

Free Route Airspace, Deployment 2.1
PEMAK Triangle, TAKAS Box
ACP-2020-039

Gateway documentation:
Stage 3 Consult

Step 3A Consultation Strategy

The NATS logo is positioned on the right side of the page. It consists of the letters 'NATS' in a bold, italicized, blue sans-serif font. A large, light blue decorative graphic, consisting of two parallel curved lines that sweep from the top left towards the bottom right, frames the logo and extends across the lower half of the page.

NATS Unclassified

Roles

Action	Role	Date
Produced	Airspace Change Specialist NATS Future Airspace and ATM	19/11/2020
Reviewed Approved	Manger Airspace Change Compliance & Delivery NATS Airspace and Future Operations	24/11/2020
Reviewed Approved	Manger Airspace Evolution NATS Airspace and Future Operations	23/11/2020
Reviewed Approved	ATC Lead NATS Prestwick Development	20/11/2020
Reviewed Approved	FRA Project Manager L6234 Operations & Airspace Programme Delivery	20/11/2020

Publication history

Issue	Month/Year	Change Requests in this issue
1.0	January 2021	

References

Ref No	Description (hyperlinked)
1	FRA Deployment 2.1 CAA web page – progress through CAP1616
2	Stage 1 Assessment Meeting Minutes
3	Design Options
4	Design Principles Evaluation
5	Initial Options Appraisal

Contents

1.	Introduction.....	3
2.	Objectives.....	5
3.	Summary of Engagement Activity Undertaken to Date	5
4.	Audience.....	6
5.	Approach.....	6
6.	Materials.....	7
7.	Length.....	7
8.	Reversion Statement.....	8
9.	Conclusion and Next Steps.....	9
	Appendix A: List of Stakeholders	10

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 satisfy the requirements of Stage 3 Consult Gateway, Step 3A Consultation Strategy.
- 1.3 Free Route Airspace is defined¹ as *“A specified airspace within which users may freely plan a route between a defined entry point and a defined exit point, with the possibility to route via intermediate (published or unpublished) way points, without reference to the ATS route network, subject to airspace availability. Within this airspace, flights remain subject to air traffic control.”*
- 1.4 The concept of Free Route Airspace (FRA) where aircraft can fly between points and are not constrained to follow a network of routes is well established and has been recommended as a part of the Eurocontrol Single European Sky ATM Research (SESAR) programme and is a major initiative of the CAA’s [Airspace Modernisation Strategy \(AMS\)](#). The implementation of FRA by European Union (EU) member states was mandated in European Law under the EU [Implementing Regulation EU716/2014](#).
- 1.5 The FRA project has been split out into individual geographical deployments which will introduce FRA throughout the UK airspace in four main phases; each will have an individual Airspace Change Proposal (ACP). A single ACP would not be appropriate or easily align with the engagement and consultation requirements of CAP1616.
- 1.6 This ACP (Deployment 2.1) is a subset of the second main UK FRA deployment and seeks to introduce FRA in airspace where the provision of ATS has been delegated to the IAA Shannon ACC and the DSNB Brest ACC in the far south west corner of the UK UIR, at FL245+. These two volumes are known as the PEMAK Triangle (provision of ATS delegated to Brest ACC) and TAKAS Box (provision of ATS delegated to Shannon ACC). This area of airspace was separated from the main Deployment 2 ACP in order to meet other DSNB FRA deployment timelines. It has a target deployment date of 2nd December 2021.
- 1.7 This change is categorised under CAP1616 as a Level 2B change due to the altitude of the changes being above 20,000ft (Flight Level 200).
- 1.8 Due to the altitude of the proposed changes, assessment of environmental impacts is limited to CO₂e emissions.
- 1.9 ICCAN guidance related to noise impacts on stakeholders on the ground has been considered during options development. The changes proposed in all options are at FL245 and above, therefore the ICAAN guidance is not considered relevant for this ACP.
- 1.10 Previous CAP1616 stages have summarised the design options development (Refs 3-5). The design options have been limited to the following two, as this change is mandatory under EU law and Implementing Regulation EU716/2014:
- **FRA Option 1.** Implement FRA in accordance with Implementing Regulation EU716/2014, remove all ATS routes and rationalise waypoints in accordance with the DSNB Brest ACC FRA design in both the PEMAK Triangle and TAKAS Box
 - **FRA Option 2.** Implement FRA in accordance with Implementing Regulation EU716/2014, remove all ATS routes and rationalise waypoints in accordance with the DSNB Brest ACC FRA design in the PEMAK Triangle but retain ATS routes in the TAKAS Box

¹ <http://www.eurocontrol.int/articles/free-route-airspace>

- 1.11 The baseline “do nothing” option was discounted during the design principles evaluation. It would not deliver any benefit or meet the mandated legal requirement to introduce FRA in the UK UIR

2. Objectives

- 2.1 The implementation of Free Route Airspace (FRA) is a legally mandated change and as such is not benefits driven.
- 2.2 We want to ensure that appropriate stakeholders, who could be negatively or positively impacted by these changes, are made aware of this airspace change proposal and are given the opportunity to submit feedback about the designs.
- 2.3 Through our engagement activities undertaken so far, we want to make sure that the correct audience is targeted in an appropriate manner and given the opportunity to respond. We also aim to ensure that the materials we produce provide stakeholders with enough information to respond; the length of the consultation is appropriate for responses and works within the project scope.

3. Summary of Engagement Activity Undertaken to Date

- 3.1 NATS has been actively involved in meetings and stakeholder engagement relating to the implementation of FRA for several years. This has included attending meetings with the Borealis Alliance FRA Programme, alongside the Air Navigation Service Providers Computerised Flight Plan Software Providers (CFSP) listed in Appendix A.
- 3.2 Prior to Stage 1 activities NATS met with the CAA and Eurocontrol on several occasions, specifically in relation to the FRA CONOPS. This resulted in a common concept of operations for FRA across the Borealis Alliance² area and helped to influence the design options.
- 3.3 Following on from the assessment meeting in May 2020, Stage 1 and 2 engagement activities were carried out with relevant stakeholders in order to refine the Design Principles and Design Options.
- 3.4 Stage 1 and 2 engagement activities have been carried out with relevant stakeholders in order to inform design options. Specific airlines, Computerised Flight Plan Service Providers and National Air Traffic Management Advisory Committee (NATMAC) members were identified as relevant and representative stakeholders for the proposed designs. These have been listed in Appendix A.
- 3.5 NATS completed two-way stakeholder engagement for the Stage 2 Design Options, primarily through meetings and email communication. The engagement activities were based on the design concept options covered in the Design Options Document (Ref 3). This engagement was used to inform the list of options which were evaluated against the Design Principles (Ref 4), resulting in the final design options we are consulting on.
- 3.6 NATS completed two-way stakeholder engagement to inform this consultation strategy. Specifically, the views of DSNB Brest ACC and IAA Shannon ACC we sought to ensure that the correct stakeholders were targeted, and the duration of the consultation was appropriate.
- 3.7 The stakeholder engagement summarised above, shows that appropriate 2-way engagement has occurred via appropriate mechanisms, and the most relevant stakeholders are fully aware of the proposed changes and have had an opportunity to influence the design options.

² The Borealis Alliance includes the Air Navigation Service Providers (ANSPs) of Denmark, Estonia, Finland, Iceland, Ireland, Latvia, Norway, Sweden and the UK.

4. Audience

- 4.1 NATS does not plan to target organisations whose primary interest is environmental (e.g. noise, local air quality). There would be no change in impacts to noise & local air quality as the changes are all contained within airspace above FL200 and over the high seas.
- 4.2 All of the stakeholders listed in Appendix A, will be invited to respond to the consultation.
- 4.3 In addition to the identified impacted stakeholders, NATS will target members of the NATMAC (National Air Traffic Management Advisory Committee) forum as stakeholders, which includes a number of airline operators and organisations. These have been listed in Appendix A: List of Stakeholders.
- 4.4 The options being consulted upon are wholly within controlled airspace at FL245+, therefore impacted stakeholders are a known audience. There is no requirement to consider seldom heard audiences within this strategy.

5. Approach

- 5.1 Although the key stakeholders were specifically engaged as part of Stages 1 and 2, as a representative group, we will actively seek responses from stakeholders. These are all listed in Appendix A: List of Stakeholders.
- 5.2 Stakeholders will be informed via email when the consultation is launched. They will be able to view and download the consultation document on the online consultation portal, alongside access links to supporting documentation. This is where they can also submit a response to the consultation.
- 5.3 We will put a link to the consultation on the NATS Customer Affairs website, one of the information transfer mechanisms between NATS and our customer airlines.
We will also put a link on the NATS.aero website, which is available to the public.
Any individual or organisation may submit a response; however, we are specifically targeting the organisations discussed in this document.
- 5.4 Respondents will not be able to submit a postal response to the consultation. Due to the COVID-19 pandemic, we are unable to guarantee that we can access NATS sites to collate and consider postal responses³.
- 5.5 A reminder will be sent mid-way through the consultation period to stakeholders to maximise the likelihood of stakeholder participation in the consultation.
- 5.6 We will send a final reminder of the closing date one week before the consultation concludes and request a response from stakeholders who have not submitted a response. This is in order to achieve maximum participation.
- 5.7 Responses will be managed and uploaded to the portal by the CAA. Should responses contain requests for clarification, answers will be added to the list of FAQs available on the consultation website.
- 5.8 At the end of consultation, the responses will be analysed and themed; any late responses may not be included in the subsequent analysis.

³ NATS has catered for postal responses for all previous CAP1616 level 2 ACP consultations. However no postal responses have been received during these consultations, so the evidence suggests that not providing the facility to receive postal responses will not adversely impact the outcome of the FRA D2.1 consultation.

5.9 NATS will acknowledge receiving responses by sending a completion message back to the user, using the email address they provide. We will also include a list of FAQs on the consultation portal if responses require clarification or frequent queries arise.

5.10 In the event of any unexpected challenges or events, we will directly communicate and negotiate with stakeholders in order to resolve an issue and reach a mutual agreement.

6. Materials

6.1 For all analyses the most up-to-date and credible data has been used.

6.2 Our stakeholders are considered to be an aviation expert audience; therefore, we plan to use specialist aviation technical terminology in the consultation material, in English only. We plan to conduct the consultation via the internet (including email and the online consultation portal).

6.3 The online consultation portal will include an overview into the proposed changes, the consultation document available for download (covered in Section 6.5 below) and a response questionnaire which will allow users to submit feedback.

6.4 The response questionnaire will capture information on the user; some of this will be mandatory (such as organisation being represented) and others optional (such as a postcode). The consultation document, covered in Section 6.5, has been written such that it contains enough relevant information for stakeholders to provide informed responses.

6.5 The Consultation Materials will be available on the CAA consultation portal. This will contain information on the current relevant airspace; the proposed changes including NATS' preferred design option; and the estimated enabled benefits and impacts of the proposal.

6.6 We will also use the online consultation portal to include any FAQs we receive during the consultation to ensure all stakeholders have sight of these.

6.7 A standard environmental analysis focussing on the enabled CO₂e impacts has been completed for the proposed change. No analysis relating to noise or local air quality has been completed because of the altitude of the proposed changes.

6.8 After the consultation, a consultation feedback document will summarise the themes and NATS' response to issues raised – this may involve making changes to the design. The feedback document will be available for download via the CAA portal, and the ACP will be written based on the final design described in the feedback report.

7. Length

7.1 The length of this consultation will be 4 weeks, which is proportionate to the small but positive impact of the proposal. In addition, there are only a small number of directly impacted stakeholders, the majority of whom have been engaged throughout the development of this ACP (including the ANSPs who provide ATS within the region). In the event that relevant stakeholders provide feedback that the consultation duration is insufficient for them to provide a meaningful response, we will work with them to extend the consultation period.

7.2 Subject to passing the Stage 3 consult gateway, NATS intend to commence the consultation on Monday 11th January 2021 and close on Monday 8th February 2021.

8. Reversion Statement

- 8.1 Should the proposal be approved and implemented, depending on the Option implemented, reversion to the pre-implementation state would be:
- **FRA Option 1.** (In which all ATS routes are removed) – **Complex and very difficult**
 - **FRA Option 2.** (In which an ATS route structure is maintained in the TAKAS Box) – **Complex and very difficult**
- 8.2 Due to the removal of ATS Routes the changes proposed by option 1 and 2 would permanently and significantly change the airspace structure, hence making reversion complex and extremely difficult. Since the Air Traffic Service in these areas is delegated to, and managed by DSN and the IAA any proposed reversion would cause significant disruption to the interface and would require international coordination and agreement.
- 8.3 In the unlikely event that there are unexpected issues caused by this proposal, then short notice changes could be made via NOTAM or by adding Route Availability Document (RAD) restrictions. For a permanent reversion, the changes would have to be reversed by incorporating this into an appropriate future AIRAC date. Due to the limitations of NATS Area System (NAS - flight and radar data processing) large scale airspace changes are only implemented four times a year.

9. Conclusion and Next Steps

- 9.1 The design options which are being proposed for this airspace design, are listed in Section 1.10. NATS preferred option is **FRA Option 1**, in which FRA would be established in accordance with Implementing Regulation EU716/2014, remove all ATS routes and rationalise waypoints in accordance with the DSNA Brest ACC FRA design in both the PEMAK Triangle and TAKAS Box.
- 9.2 The proposed and preferred option for the airspace design is **FRA Option 1**. The details of how FRA Option 1 was decided upon as the preferred option can be found in the [Stage 2 Initial Options Appraisal](#) (Ref 5) published on the FRA pages of the CAA airspace change portal (Ref 1). Analysis of the design options proposed during consultation is available in the Full Options Appraisal.
- 9.3 We consider this consultation strategy to be reasonable and proportionate. We have identified the relevant stakeholders; have engaged with selected stakeholders most likely to be impacted⁴; given the selected stakeholders advance notice that the consultation would last 4 weeks subject to CAA approval; and primed them for that turnaround. We have made it clear that there is scope to change the proposal based on their feedback.
- 9.4 Subject to passing the Stage 3 Gateway Assessment, we will finalise the consultation material; publish the appropriate material on the CAA Citizen Space consultation portal and launch the consultation with stakeholders via email.

⁴ NATS considers that the stakeholders most likely to be impacted by this proposal would be IAA Shannon ACC And DSNA Brest ACC.

Appendix A: List of Stakeholders

Links to the consultation will be placed on the NATS Customer Website and also on the NATS public website. Any individual or organisation may submit a response; however, we are only specifically targeting the organisations discussed in this document.

The consultation is most relevant to the stakeholders listed below – who will all be emailed PDF copies of the consultation material and sent links to the consultation feedback website - but consultation is not exclusive to this list.

Airlines

Aer Lingus
Air Canada
Air France
Air New Zealand
American Airlines
Austrian Airlines
BA Cityflyer
BAR
British Airways
Cityjet
Cargolux
Delta Airways

DHL
Eastern Airways
EasyJet
Emirates
Etihad
FedEx
FinnAir
Gamma Aviation
Gulf Air
Iberia
Jet2
KLM
Logan Air

Lufthansa
Qatar Airways
Ryanair
SAS
Saudia
Stobart Air
Tag Aviation
Thomson/ TUI
Turkish Airlines
UK Air Tanker
United Airlines
Virgin Airlines
WizzAir

Air Navigation Service Providers (ANSPs)

Direction des Services de la Navigation Aérienne
(DSNA) (France)
DSNA ACC Brest (France)
DSNA ACC Reims (France)

Eurocontrol Central Flow Management Unit (CFMU)
Irish Aviation Authority (IAA) (Ireland)
RAF(U) Swanwick (UK Royal Air Force)

Computerised Flight Plan Software Providers

Air Support
Aviation Cloud
Flight Keys
Lido

Jeppesen
Lufthansa Systems
NavBlue
Sabre

NATMAC Members

Aviation Environment Federation (AEF)
Airport Operators Association (AOA)
Aircraft Owners & Pilots Association (AOPA UK)
Association of Remotely Piloted Aircraft Systems
(ARPAS UK)
British Airways (BA)
British Aerospace Systems (BAE Systems)
British Airline Pilots Association (BALPA)
British Air Transport Association (BATA)
British Balloon & Airship Club (BBAC)
British Business & General Aviation Association (BBGA)
British Gliding Association (BGA)
British Hang Gliding & Paragliding Association (BHPA)
British Microlight Aircraft Association (BMAA)
British Model Flying Association (BMFA)
British Parachute Association (BPA)

British Helicopter Association (BHA)
European UAV Systems Centre Ltd
General Aviation Safety Council (GASCo)
General Aviation Alliance (GAA)
Guild of Air Traffic Control Officers (GATCO)
Helicopter Club of Great Britain (HCGB)
Heathrow Airport Ltd (HAL)
Heavy Airlines
Honourable Company of Air Pilots
Light Aircraft Association (LAA)
Light Airlines
Low Fares Airlines (LFA)
Ministry of Defence (MoD) via the Defence Airspace
and Air Traffic Management (DAATM)
PPL/ IR

Other

Direction de la Sécurité de l'Aviation Civile (DSAC)
Direction du Transport Aérien (DTA)
French Air and Space Force

Irish Aviation Authority Regulator
Irish Air Corps
United Kingdom Space Agency (UKSA)

End of document