# Operational Service Enhancement Project:- P18 Extension of Times of Availability NATEB – ADN (ACP - 2021- 020)

## P18 - Aberdeen ACC Briefing

3rd September 2021

[redacted] - Airspace Implementation Manager

NATS

# Agenda

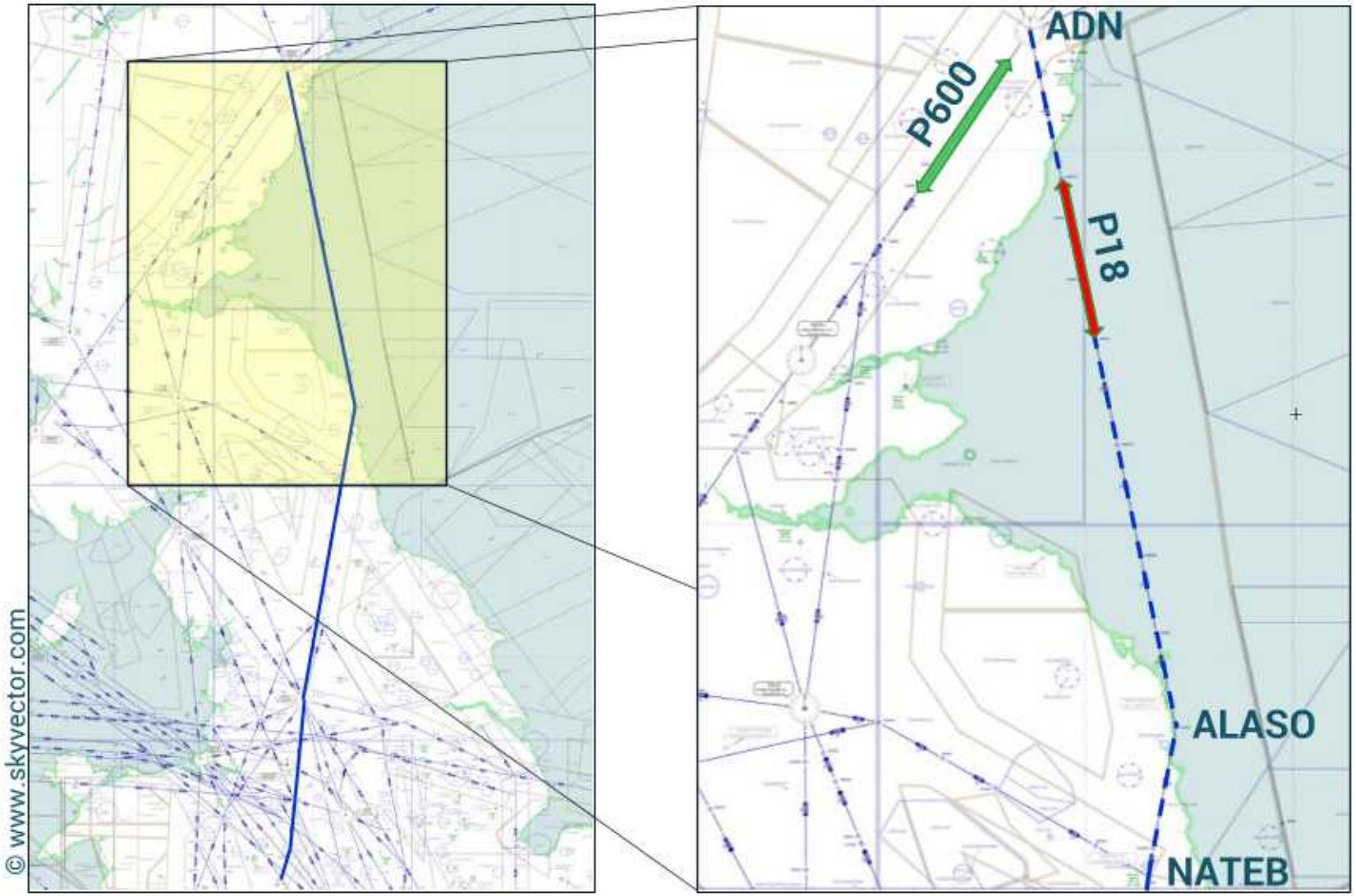
- Proposal Background
- Affected Airspace
- Current Usage
  - Aberdeen Airspace
- Design Principles
- Other Airspace Considerations
- Design Options considered
- Proposed CAP1616 Timescales
- Questions

# Proposal Background

The Operational Service Enhancement Project (OSEP) will deliver small scale changes across NERL airspace between now and 2025. The changes will deliver benefits through enabled fuel savings to customers, reduced routing inefficiency, safety improvements and alleviating capacity hotspots.
Note :This project is independent of the FASI based programme.

**The Change**
Aircraft arriving/departing Aberdeen to the south currently can use ATS routes P600 (From/ to the West) or P18 (From/ to the South). P18 offers a more direct route between Newcastle and Aberdeen but is not available all the time. It is a **Conditional Route**.
As part of the OSEP project we are looking to extend the availability of this route so that it can be better utilised.

# Affected Airspace




**This ACP is only looking to change the availability of P18 and not the airspace surrounding Aberdeen Airport. However, we recognize this change could affect the distribution of flights within the vicinity of Aberdeen airport.**

***P18 NATEB – ADN***

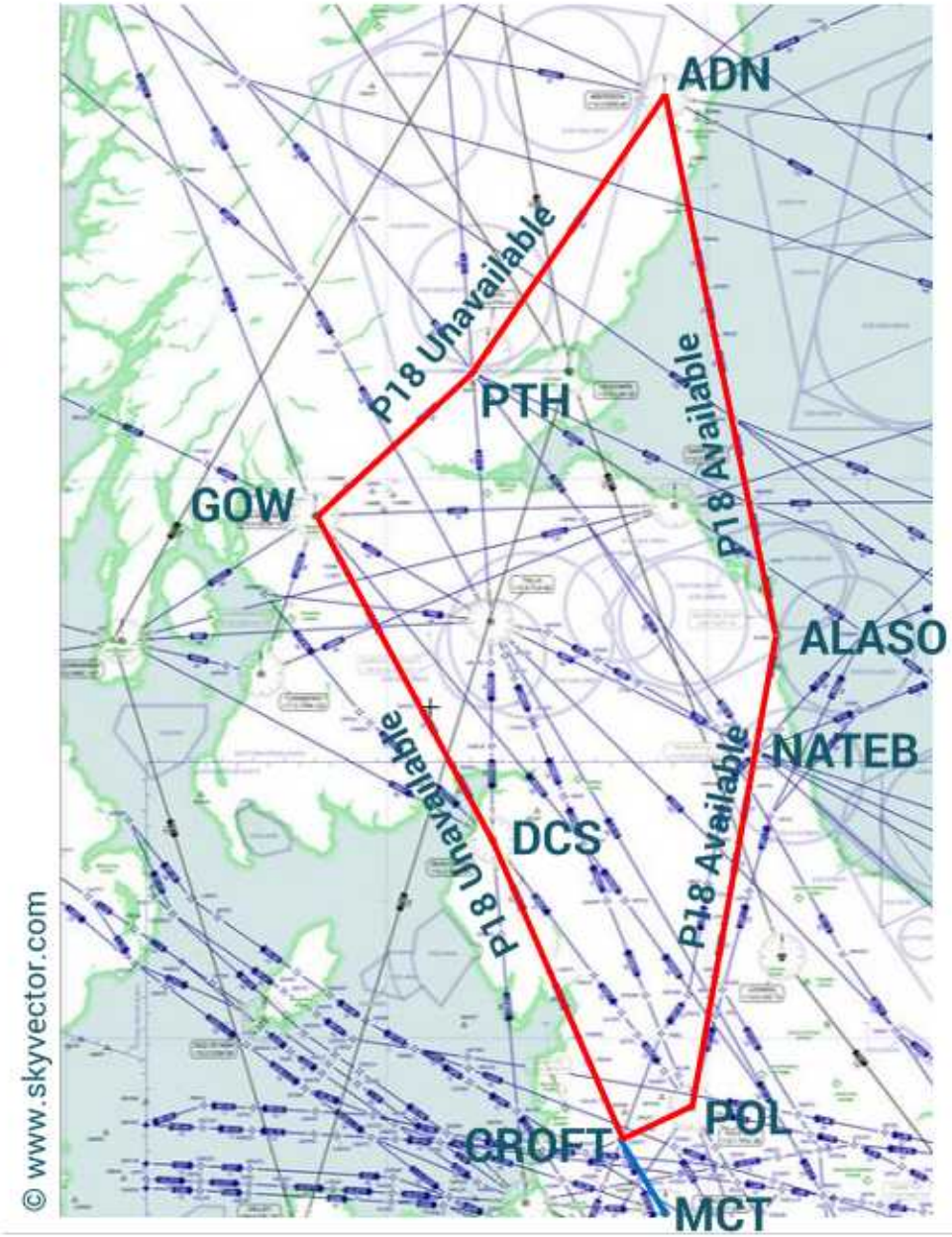
*Not currently available H24*

- *Current availability:*
- *Winter-*
  - *Weekends and weekday early mornings*
- *Summer*
  - *Weekends and weekdays overnight*
- *Increased H24 availability over the Christmas/ New Year period*

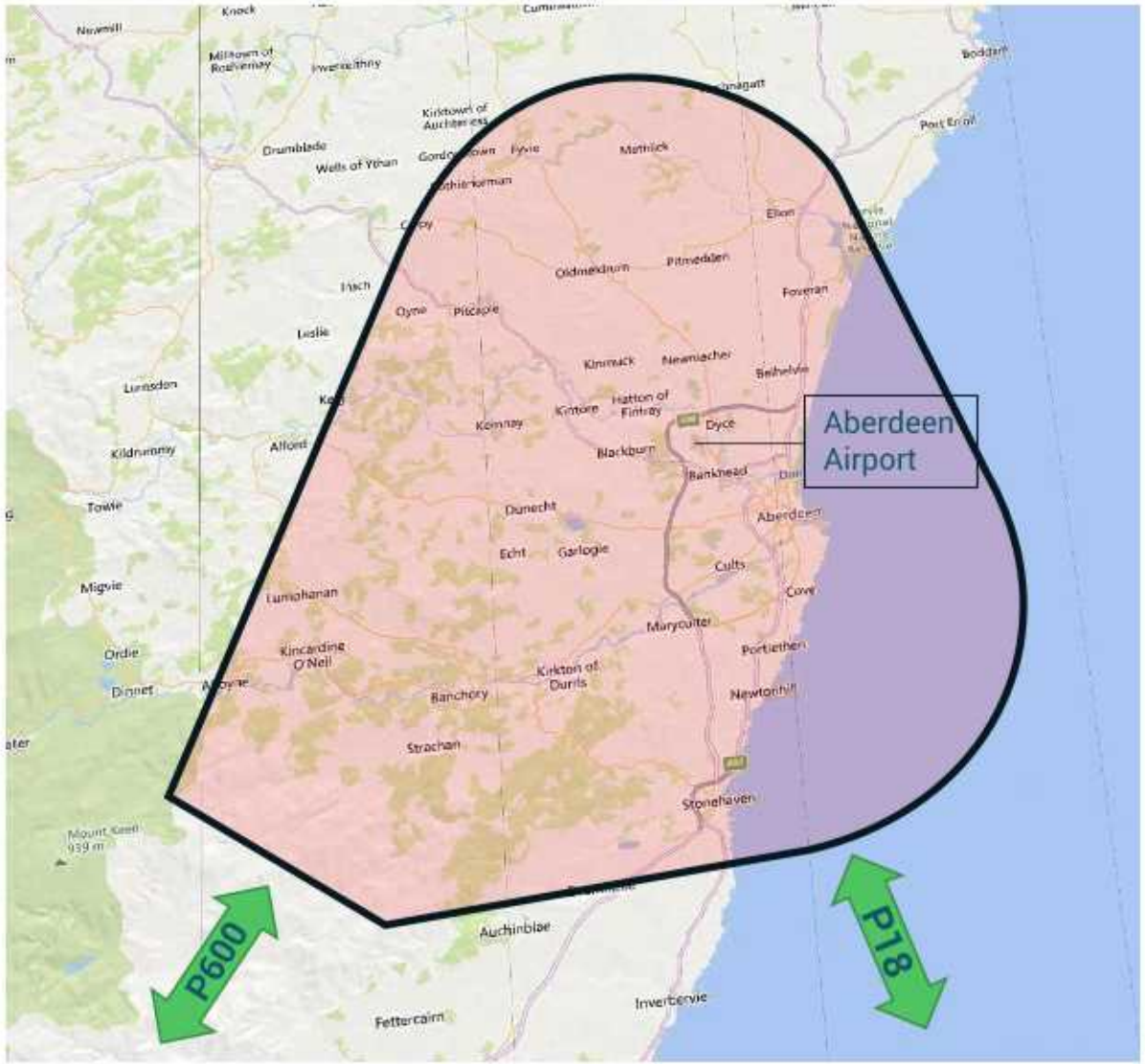
# Current Use

- *For a typical route EGPD-EGBB:*
  - *P18 available: 309 NM*
  - *P18 unavailable: 327 NM*
  - *Flights shown for this route Aug 5-11 2019.*
- *For all routes this could save approx. 150-250 kg $CO_2$ per flight.*
- *Initial Analytics indicates that if P18 became available H24, in 2022 this will potentially affect* ***up to 16 flights per day*.***
- ***This change could save ~400 T fuel (~1.3 kT $CO_2$) p.a.***

* Of these, some are likely to have arrived via P18 due to tactical direct routings offered by ATC or as a result of pilot request.



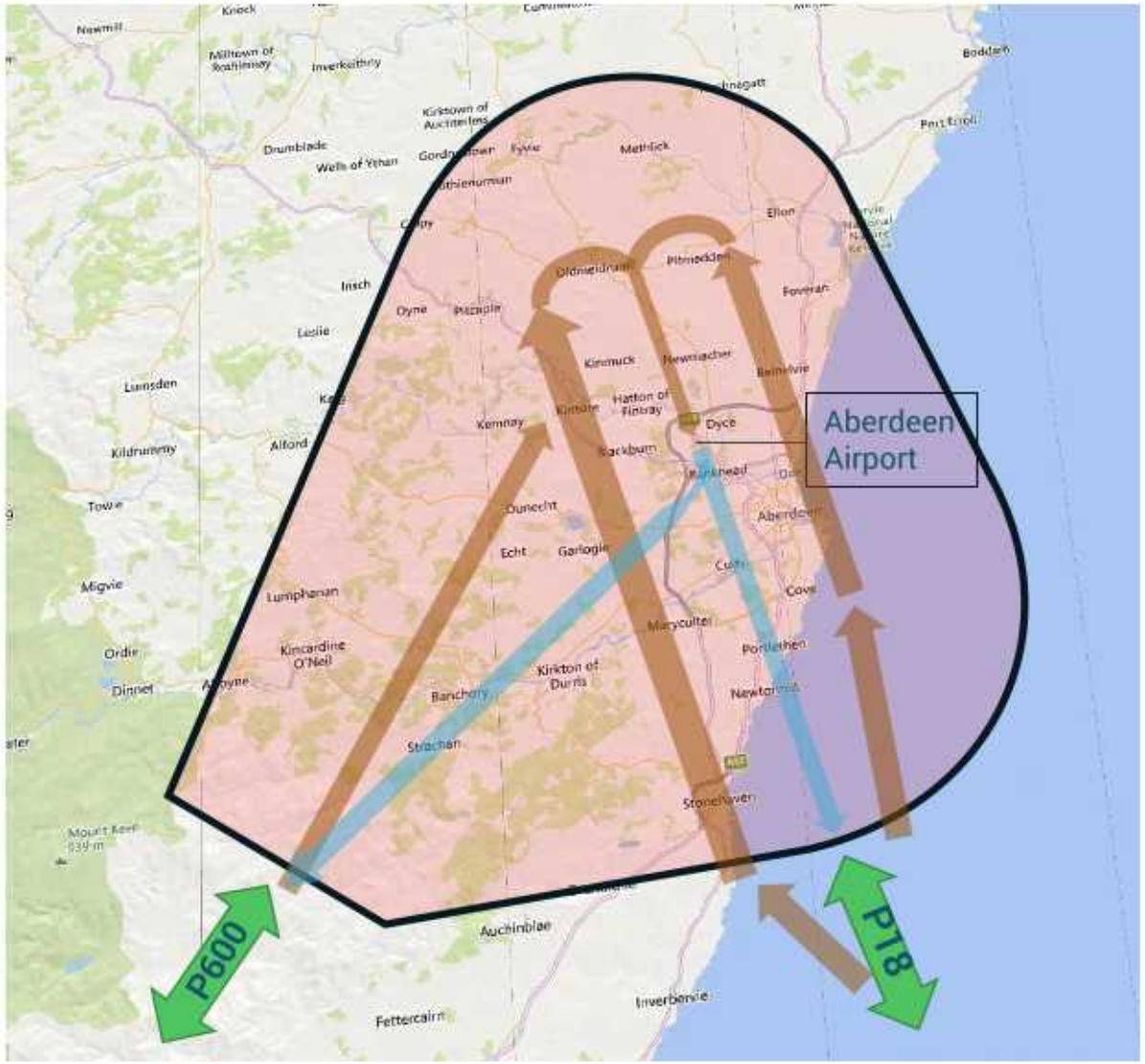

# Current Use



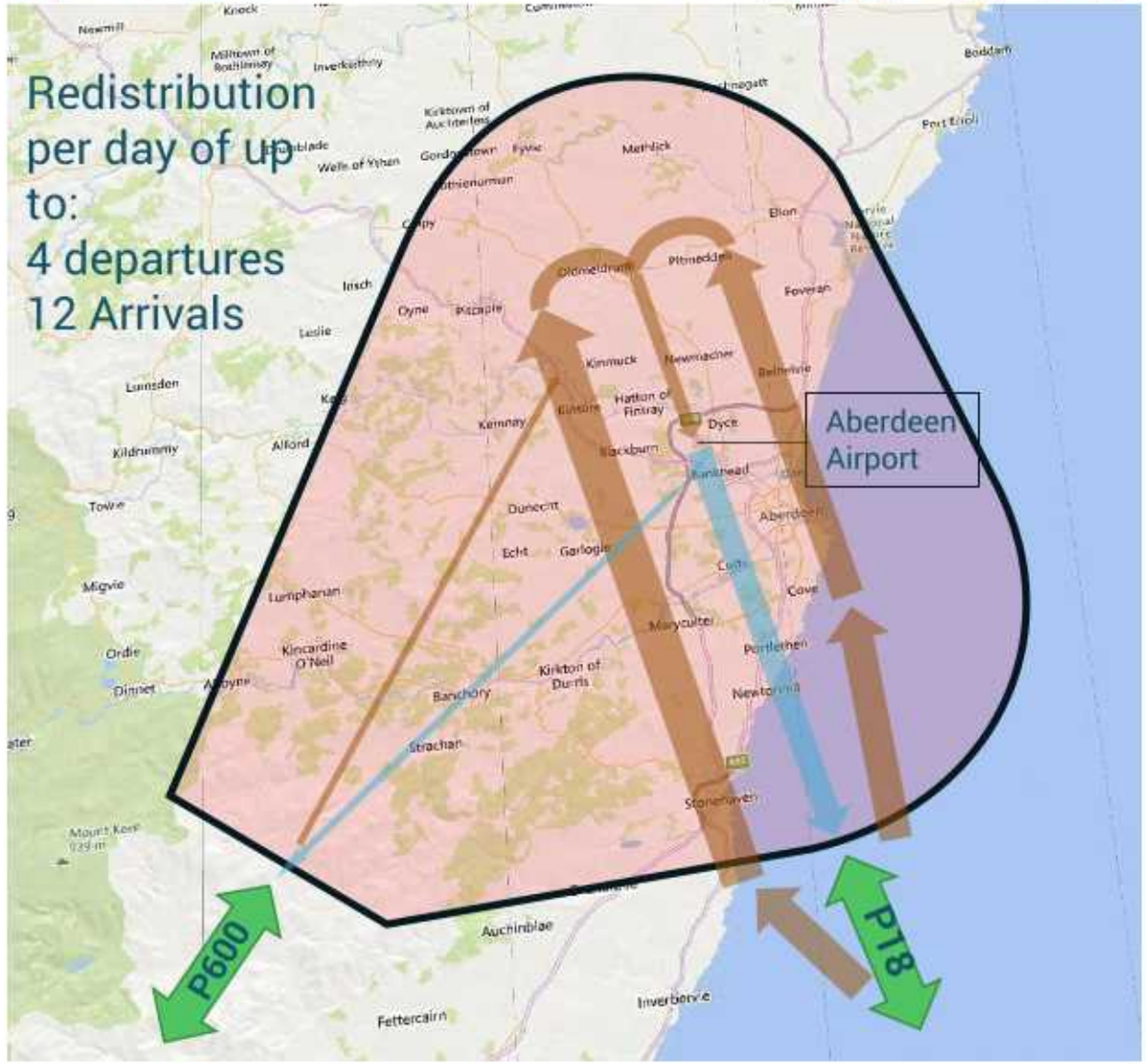

- Aircraft within the shaded area arriving and departing Aberdeen are vectored (given headings to fly) by ATC.
- As such individual aircraft tracks are dispersed and will not continually overfly the same area.
- Aircraft track concentration is highest nearest to the airport.
- The nearer to the airport a flight is, the impact of this change is reduced as P600 and P18 arrivals and departure tracks are naturally concentrated.
- ATC endeavour to give the most direct routes to/ from the ATS network.
- In 2022 this change is anticipated to affect up to 16 flights per day.
- These flights will be dispersed over a large area as in the case of the current operation – see next slide

# Indicative flow for Runway 16 (prevailing runway 55-60%)

## Current Use




## Expected Use

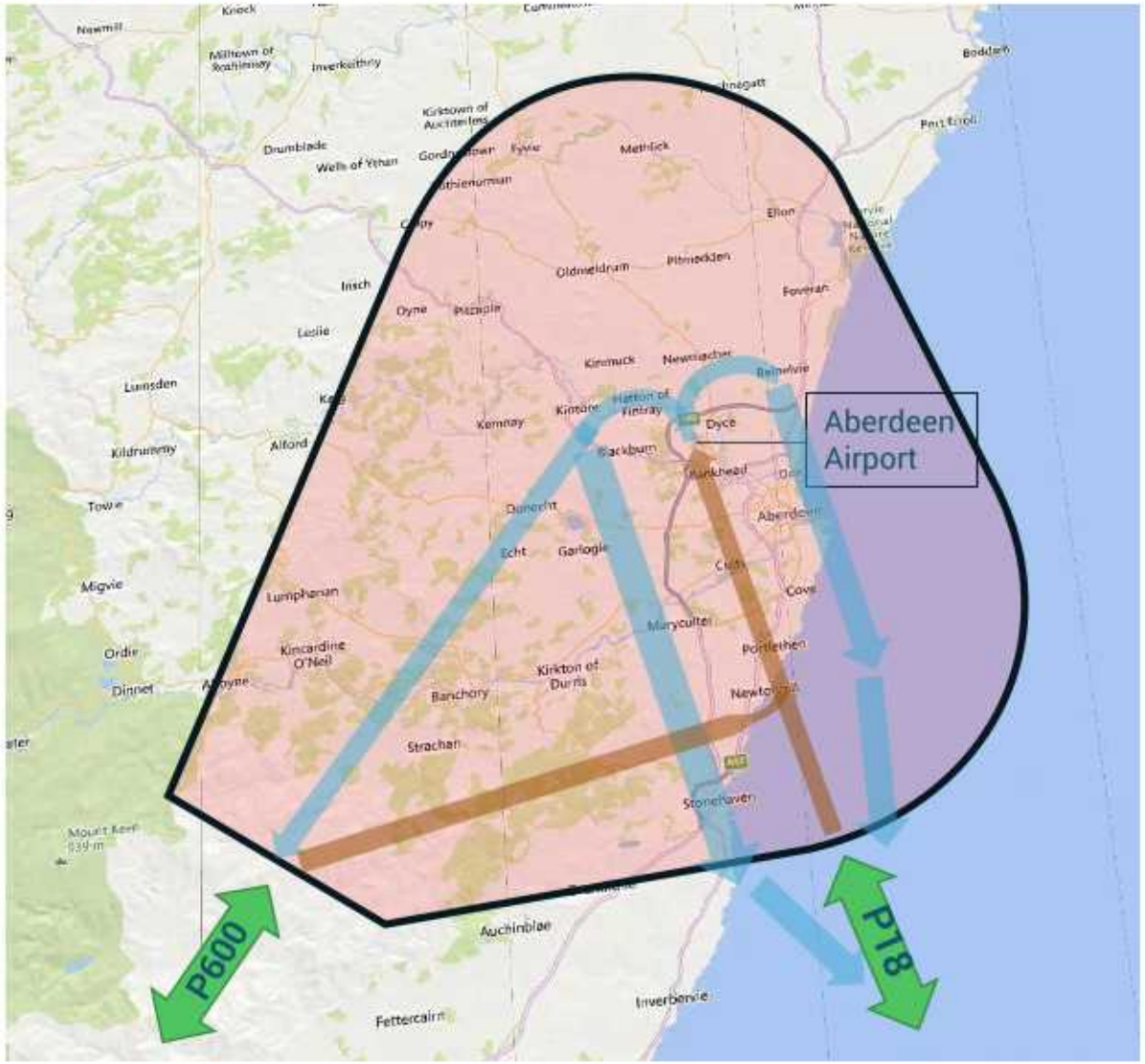




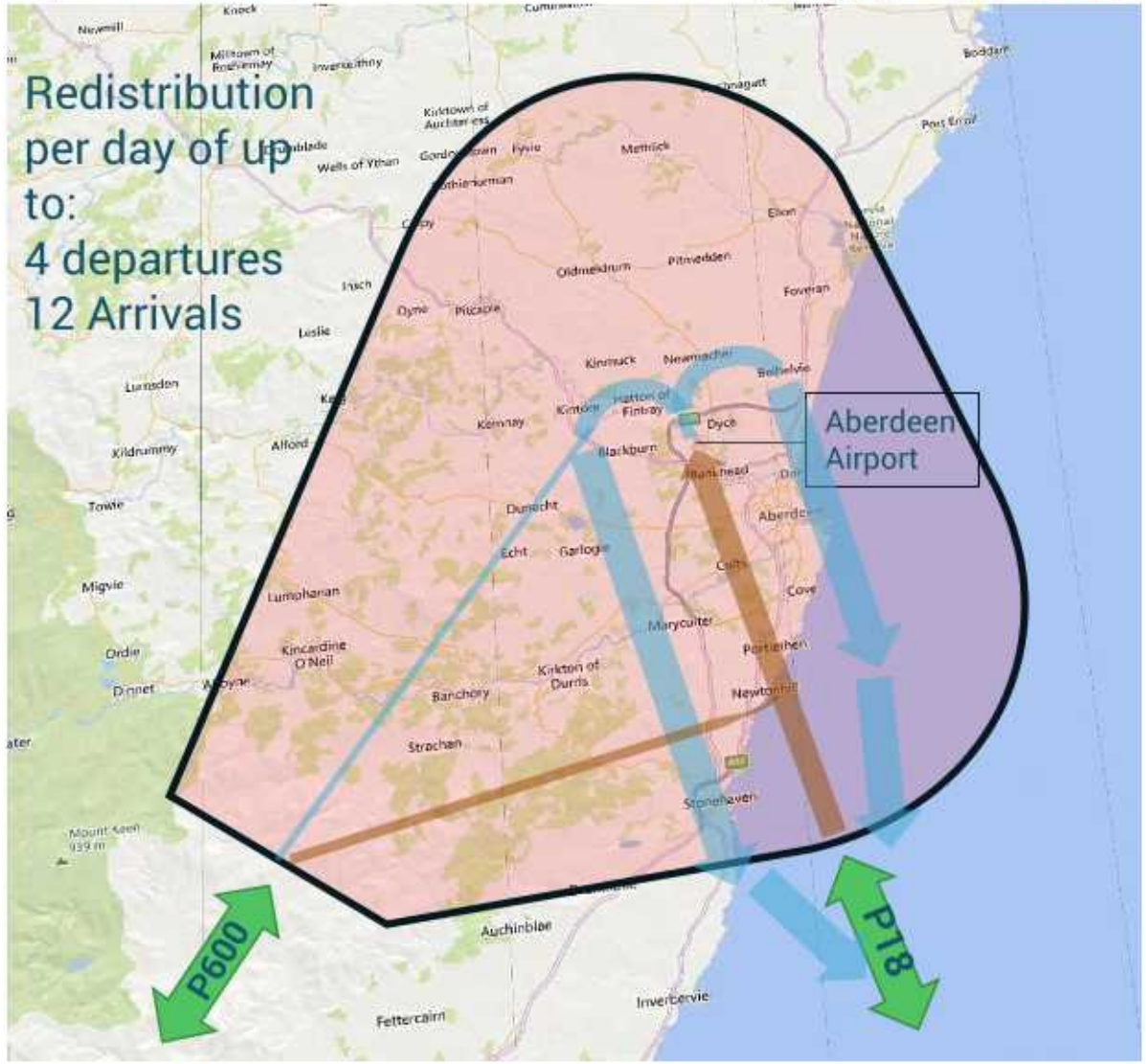

NATS Public

# Indicative flow for Runway 34

## Current Use




## Expected Use

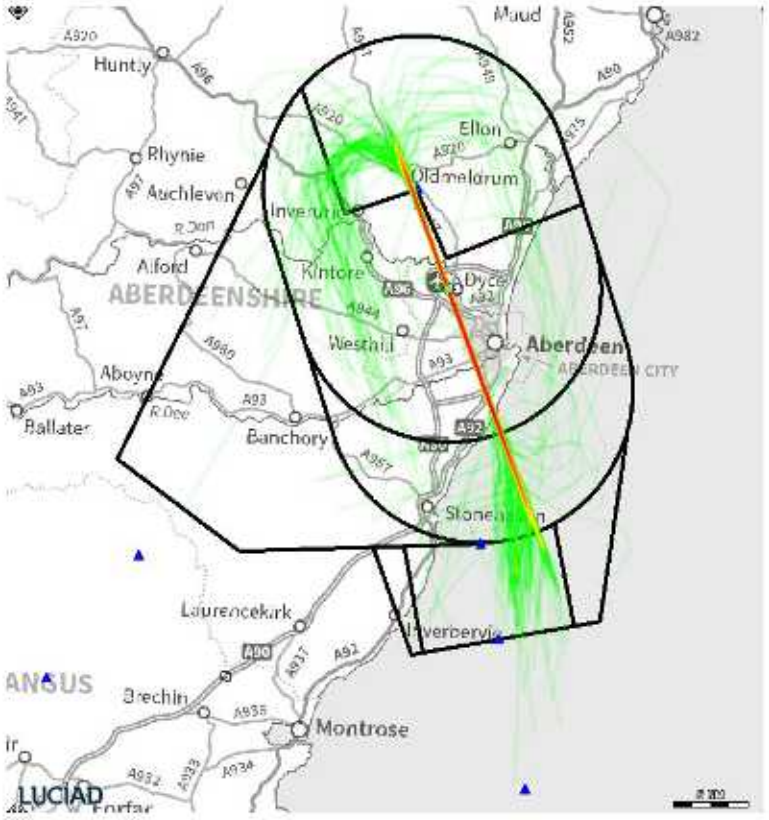




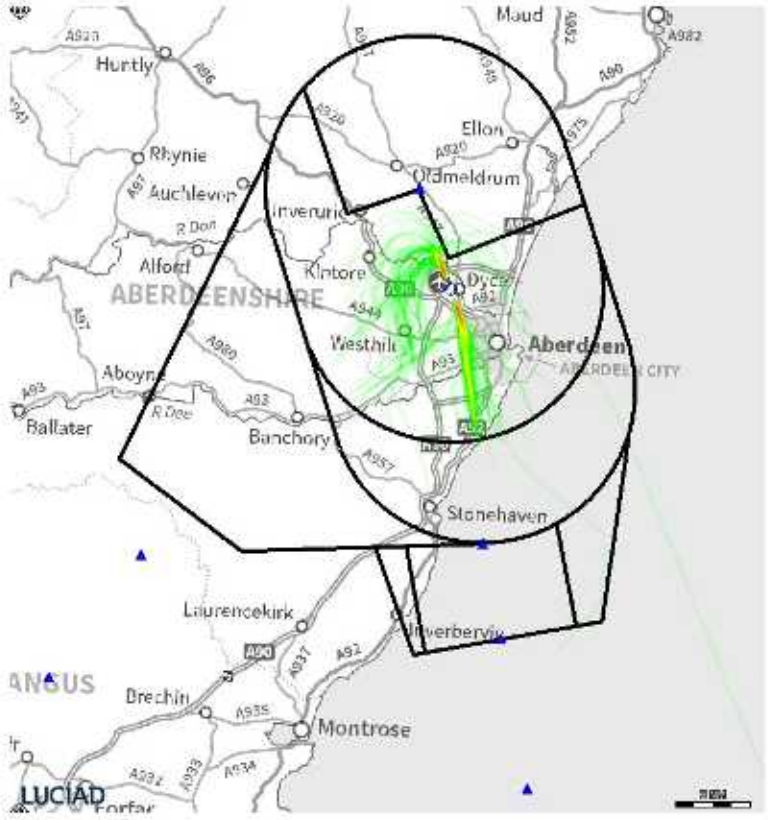

NATS Public

# Current Use for relevant P18/P600 traffic: 5-11th Aug 2019

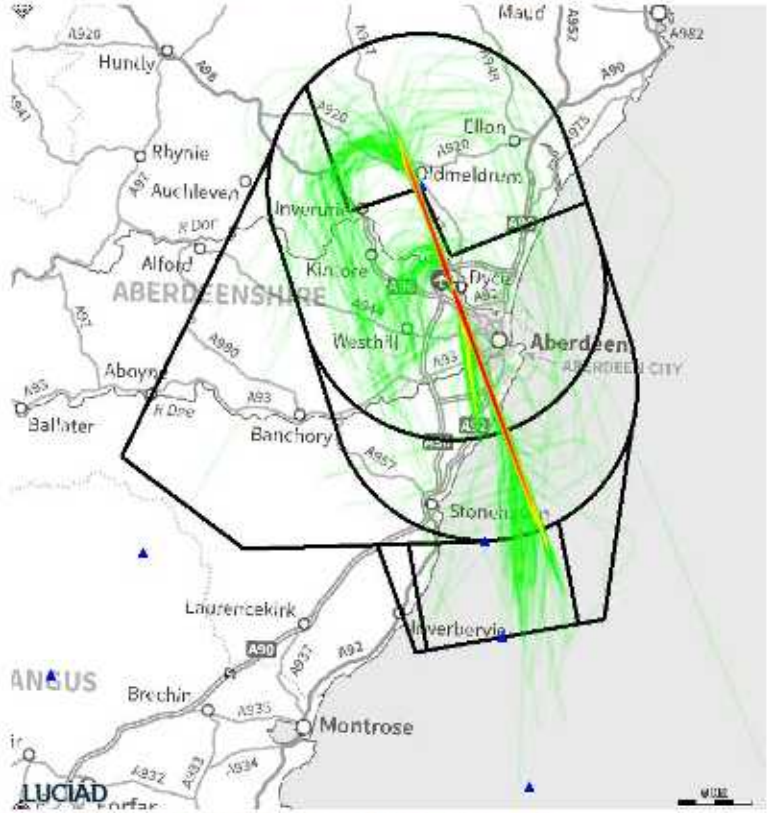
## Arrivals SFC-FL70




## Departures SFC-FL70




## Combined SFC-FL70




**Flights per day**

- Up to 2 flight
- 2 to 4 flights
- 4 to 8 flights
- Greater than 8 flights

Density plots demonstrate aircraft tracks disperse away from the airport.
We recognise there is a potential impact beneath 7000 ft.
Noise modelling is being assessed with a view that the amended tracks will see more aircraft routing over the sea and /or rural areas
**No new areas overflown as the route already exists**

# Draft Design Principles:

| # | Design Principle | Category | Priority | Notes |
|---|---|---|---|---|
| 1 | Maintain or enhance current levels of safety. | Safety | 1 | |
| 2 | Must accord with the CAA's published Airspace Modernisation Strategy (CAP1711) and any current or future plans associated with it. | Policy | 1 | The CAA have stated that this DP is required by all change sponsors. CAP1711 describes what airspace modernisation must deliver |
| 3 | The proposed change will facilitate the reduction in $CO_2$ emissions per flight. | Environmental | 2 | |
| 4 | The proposed change will facilitate the reduction in fuel burn per flight. | Economic | 2 | |
| 5 | The impacts on MoD airspace users should be minimised | Operational | 3 | |
| 6 | The impacts on civilian airspace users should be minimised | Operational | 3 | |
| 7 | The change of environmental impacts to stakeholders on the ground shall be minimised. | Environmental | 3 | |
| 8 | The proposed change will provide predictable flight planning capability. | Technical | 3 | Eliminates CDR category not associated with a DA |

# Draft Design Options:

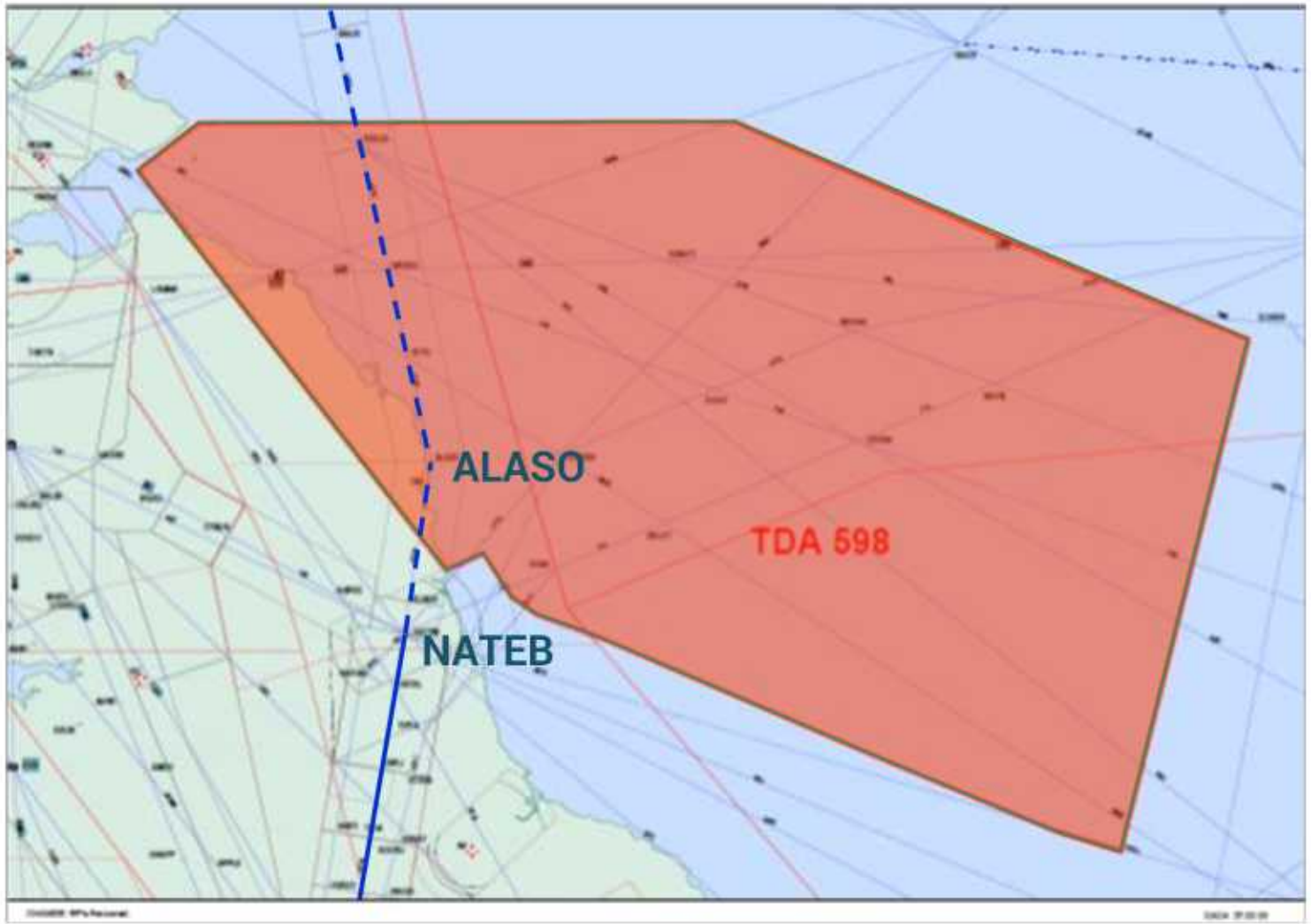
- ***Design Option 1: Do Nothing***
  - *This option would leave the airspace as is.*

- ***Design Option 2: H24 ATS Route***
  - *P18 would become permanently flight plannable.*
  - *Military would not have access to it*

- ***Design Option 3: H24 CDR- availability subject to D-1 notified MoD activity (NATS Preference)***
  - *P18 would become flight plannable H24 subject to Special Use Airspace (SUA) activities.*
  - *Military would be able to close the CDR when required. e.g To support the planned Danger Area activities – see next slide*

- ***Design Option 4: Extended hours CDR- availability subject to D-1 notified MoD activity***
  - *P18 would be available for extended periods.*
  - *If this option was to be progressed the hours of extension would form part of the consultation.*

# Airspace Planned Danger Area:

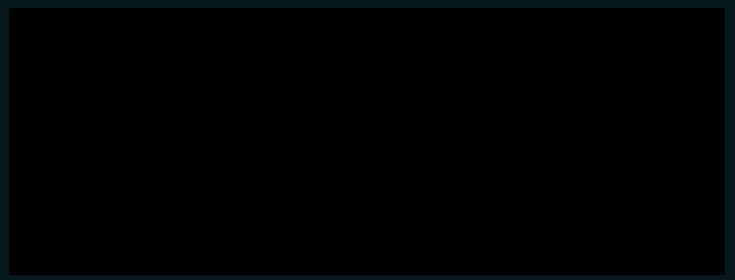



- MOD have conducted airspace trials in the area shown.
- MOD ACP-2020-026 is to introduce an airspace volume linked to these trials.
- This airspace is only likely to be utilised ~2 weeks a year.
- As indicated in Design Options, MOD will still need access and Option 2 is unlikely to be viable

# Proposed CAP1616 Gateway Timescale

| Stage | Date | |
|---|---|---|
| Assessment meeting | 06/05/2021 | |
| Stage 1 – Define | 29/10/2021- | Design Principles |
| Stage 2 – Develop | 29/10/2021- | Design Options |
| Stage 3 – Consult | 26/11/2021- | Consultation planned for December and January |
| Stage 4 – Update and Submit | 24/02/2022 | |
| Stage 5 – Decide | 13/05/2022 | |
| Stage 6 – Implement | AIRAC 10 2022 | |

# Questions?



NATS