due to COVID restrictions.

The purpose of today's session is to describe the design options that are being considered and seek feedback during or after the session.

ACP Progress



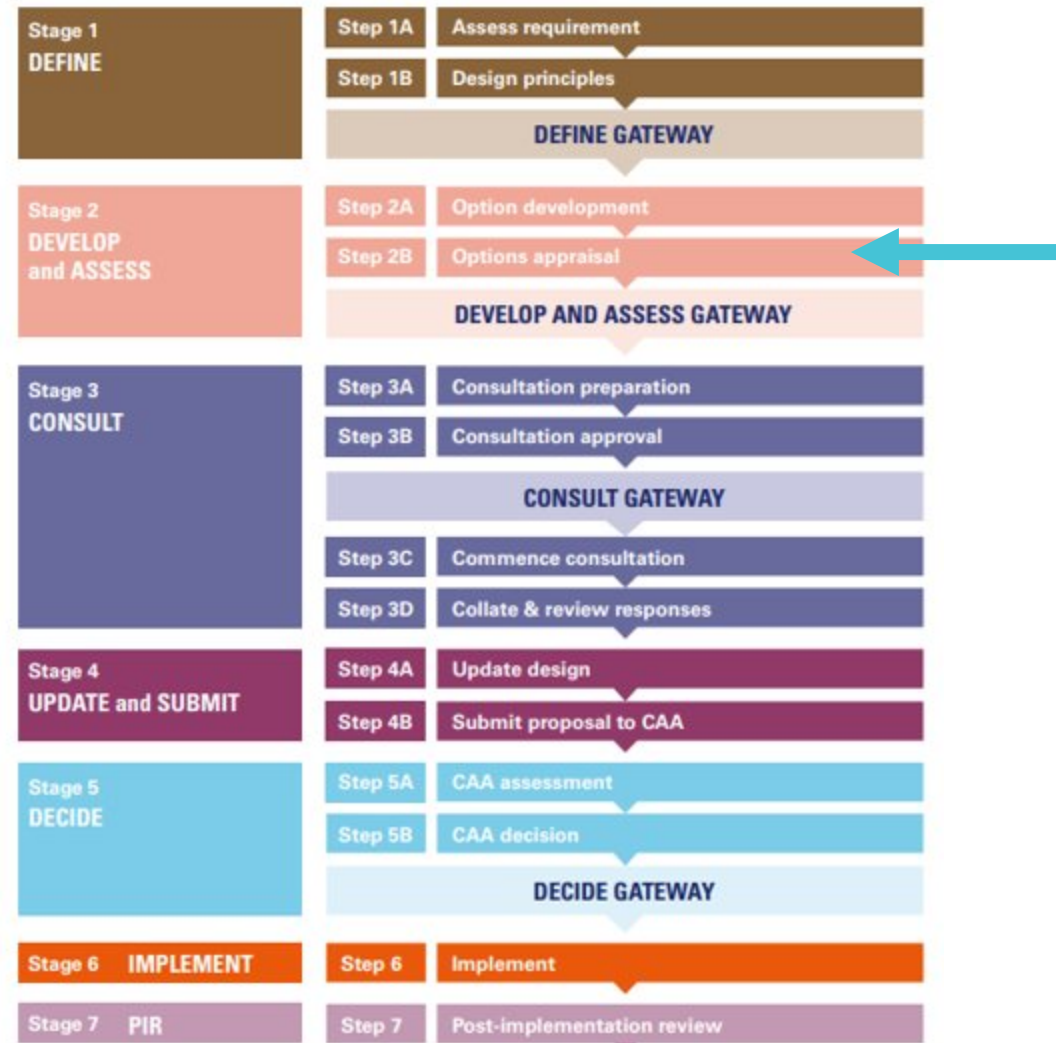
Our ACP is currently in Stage 2 of the CAP1616 Process – Options Development

Step 2A requires us to develop a comprehensive list of options . Step 2B requires us to assess these options. These should satisfy the Statement of Need and align with Design Principles (Stage 1)

We have been engaging with stakeholders airlines, airports, MOD and GA

Engagement has been undertaken with both Glasgow and Edinburgh through a series of collaborative workshops to produce a long list of options as required under CAP1616 (Stage 2)

Airline engagement thus far has been via airport FLOPSC meetings (EGPH/PF/PN) and through the Lead operator Carrier Panel (Dec 21)



Design Options

An option in the context of CAP1616 Stage 2A design longlisting means a structure that supports arrivals, departures, or both, that may be viable.

The following options have been developed based on feedback from recent workshops and controller questionnaires

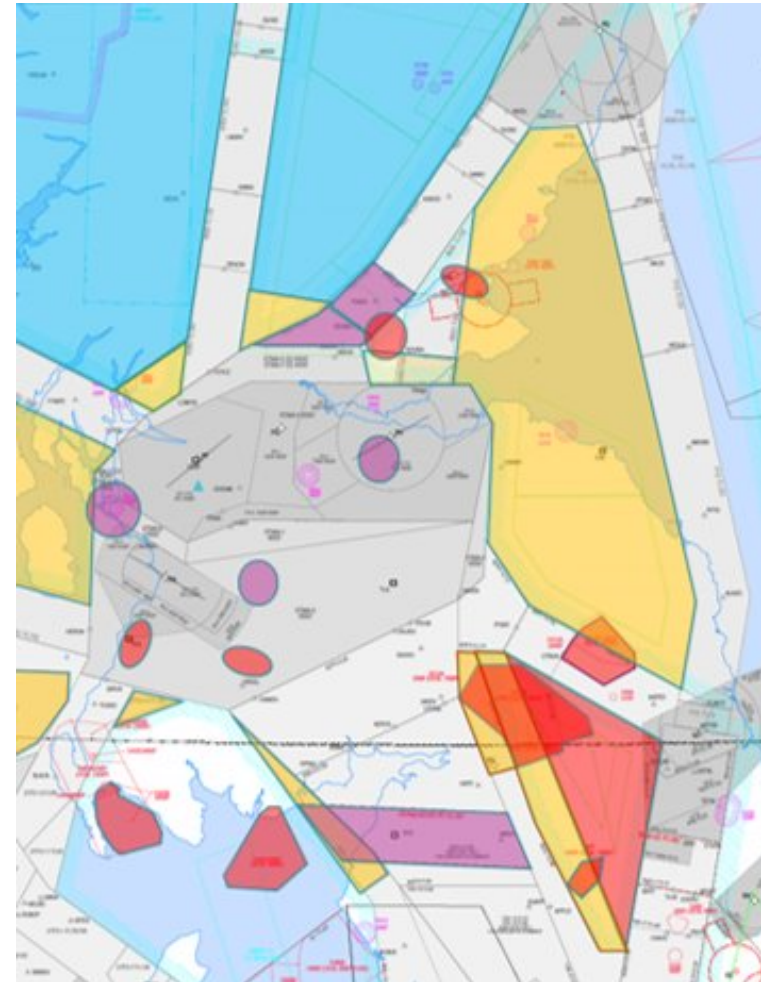
The workshops also considered existing constraints , e.g. danger areas , CAS , TRAs and existing holds e.g. EGPK holds

RED - segments of airspace where changes may be exceptionally challenging to make.

AMBER - segments of airspace where changes may be challenging to make.

PURPLE - segments of airspace that currently have unusual activity that needs to be taken into account through the design process.

BLUE - little benefit identified during the workshop in changing this segment, therefore these segments have not been assessed at this stage



New CAS considerations

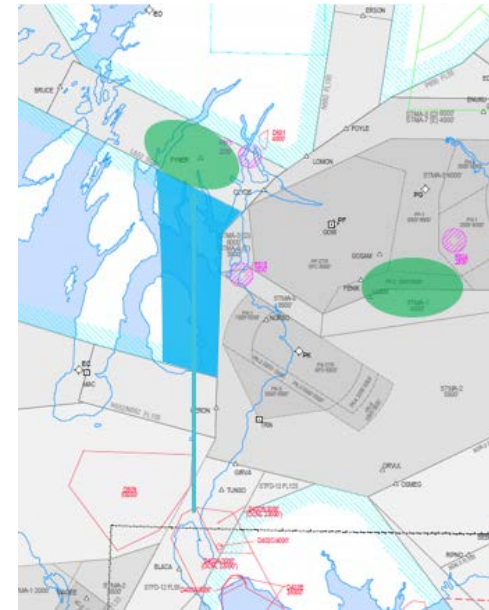
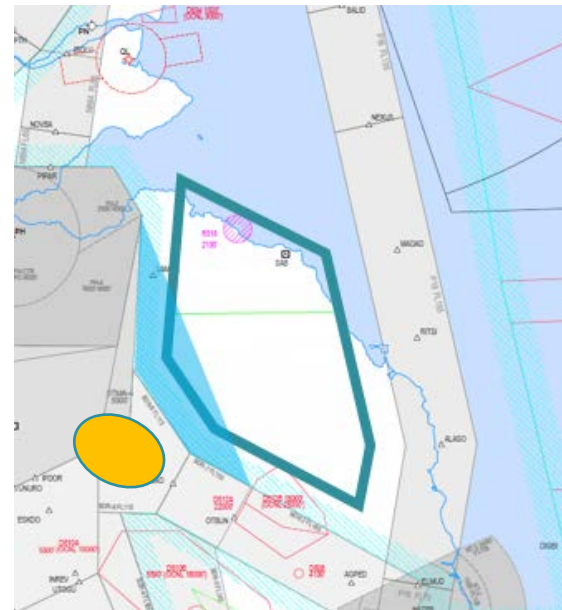
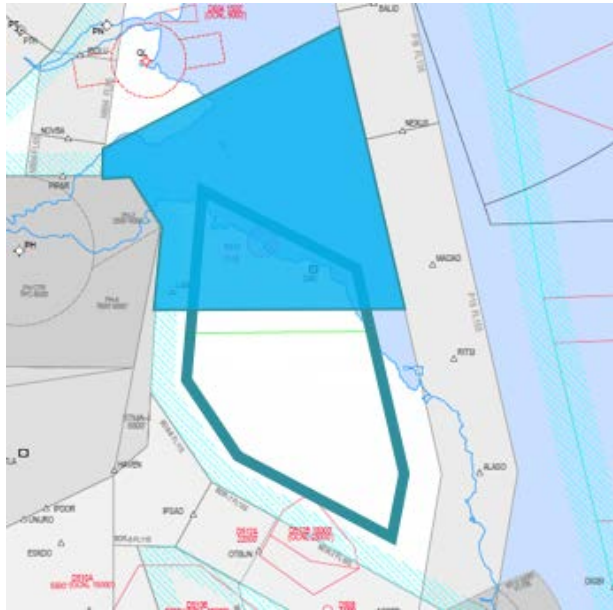


Firth of Forth

Y96 Fillet

TUNSO-FYNER DCT

Y96/N601 Bases lowered



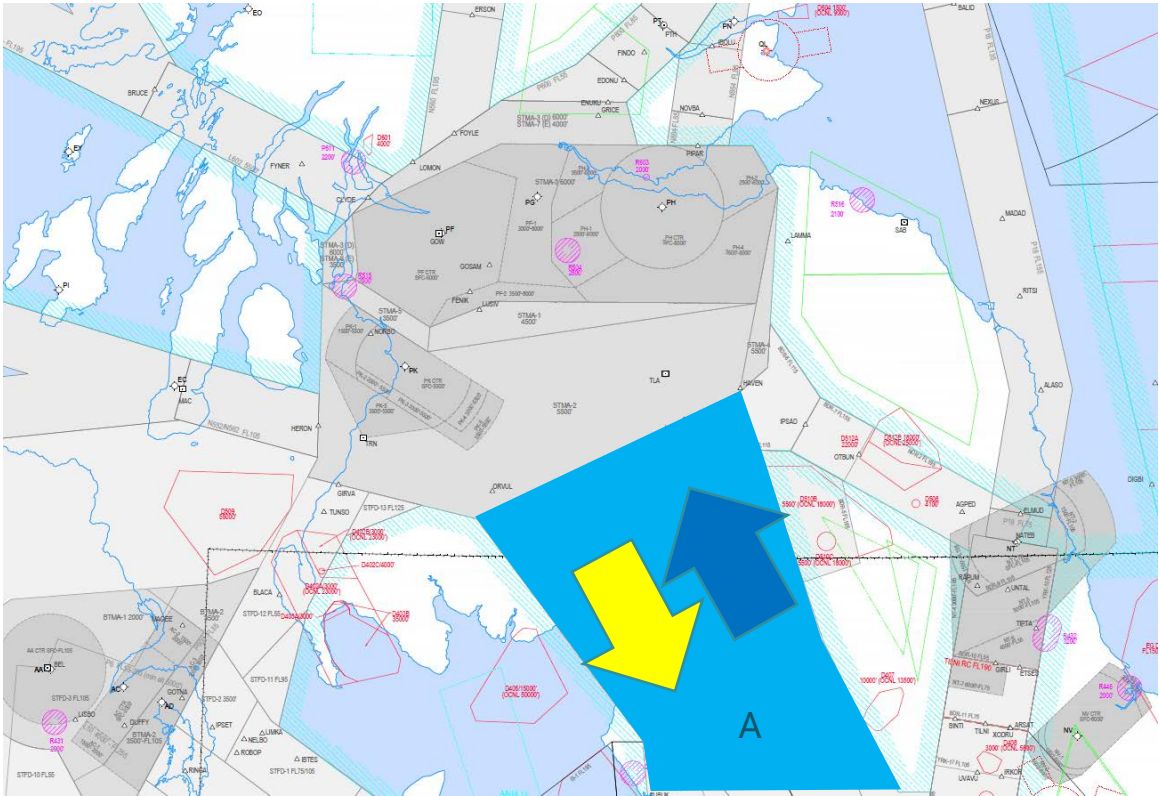
- Significant potential benefits in
 1. Efficiency measured by NATS 3Di score
 2. Track miles
 3. CO²
 4. Fuel savings
 Potentially for PH/PF and PK traffic.

- Potential benefits in
 1. Efficiency measured by NATS 3Di score
 2. Track miles
 3. CO²
 4. Fuel savings
 PH traffic. Reduce complexity in and around the IPSAD/HAVEN area (amber)

- Potential benefits in
 1. Efficiency measured by NATS 3Di score
 2. CO²
 3. Fuel savings
 Potentially for PF. Traffic could remain higher and reduce complexity in and around the LANAK hold

- Potential benefits in
 1. CO²
 2. Fuel savings
 As the lowered bases would offer improved descent profiles

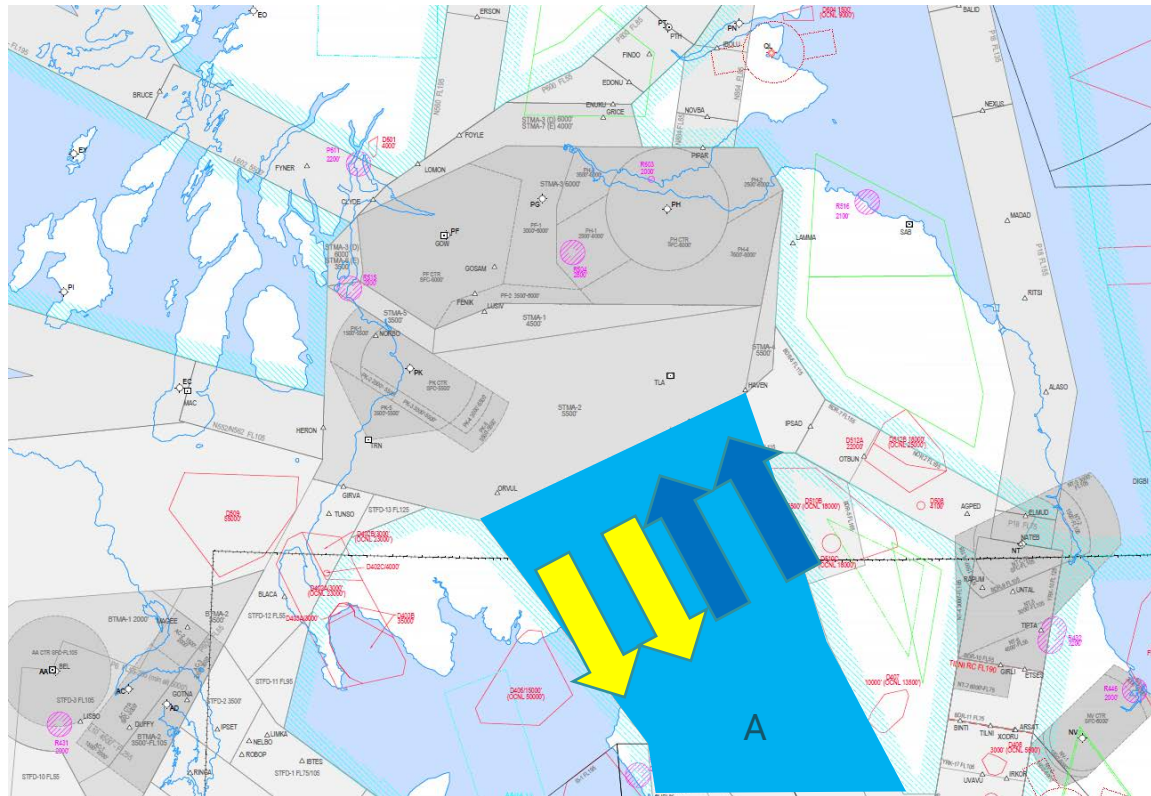
ATS Routes – Spine Element



Within Area A we will consider:

- Current N/S flows (do nothing)

ATS Routes – Spine Element

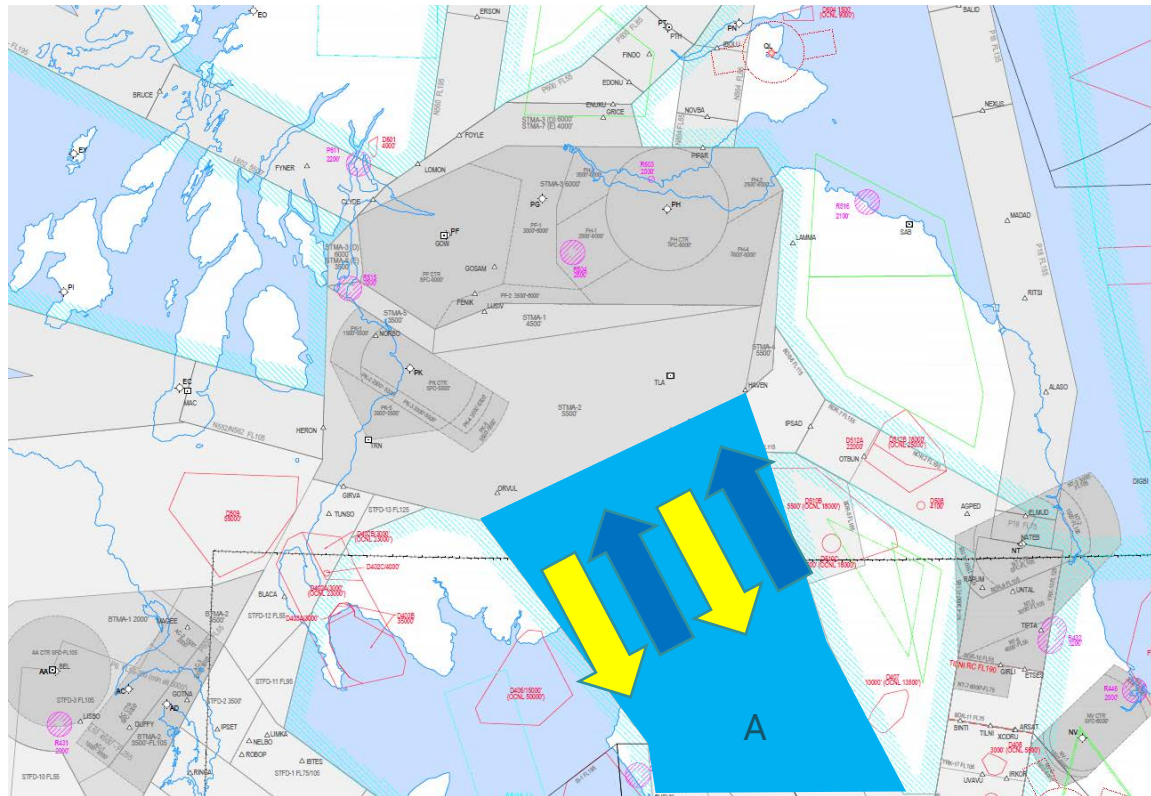


Within Area A we will consider:

- Systemised N/S structure
- Based upon
- PF/PH deps & PF /PH arr
- PK traffic linked to PF
- Maybe more than 4 tracks
- Overflights to be integrated

Systemisation – introduction of closely spaced PBN ATS routes/SIDs/STARs based on CAP 1385 principles

ATS Routes – Spine Element



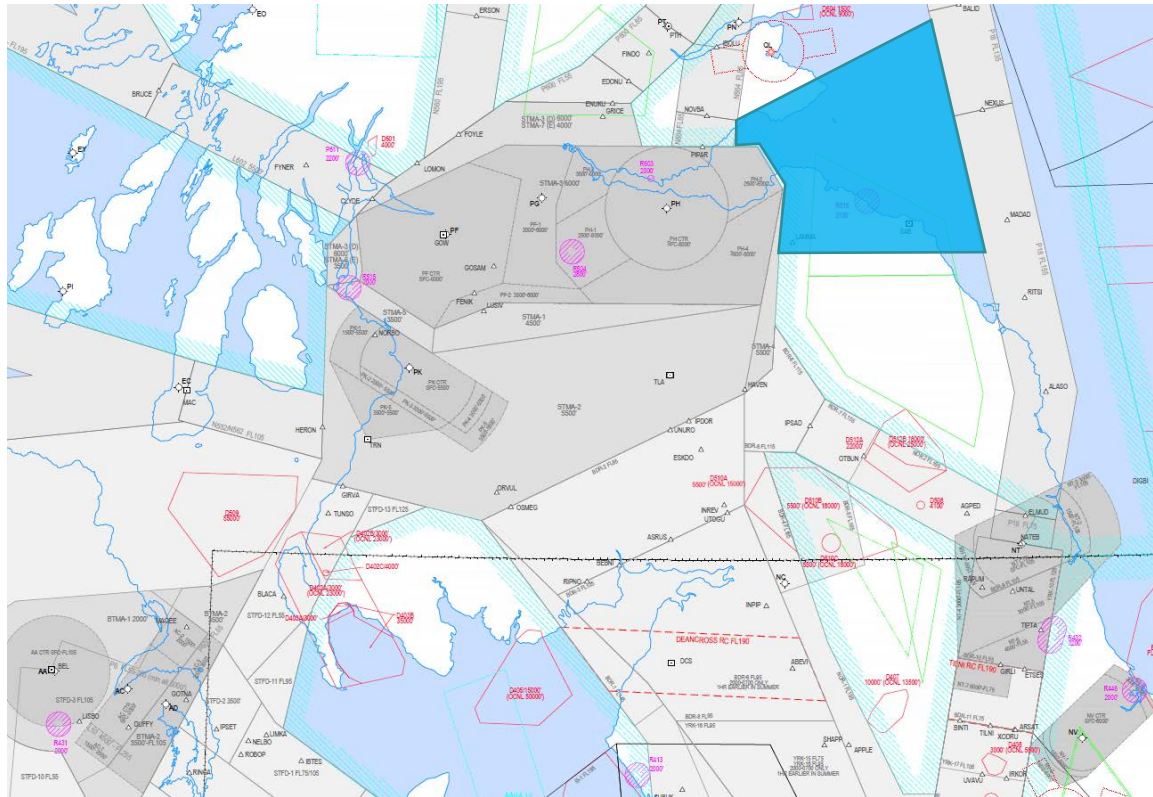
Within Area A we will consider:

- Systemised airfield structure
- Based upon:
 - PF Dep/PF Arr/PH Deps/PH Arr
 - PK traffic integrated into PF stream
- May be more than 4 tracks
- Overflights to be integrated

CAS Options – Additional detail



Firth of Forth - New CAS Option



The concepts defined as 'Firth of Forth' are wholly contained within TRA007.

These have the potential of providing significant benefits in fuel, CO2, track mileage and 3Di.

Moving traffic over the sea reduces noise and overflight of populated areas

Who would the proposal affect?

Gliders

Military

GA

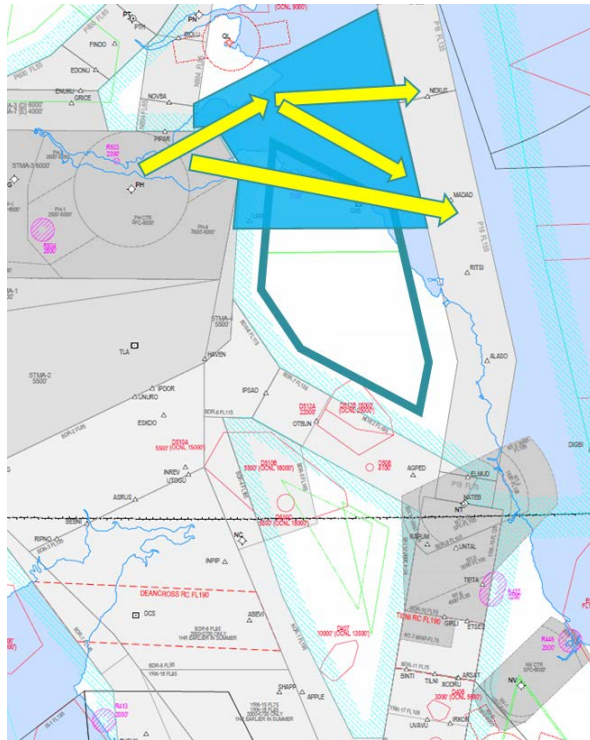
Airlines (All airlines or only those via certain destinations e.g. SCTMA airfields)

Airports

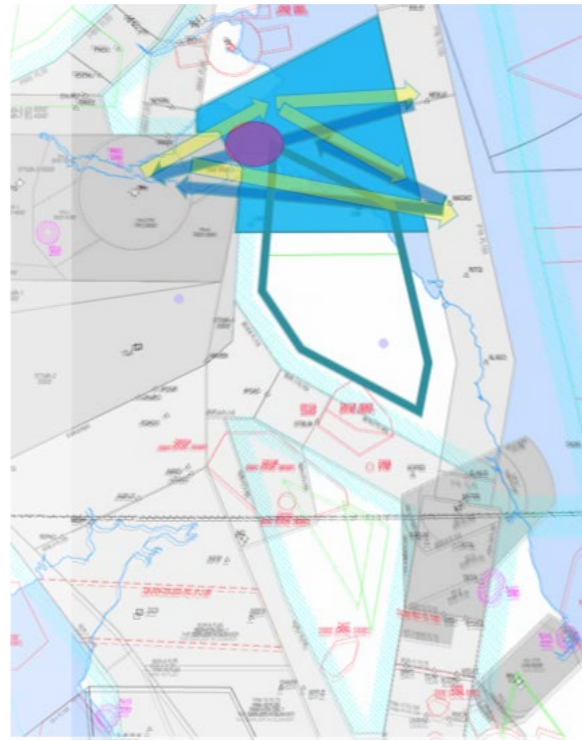
Firth of Forth Options

We will consider all options including time based usage

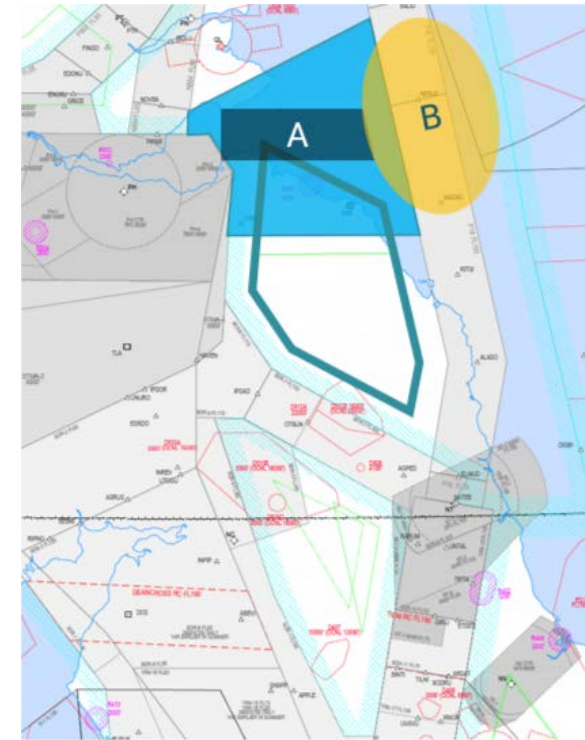
Departures only



Arrivals and departures

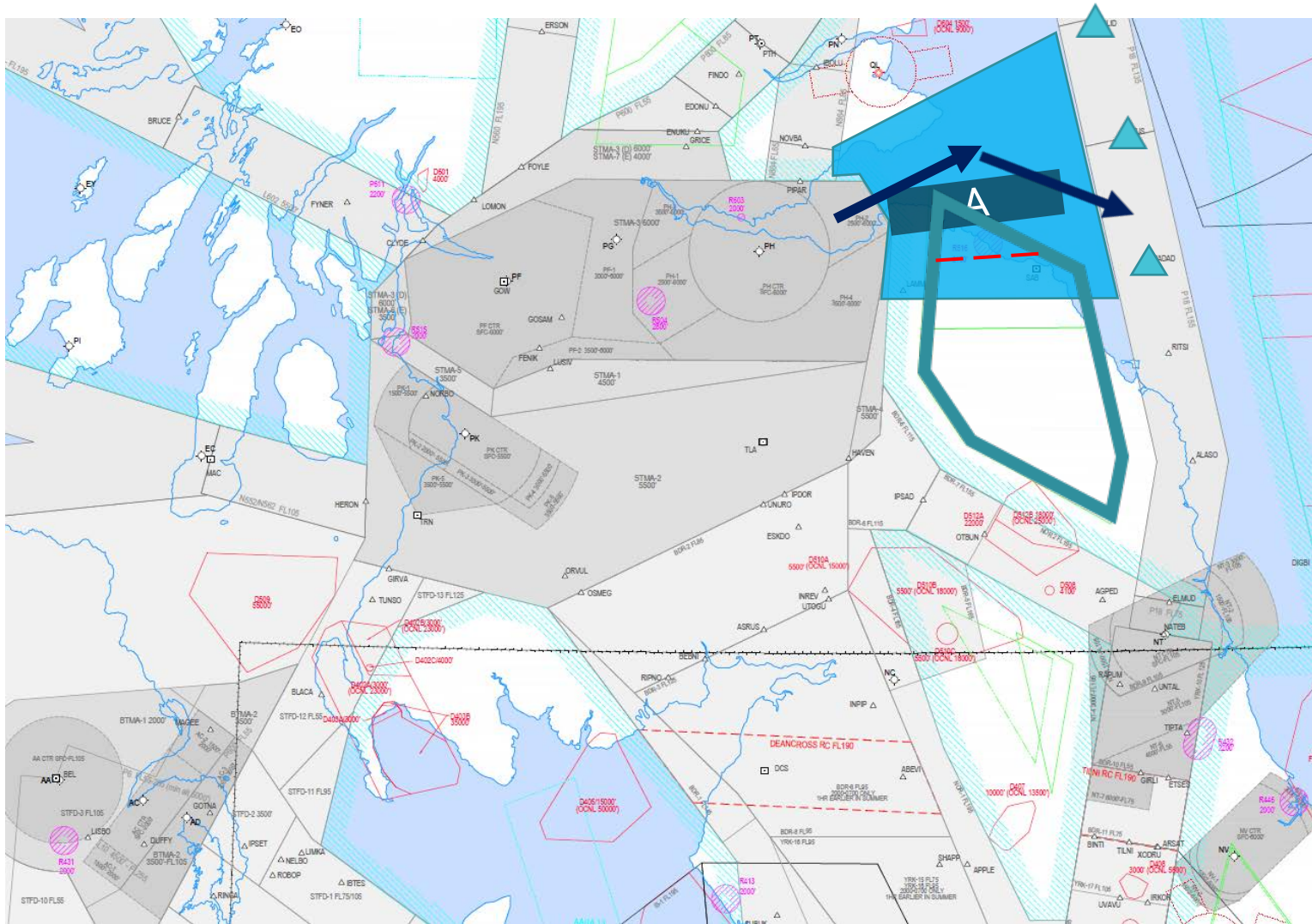


Connection to existing CAS /FRA



A - New ATS route
B - CAS Connectivity

Firth of Forth – Northumbrian Gliding Area Considerations



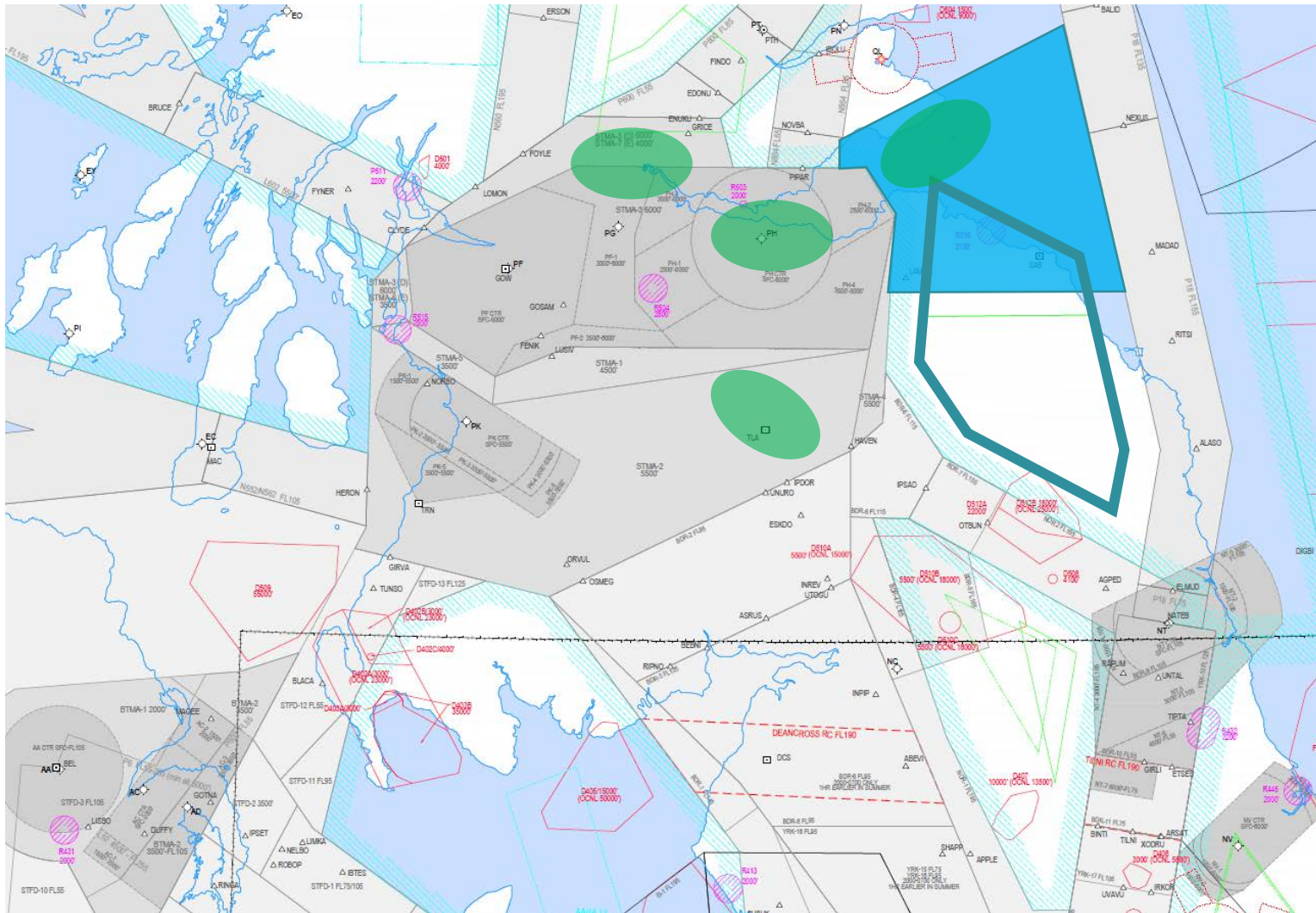
Gliders – currently either the north OR the south can be activated. They cannot both be activated simultaneously.

Depending on where within the blue area aircraft route has an impact on the northern segment of the gliding area .

Direct to MADAD/NEXUS.
Requires a portion of the gliding area. If the northerly portion was reduced (red line) , the whole area becomes available?

An ATS Structure remaining 5 nm clear of gliding area has no effect i.e to a new FRA entry/exit point?

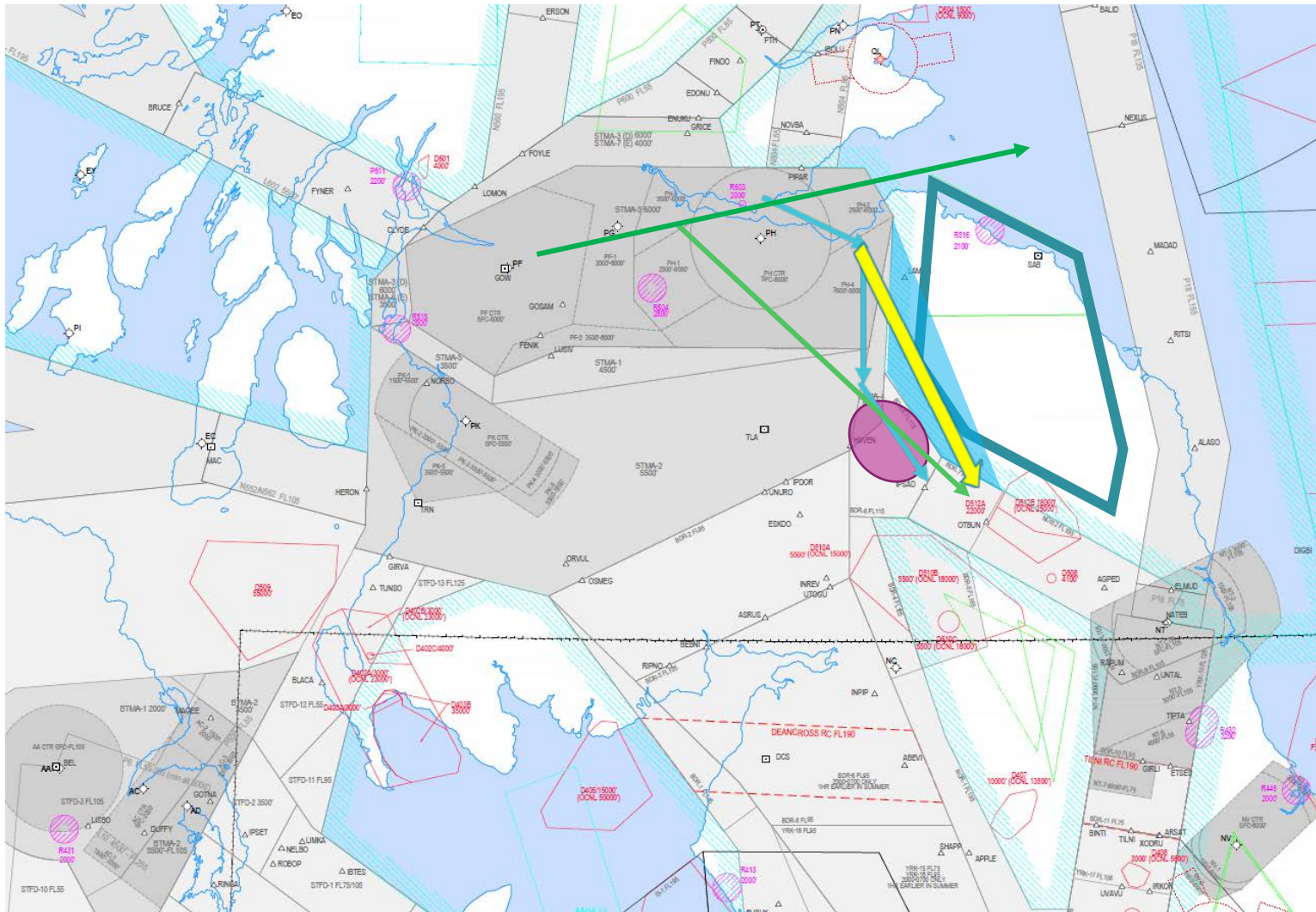
Firth of Forth - Holding Impact



Options include:

- Over the sea, within the newly created airspace structure
- New hold in the PH overhead
- STIRA. This is no longer a shared hold and could be used by PH alone
- Use the existing TARTN hold
- Option of using FYNER/FOYLE Hold for EGPF

New CAS Options – Y96 Fillet



Why?

This option has been discussed at airport workshops and we have received ATCO feedback expressing a desire for the reintroduction of the TUTUR SID (previous SID trial from EGPH) and more CAS to reduce the complexities of the airspace between HAVEN- IPSAD.

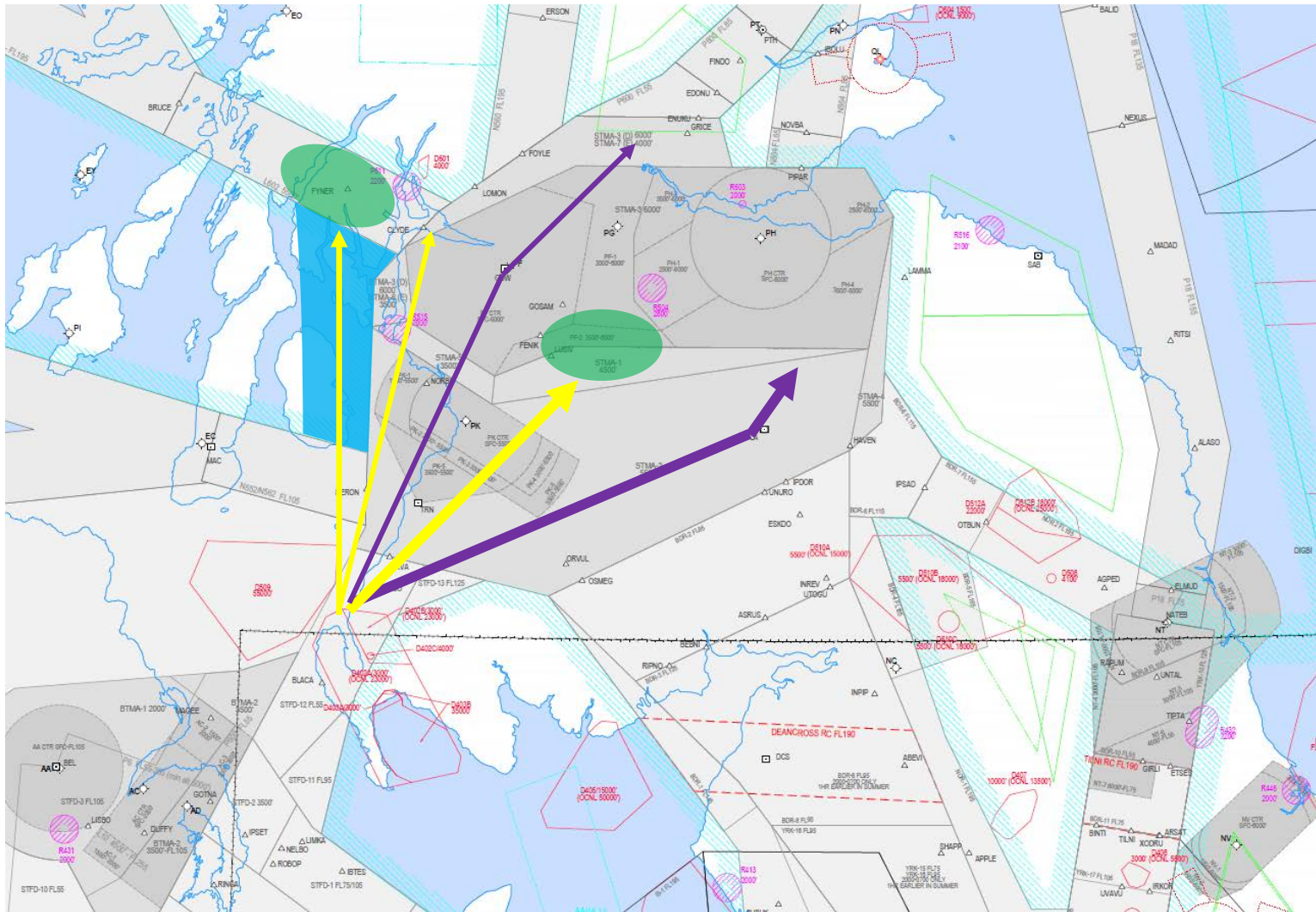
Blue area – describes a fillet of airspace that would help with the funnel effect and complexity around the IPSAD area for EGPH traffic.

Green arrow indicates possible route for EGPF traffic via FoF and Y96

Military – Any element will route through current TRA

Gliders- an amendment to the existing glider area may be required.

Airways – Inbounds to the North

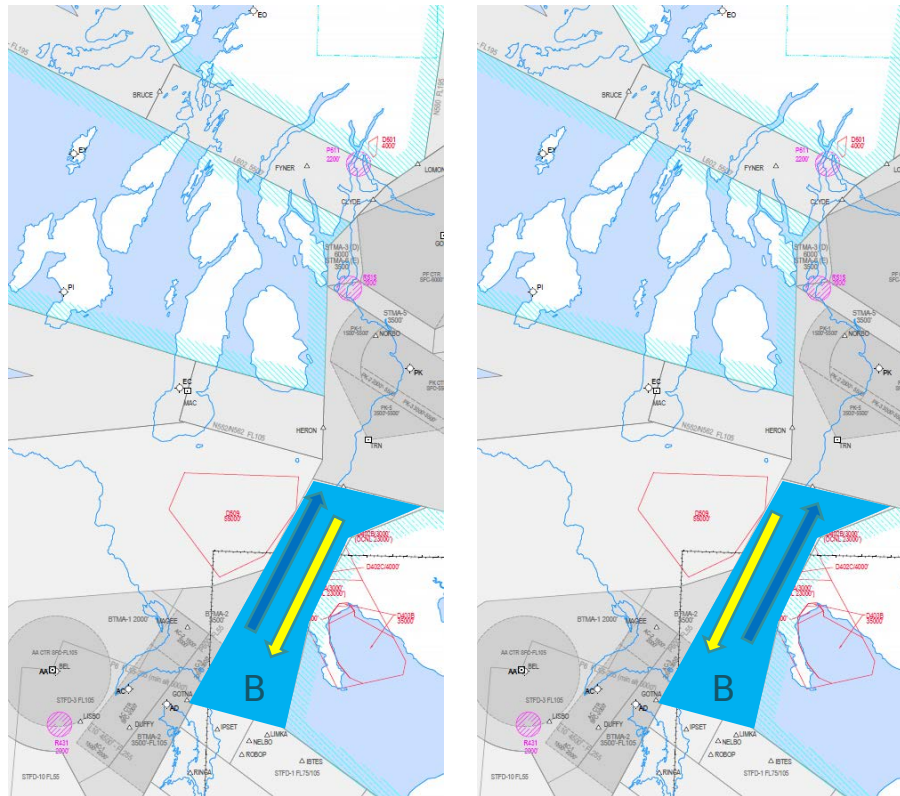


Traffic inbound to EGPF from Antrim currently turns right at GIRVA towards LANAK to hold.

The blue fillet would be extra CAS required to allow PF inbounds from ANTRIM to route via FYNER hold. Alternate route option to remain within CAS to a new CLYDE hold.

Edinburgh traffic currently route via TRN – TLA-TARTN option is to remain higher than existing standing agreement (FL170 TUNSO) and route via GOW -STIRA

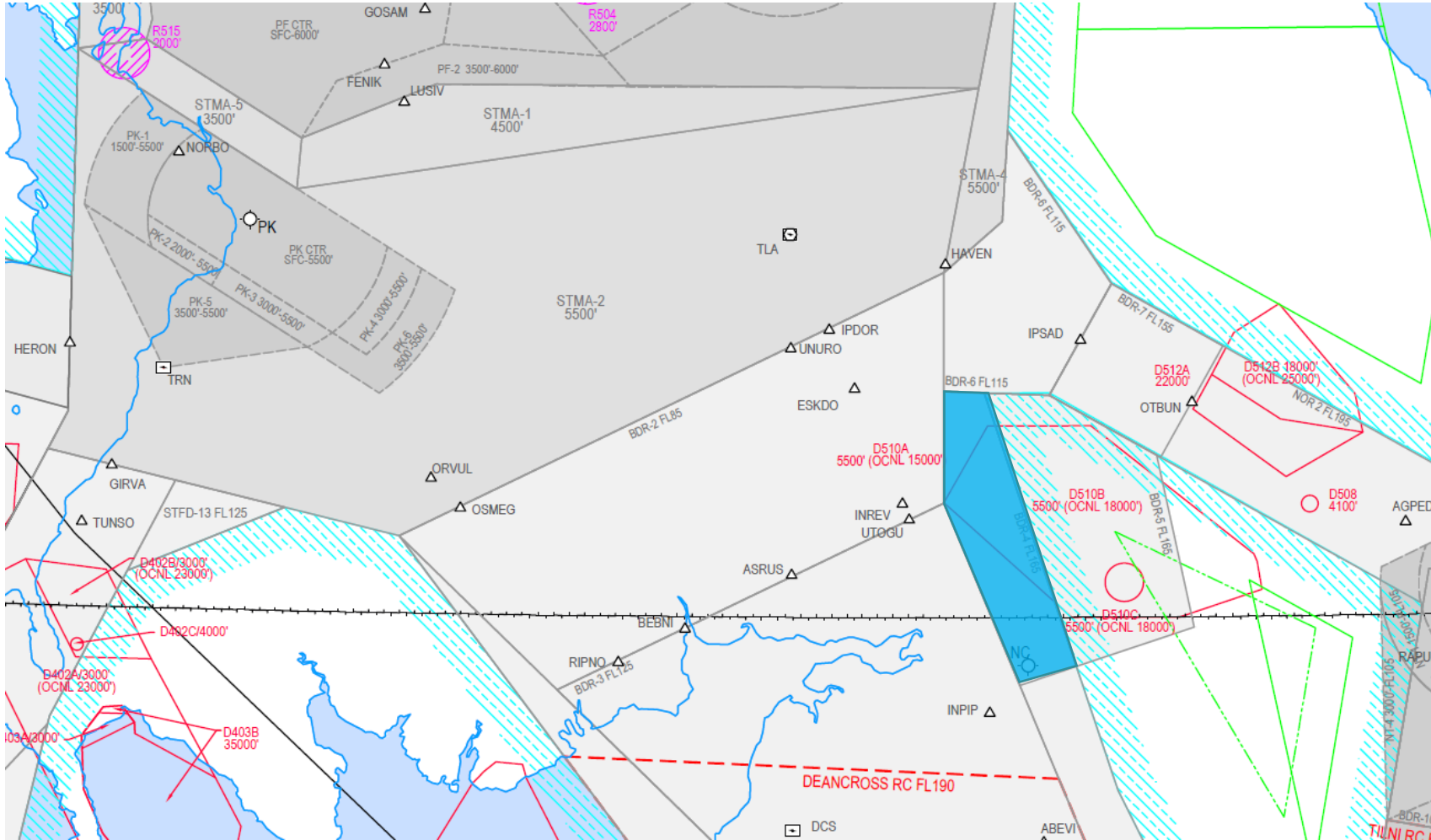
ATS Routes – P600 (BLACA –TRN)



Within Area B we will consider:

- Systemised airway structure
- Additional tracks may require additional CAS

Lowering airway bases – N601

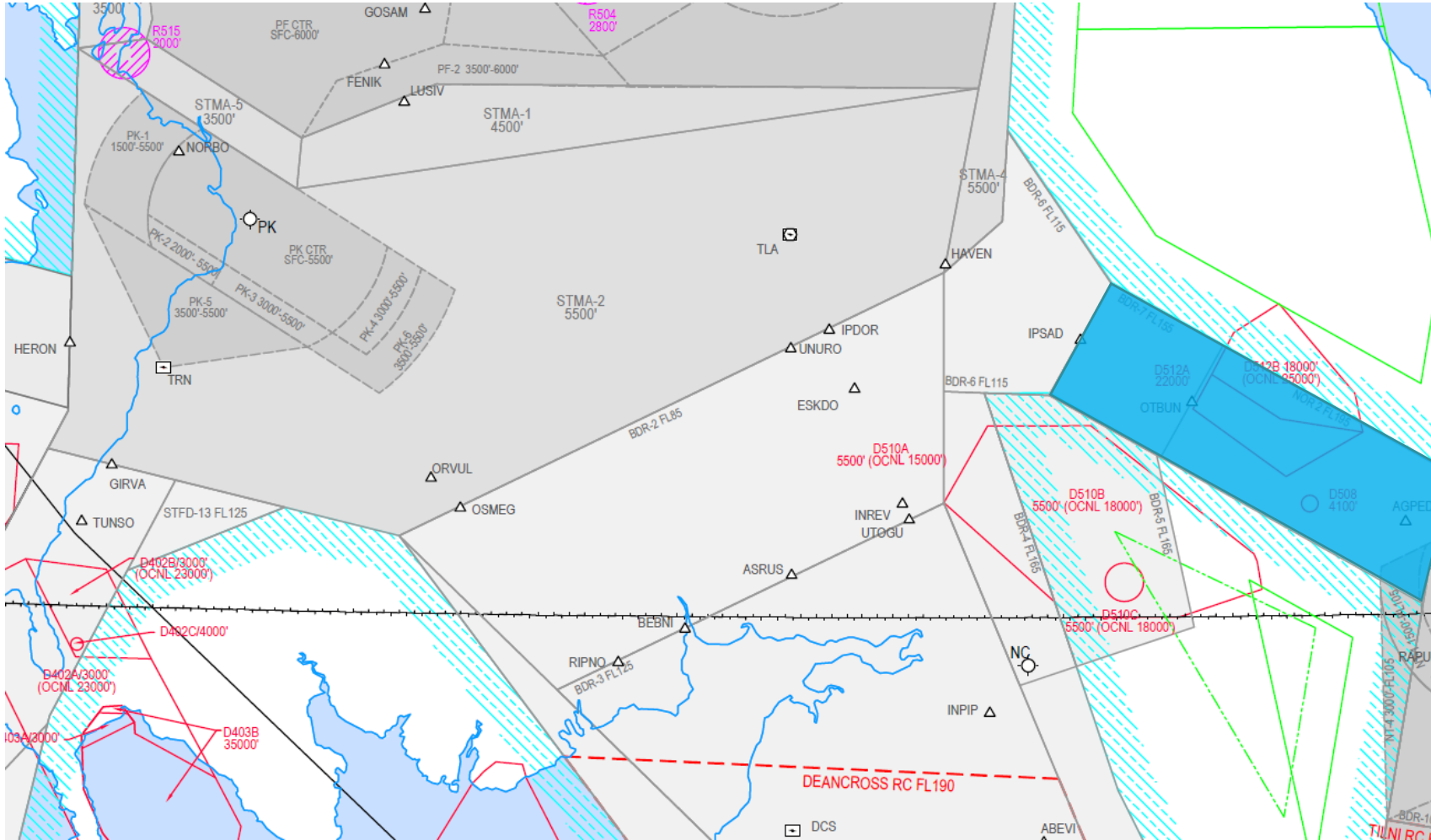


N601 east of TLA currently FL165 – Controller feedback via the questionnaire suggested lowered bases would offer a continuous benefit when dealing with inbound traffic.

Such an idea would impact Spadeadam and MoD consultation would be essential.

Lowered bases would improve descent profiles and give flexibility to the sector controllers

Lowering airway bases – Y96



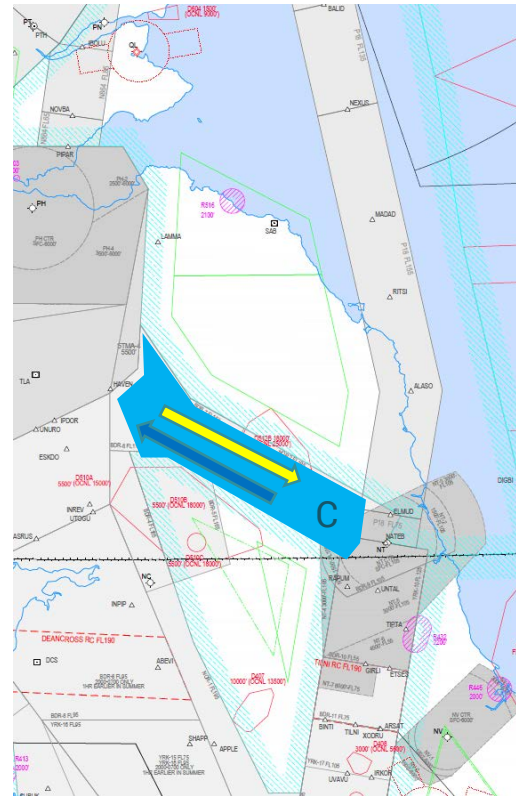
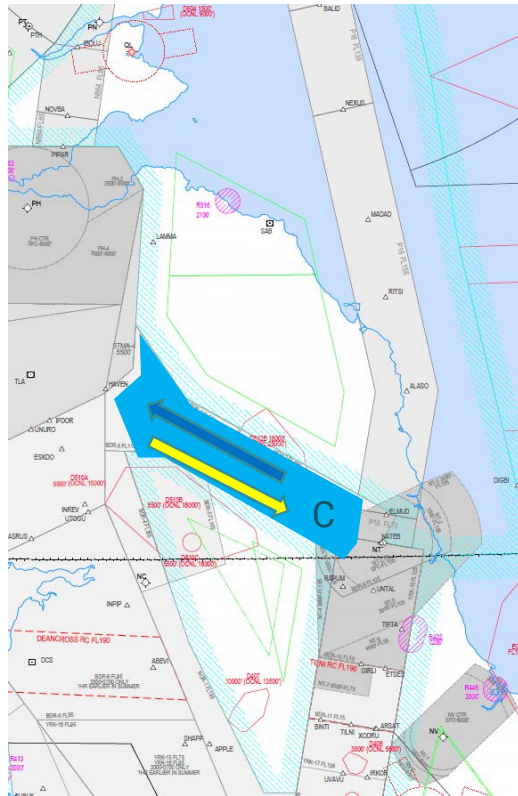
The base to the east of OTBUN is FL195 and sometimes increased with the activation of D512/B meaning PH inbounders have to be left high.

Feedback from the questionnaire sent to TMA controllers suggested lowering bases by 1000ft/2000ft would enable CDA

This would offer a more optimal descent compared with existing bases level restrictions

Lowered bases would improve descent profiles and give flexibility to the sector controllers

ATS Routes – Y96 (NATEB – TLA)



Within Area C we will consider:

- Systemised airway structure
- Lowering base levels
- Additional tracks may require new CAS

Next Steps & Feedback



The project will continue to engage with airports, airlines, MOD and GA.

A range of concepts have been taken to visualisation simulations during January/ February and March to gain ATCO/airport feedback and inform design options appraisal.

Detailed options will be developed for real time simulations planned for September 22

These concepts will also take cognisance of next stage of FRA

As part of the design iterations the project will also review areas which could be released to Class G

Planned implementation date Q2 2025

Questions

If you would like to comment or provide feedback on today's presentation / options , we would welcome this by 29th April 2022 to :-



Questions?

