Doncaster Sheffield Airport

Airspace Change Proposal

Main Consultation Document

Aviation Interest

Table of contents

Foreword 3

Which document is right for me? 4

1. Introduction 5

1.1 Introduction to this consultation 5
1.2 About Doncaster Sheffield Airport (DSA) 5
1.3 Why is an airspace change needed for DSA? 5
1.4 The process for changing airspace (CAP1616) 5

2. Doncaster Airport's airspace timeline 6

3. Consultation Information 7

3.1 Key consultation information 7
3.2 Consultation materials 7
3.3 Consultation events 8
3.4 Further questions 8

4. How we developed our proposal 9

5. DSA's airspace change proposal 11

5.1 Current situation without the airspace change 11
5.2 DSA traffic forecasts 12
5.3 DSA fleet mix 12
5.4 Modal split 12

6. Proposed Instrument Flight Procedures (IFPs) 13

6.1 Standard Instrument Departures (SIDs) 13
6.2 Arrival procedures 17
6.3 Noise Abatement Procedures 20
6.4 Navigation Aids 21
6.5 Interdependencies with wider airspace 21

7. Proposed Controlled Airspace (CAS) 23

7.1 What is Controlled Airspace (CAS) 23
7.2 Developing CAS for DSA 24
7.3 DSA's Controlled Airspace Proposal 26
7.4 What are the expected impacts of the changes to CAS? 29

8. The benefits and impacts of our proposal 33

8.1 Overview of the benefits and impacts 33
8.2 Fuel burn and Greenhouse Gas Emissions 34
8.3 Safety 35
8.4 Monetised assessment outcomes 36

9. Responding to the consultation & what happens next 37

9.1 How to respond to the consultation 37
9.2 What happens to consultation responses? 37

10. Appendix A: Overview of CAP1616 process to date 38

11. Appendix B: Draft Noise Abatement Procedures 39

Foreword

Christian Foster - Programme Director CDC

We're preparing for take-off…

The reopening of Doncaster Sheffield Airport is a major step forward for the region. Work is already underway to bring the site back into operation, with a clear focus on building the infrastructure, jobs, and partnerships needed to support both passenger and cargo activity over time. But, as the project moves firmly into its delivery phase, we also must look to the skies and develop the airspace that will allow aircraft to safely arrive and depart.

To do this, Doncaster Sheffield Airport must undertake an Airspace Change Proposal (ACP) which will enable the introduction of arrival and departure routes and the associated controlled airspace needed to operate them in,

Successful completion of the ACP will enable the airport to commence regular and routine commercial movements. This unlocks economic growth for the South Yorkshire region, with estimates showing that in the long term, re-opening the airport could boost the economy by approximately £5 billion[1]. Not only that, but re-opening the airport will support employment, with around 5,000 jobs created across aviation, logistics, engineering, construction and local businesses[2]

Beyond the wider economic benefits, we recognise that there are some local airspace impacts as a result of the airport opening, such as noise and controlled airspace changes. We are committed to working with our neighbours and the aviation industry community throughout this process to listen to concerns and, where possible, adapt our proposals.

The flight paths and associated controlled airspace that form part of this proposal are different from Doncaster Sheffield Airport's previous arrangements which were withdrawn when the airport closed in November 2022. This is as a result of the Civil Aviation Authorities (CAA) CAP1616 process whereby we have undertaken engagement with stakeholder representatives who have suggested ways the previous arrangements could be improved.

We are now undertaking this consultation to gather as much feedback as possible to ensure everyone's views are given consideration. The information within this Consultation Document aims to help you understand what these proposals would mean for you.

Following this consultation, we will collate, review, and respond to your feedback before developing the final Airspace Change Proposal and then submitting this to the CAA for formal approval.

Thank you in advance for your consideration of our proposals and we look forward to hearing from you before the consultation period ends on Sunday 4 October 2026 (23:59hrs).

[1] Government backs mayor to reopen Doncaster Sheffield Airport - GOV.UK

[2] i9 Cabinet 051125 SYAC report.pdf

Which document is right for me?

We understand that there are lots of different interests in the Doncaster Sheffield Airport (DSA) airspace change proposal (ACP).

We have split our main Consultation information into two documents:

1. DSA Consultation Document: Communities & local area interests
2. DSA Consultation Document: Aviation interests (this document)

This document is based around aviation interests. Within the document there's draft Instrument Flight Procedure (IFP) design information along with the Controlled Airspace Proposals. We have aimed to make this document as accessible as possible, however it does use aviation terminology, and it is aimed towards stakeholders with aviation interests, such as airlines, general aviation pilots, and other airports. The Aviation Interest document contains an overview of the assessments we've undertaken to understand the benefits and impacts of the proposal, with a more detailed focus on the categories that impact aviation stakeholders.

The alternative Communities and local area interests document aims to explain the proposals in an easy-to-understand way, without using lots of aviation technical jargon. There are maps to understand where the routes will be located and where we expect aircraft to fly in future. There's also lots of information about noise, overflight of wildlife habitats and tranquil areas, and the outcomes of the other assessments we've undertaken to understand the benefits and impacts of the proposal.

The main differences between the two documents occur from section 5 onwards.

If you are looking for a very high-level summary of the proposals, please see the Consultation Summary Document.

1. Introduction

1.1 Introduction to this consultation

City of Doncaster Council (CDC) is sponsoring an airspace change proposal (ACP) to reinstate controlled airspace and introduce the arrival and departure routes needed for Doncaster Sheffield Airport (DSA) to reopen safely and bring passenger and cargo flights back to the region.

1.2 About Doncaster Sheffield Airport (DSA)

The reopening of DSA is the centrepiece of South Yorkshire Airport City (SYAC), a major regional growth programme designed to restore aviation services and unlock thousands of new jobs across advanced manufacturing, engineering, logistics and green technologies. The project is being delivered through a partnership between national government, the South Yorkshire Mayoral Combined Authority (SYAC) and CDC.

Government backing for the SYAC programme has enabled significant investment to prepare the airport for reopening, reflecting the national importance of restoring regional connectivity, supporting trade and driving economic growth across the North. The airport's return forms part of the Government's wider devolution agenda, demonstrating how locally led, nationally supported investment can deliver regeneration, skilled employment and long-term prosperity.

1.3 Why is an airspace change needed for DSA?

DSA closed in 2022 after the previous airport operator withdrew, which led to the CAA removing the controlled airspace and flight procedures that supported its operations. In March 2024, CDC secured a 125-year lease for the site, and began work to reinstate the airport licence, establish a local air traffic control service, and prepare for regular, scheduled commercial air services to return from 2028. Restoring DSA's airspace and procedures is essential for this.

As a result, the ACP is a core part of the SYAC programme. Airlines have been clear that they will not operate from DSA until a safe and efficient airspace structure is in place to support commercial flights.

1.4 The process for changing airspace (CAP1616)

The Civil Aviation Authority (CAA) Airspace Change Process, known as CAP1616, sets out how any proposed changes to UK airspace must be developed, assessed and approved.

There are seven-stages to the process (shown in Figure 1) which provide a framework for changing airspace. The CAA monitors the progress of an airspace change proposal against the requirements of the process at key defined points, called gateways.

At each gateway, the CAA will assess whether the relevant process requirements have been met, and whether to approve progress to the next stage.

DSA is at Stage 3: Consult. There's more information in section 4 of this document about the Stage 1 and Stage 2 activities that have been undertaken ahead of this consultation.

This ACP is progressing in accordance with CAP1616 version 5.1.

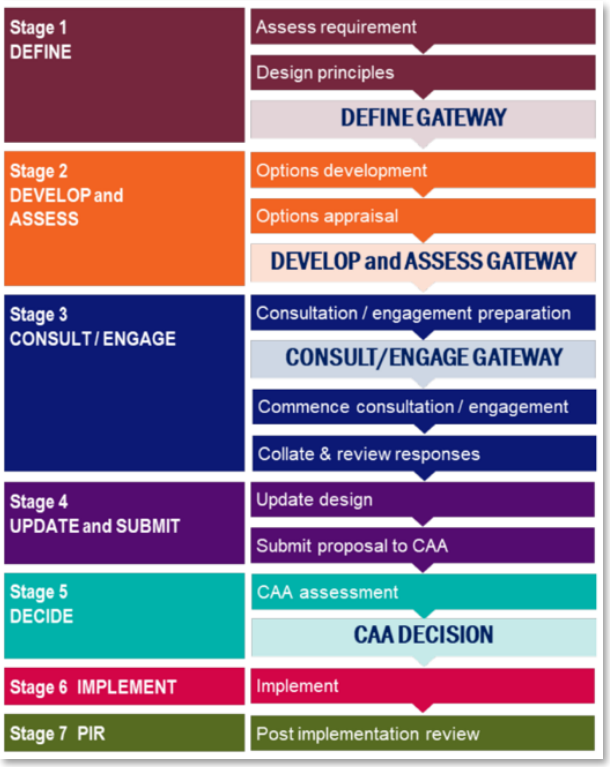
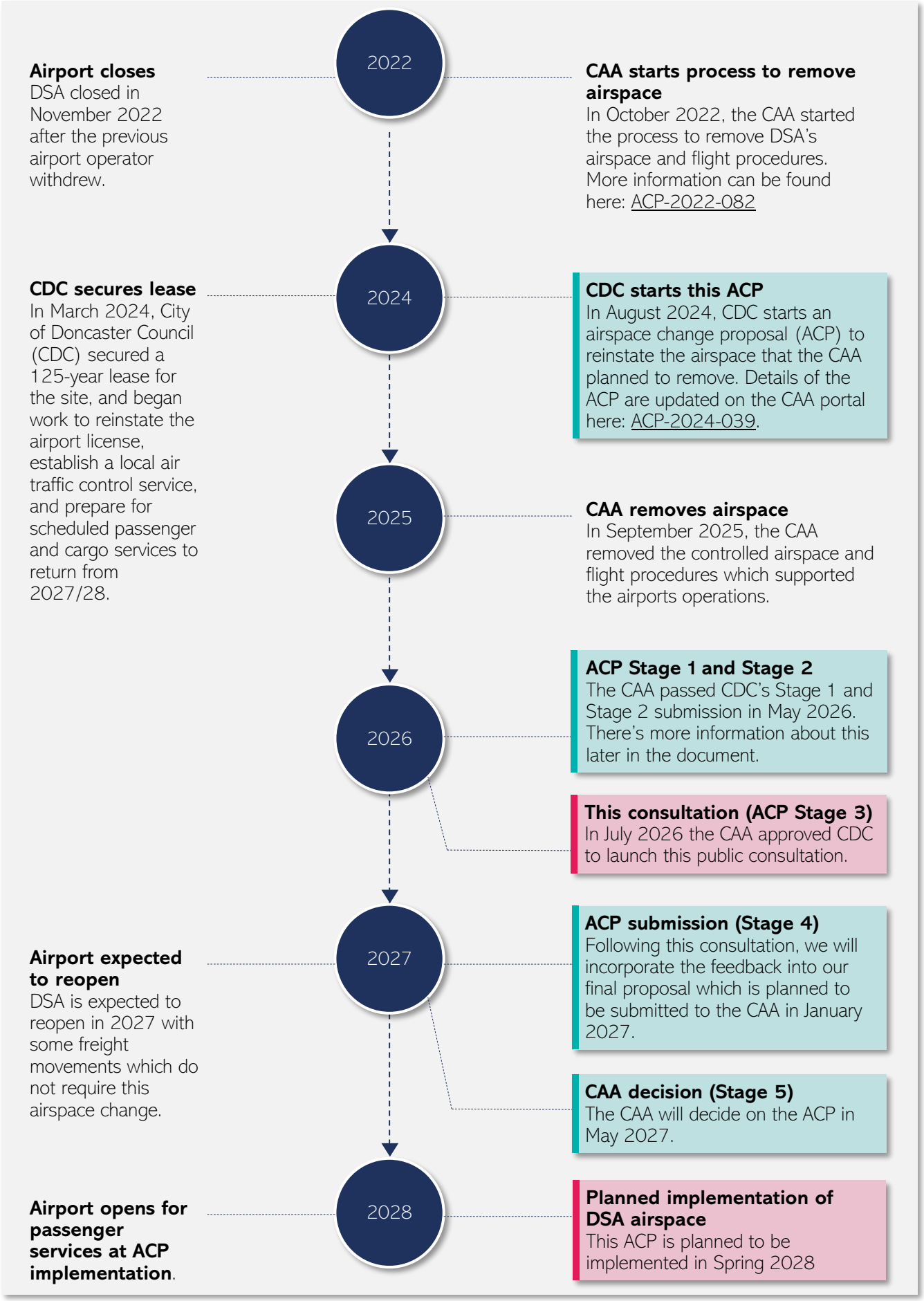


Figure 1 Overview of the CAA's CAP1616

2. Doncaster Airport's airspace timeline



3. Consultation Information

3.1 Key consultation information

This consultation is seeking your views on the proposed arrival and departure routes for DSA and the associated Controlled Airspace (CAS).

The consultation runs from Monday 3 August 2026 to Sunday 4 October 2026 (23:59).

All consultation materials and the consultation feedback form are available on the Doncaster Sheffield Airport Citizen Space consultation website:

https://consultations.airspacechange.co.uk/doncaster-airport/dsa-airspace

3.2 Consultation materials

This document is one of two main consultation documents which contain lots of information about the background to this ACP, the details of the proposal, and the potential benefits and/or impacts of the proposal. The documents have been split into two based on key stakeholder interests; there is this document, the Aviation interests document, and an alternative Community and local area interest document. More information is available here and to go to the communities and local area interest document, please click here.

ⓘ Within the document, the information boxes ⓘprovide links to where to find out further information.

Throughout the document, we have linked to where you can find out further information as part of the wider suite of consultation materials. These links are within the text or within information boxes, like the one shown opposite, All materials are available on the consultation website linked above.

Looking for an easy-read summary?	Our consultation summary document provides a high-level overview of the proposals or come along to one of our webinars where we will present a summary of the proposals (details below).
Interested in finding out what it might mean for your local area?	Our Communities and Local Area Interest document provides detailed maps which show where we expect aircraft to fly in future. There's then lots of information about noise, wildlife and tranquillity.
Looking for detailed technical information about the benefits and impacts of our proposal?	The Full Options Appraisal (FOA) document describes in full technical detail of the different options assessed ahead of this consultation, and the positive benefits and negative impacts of the proposal.
Struggling with some of the terminology?	We've aimed to keep the documents as easy to follow as possible, but we appreciate that aviation has lots of technical terms. It may be useful to have the glossary document open whilst reading these materials. We will also be holding in-person and online events where you can ask questions (please see the next page for further details).
Want to see what other people are asking?	The Frequently Asked Questions (FAQs) document which will be updated throughout the consultation.
Ready to feedback?	Please go to the website here https://consultations.airspacechange.co.uk/doncaster-airport/dsa-airspace or use the contact details on the next page to request a hard copy.

3.3 Consultation events

Webinar events

At the online webinar events, the DSA airspace team will present an overview of the proposal before there will be an opportunity for questions and answers. The focus of each webinar is shown in the table below. To register to attend a webinar event, please use the link below.

Webinar focus	Date	Time	Register
Communities and environmental interest	17 August	1600-1930hrs	Find links to register on the consultation website.
	3 September	1100-1230hrs	
	23 September	1730-1900hrs	
	25 September	1100-1230 hrs	
General Aviation and Controlled Airspace interest	14 August	1100-1230hrs	

ⓘ A recording of both webinars is available here:
https://consultations.airspacechange.co.uk/doncaster-airport/dsa-airspace

In Person events

As well as webinar events, there will be opportunities to meet the DSA airspace team face to face. At these events the consultation material will be available to view, along with large scale printed maps of the proposals.

The events are drop-in format, which means you can attend anytime within the time-period shown and there's no need to book. Our team will be available to answer questions.

Location	Date	Time (Attend at any time – no need to book)
Bawtry Mayflower Primary School	13 August 2026	1400-1900hrs
St Josephs Parish Centre, Worksop	19 August 2026	1400-1900hrs
Finningley Village Hall	2 September 2026	1400-1900hrs
Thorne Rugby Club	10 September 2026	1400-1930hrs
The Corn Exchange, Doncaster City	19 September 2026	1030-1430hrs

DSA are also planning to hold a General Aviation and Controlled Airspace specific in person event at Retford Gamston Airport. For more details, please email: DSA-airspaceconsultation@flydsa.com.

3.4 Further questions

If you have any further questions, or if you would like to request hard copies of the materials, please contact us using the below contact details.

Email: DSA-airspaceconsultation@flydsa.com
Telephone: 0800 043 3099
Write to us: DSA Airspace Consultation, c/o Heyford House, First Avenue, Finningley, Doncaster, DN9 3RH

Please note that all responses to the consultation must be submitted via the DSA Citizen Space consultation website: https://consultations.airspacechange.co.uk/doncaster-airport/dsa-airspace.

ⓘ For more information about how we have developed our approach to this consultation, please see the Consultation Strategy document.

4. How we developed our proposal

This section provides an overview of how we have developed our proposal including details of the previous stages of the CAP1616 process. There's more information about the CAP1616 process to date in Appendix A. If you'd like to go straight to details of the proposal itself, please see section 5.

CAP1616 Stage 1: Assess requirements

- A Statement of Need (SoN) was submitted to the CAA and then an assessment meeting was held. As part of the meeting the CAA agreed that it was appropriate for CDC to work through Stages 1 and 2 of the process together which meant the required outputs from both stages were developed and submitted for a CAA Gateway assessment at the same time. This combined approach helped keep the ACP on track for DSA's planned reopening, while remaining fully compliant with the CAP1616 requirements.

CAP1616 Stage 1: Design Principles

- 6 Design Principles (shown in Table 1) were developed through engagement with stakeholder representatives. Design Principles provide a framework against which design options can be developed and evaluated.

Table 1 DSA Design Principles

Design Principle	Description
DP1 Safety	The airspace change proposal must maintain a high standard of safety and should seek to enhance current levels of safety.
DP2 Policy	The airspace change proposal should not be inconsistent with relevant legislation, the CAA's airspace modernisation strategy, or Secretary of State and CAA policy and guidance.
DP3 Environment	The airspace change proposal should deliver the Government's key environmental objectives for air navigation as set out in the Government's Air Navigation Guidance 2017.
DP4 Technical	The ACP should consider impacts on air navigation service providers and other aviation stakeholders, such as nearby airport operators and other airspace users.
DP5 NPRs	This ACP should not change DSA's existing Noise Preferential Routes (NPRs) unless necessary to support safe operations or integration with other airspace structures.
DP6 Airspace Structure	Any airspace structure(s) should be the minimum size and lowest classification needed to achieve its aims, minimising disruption and maximising integration with other airspace users.

CAP1616 Stage 2: Options development

- 1 option (Option 1) was shared with stakeholder representatives for their feedback; this option proposed to re-instate the previous arrival and departure routes and the previous controlled airspace (CAS).
- Stakeholder representatives fed back on this option and subsequently 3 further options were developed. Table 2 describes these options and tracks their progress throughout Stage 2. For more information about Stage 2, please use the links to the documents within the table.
- The Stage 2B (IOA) shown in Table 2 notes a 'without airspace change scenario'. The 'without airspace change' scenario (sometimes called the 'do nothing') for DSA means no commercial operations (passenger and cargo arrivals and departures) and no controlled airspace.

Table 2 Option progression throughout Stage 2

With airspace change options	Stage 2A (pre-engagement) design principle Stage 2(A) Submission Document	Stage 2A (post engagement) design principle Stage 2(A) Submission Document	Stage 2A (DPE) Evaluation against each design principle Stage 2(A) Design Principle Evaluation	Stage 2B (IOA) Appraisal of noise, environmental, aviation and cost impacts compared to a 'without airspace change' scenario. Stage 2(B) Submission Document
Option 1 Reinstate the same controlled airspace structure and flight procedures that were in operation before the airport closed in 2022	Proposed ahead of stakeholder engagement	Feedback on this option used to develop other options below	Option was discontinued after the DPE as it did not meet a mandatory design principle	
Option 0 No Controlled Airspace		Developed following stakeholder feedback	Option 0 was discontinued ahead of the DPE as it did not meet the SoN	
Option 2 Refinement of Option 1 due stakeholder feedback or to align with CAA policy		Developed following stakeholder feedback	Assessed in the DPE and continued into IOA	Assessed in the IOA and continued into Stage 3
Option 3 Use of Radius-to-Fix to create less restrictive CAS structures and to aid future MTMA integration		Developed following stakeholder feedback	Assessed in the DPE and continued into IOA	Assessed in the IOA and continued into Stage 3

CAP1616 Stage 3: Consultation / engagement preparation

- Option 2 and option 3 were then refined based on more detailed airspace integration, preliminary Instrument Flight Procedure (IFP) design, and safety requirements.
- These two options were then taken to Full Options Appraisal (FOA). The FOA is a more detailed, mainly quantitative, version of the Initial Options Appraisal. It appraises the noise, environmental, aviation and cost impacts compared to a 'without airspace change' scenario.
- The FOA told us that on balance, Option 3 offered greater benefits in terms of safety, controlled airspace and integration with the wider airspace and neighbouring airports. There were mixed results in terms of noise and greenhouse gas emissions; for more details of these please see Appendix A.
- After careful consideration, Option 3 was chosen to be taken to this consultation,

For more information about the Full Options Appraisal, please see the document available at https://consultations.airspacechange.co.uk/doncaster-airport/dsa-airspace

CAP1616 Stage 3: Consultation

This brings us to where we are now – this Consultation.

We are consulting on our proposed design. We have chosen to bring one core option forward to consultation to be able to clearly present to consultees the very detailed information around how the proposal could benefit or impact compared to the 'without airspace change' scenario.

Your feedback will be used to help shape our proposal and develop the final design. For example, you may tell us that it would be advantageous to move a route slightly to avoid a noise sensitive area, or a boundary of Controlled Airspace would benefit from a lateral change to better suit a visual reference point. All your feedback will be considered by DSA, and we will document this process so that you can understand how your feedback has been considered as part of the final proposal. Your feedback will also help us to further understand the benefits and impacts of the proposal and where possible we will incorporate this into future options appraisals.

What if the design fundamentally changes following Consultation?

Depending on the scale of the changes, we may either undertake targeted engagement or, if the design changes are significant, we may carry out further consultation activities. As part of Stage 4 of the CAP1616 process, this will be agreed with the CAA ahead of any engagement/consultation activities taking place.

5. DSA's airspace change proposal

5.1 Current situation without the airspace change

Before we describe the plans for DSA's arrival and departure routes, we first need to explain the current situation.

At present, the airport is unlicensed, which means it cannot handle commercial flights with fare-paying passengers or undertake flying training involving larger aircraft. A licence from the CAA for these activities is currently being pursued by CDC.

Since the airport closed in 2022, no commercial flights have operated to or from the site. The only aviation activity currently taking place is a small number of movements by 2Excel Aviation, which were approved by CDC. These flights do not carry passengers or cargo and the airport operates on an unlicensed basis.

With the controlled airspace and supporting procedures removed after closure, the site currently has no active air traffic control service, no published arrival and departure routes, and no regulated airspace protection for arriving or departing aircraft.

Although the physical airport infrastructure remains, the airport is not operating as a commercial aerodrome. There are no scheduled flights, no regular business or general aviation activity and no cargo operations.

This is the baseline from which the ACP is being developed. Prospective airlines have requested the reinstatement of controlled airspace, flight procedures and air traffic control services to enable the safe and efficient return of regular commercial operations.

In preparation for this Stage 3 submission, we have used the latest data and information available about the plans to re-open DSA however it's important to note that this is a fast-paced project that is evolving as the plans for re-opening mature. As we progress through the CAP1616 airspace change process, we will update our information and assessments with the latest information available at the time.

5.2 DSA traffic forecasts

When assessing an airspace change, CAP1616 requires us to look at the forecast aircraft movements at the year of implementation and 10 years following implementation.

Table 3 shows the latest forecast number of Air Transport Movements (ATMs), the number of expected arrivals and departures, at year of implementation (2028) through to 10 years following implementation (2037). These arrivals and departures are either passenger or cargo flights.

This forecast sees DSA reaching its existing planning permission limit of 4,140 cargo ATMs in 2034. Any increase to this limit would require a separate planning process outside of the scope of this ACP.

Year	Total ATMs
2028 (Year of implementation)	1841
2029	3892
2030	6220
2031	8167
2032	10047
2033	10989
2034	11647
2035	11869
2036	12096
2037 (Year of implementation + 10 years)	12329

Table 3: DSA Traffic Forecast

5.3 DSA fleet mix

Alongside the forecast movement information, CAP1616 requires sponsors to forecast the future fleet mix at the airport.

Just like with the forecast movements, conversations between CDC and their future operators are constantly evolving. Table 4 sets out DSA's latest fleet mix forecast as of April 2026.

Aircraft type	Year of implementation	YoI +10 years
B788	0.5%	0.0%
B789	0.3%	1.0%
B737 Max	1.4%	1.7%
B737-800	8.3%	10.2%
A320-200	18.6%	0.0%
A320neo	5.3%	28.7%
A321-200	2.7%	0.0%
A321neo	13.7%	19.6%
A321 XLR	0.4%	0.5%
ATR72-600	1.3%	1.6%
B777-200ER	0.4%	0.0%
B777-300ER	0.3%	0.8%
E190	1.3%	1.6%
A380	0.0%	0.8%
Cargo - ATR72-600	9.1%	6.7%
Cargo - B737F	9.1%	6.7%
Cargo - A300F	9.1%	6.7%
Cargo - B747F	9.1%	6.7%
Cargo - B777	9.1%	6.7%

Table 4 Fleet mix percentages across the ACP assessment period

5.4 Modal split

For the purposes of assessment within the FOA, we have used runway direction data from 2022 which showed 62% of departures taking off on Runway 20 and 38% of departures taking off on Runway 02.

ⓘ When CDC first acquired DSA, our supporting consultants, Munich Airport International, presented a movement forecast based on passenger and freight activities commencing in 2026. Since then, there have been further developments to the forecast as the DSA project has matured in line with the year of implementation of the airspace change. Forecast numbers will ultimately be determined with a number of commercial deals which we are currently progressing with airlines and freight companies at pace. Given this evolving situation, the forecasts used within this Stage 3 submission are based on appropriate intelligence at this time and within the constraints of existing planning permissions. Forecasts may be updated ahead of Final Options Appraisal should more firm information come to light this year.

ⓘ In 2022 there were 7,966 ATMs at DSA. 2019 was busiest year recorded with 11,569 ATMs

6. Proposed Instrument Flight Procedures (IFPs)

6.1 Standard Instrument Departures (SIDs)

DSA are proposing to introduce the following Standard Instrument Departure (SID) procedures:

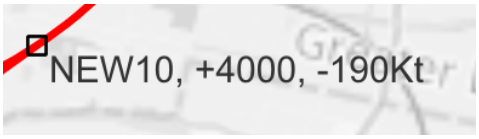
Table 5 Overview of proposed departure procedures

Temporary Procedure name	PBN specification (if applicable)
20 Upton SID (departures to the West)	RNP1+RF
20 ROGAG SID (departures to the East)	RNAV1
02 Upton SID (departures to the West)	RNP1+RF
20 ROGAG SID (departures to the East)	RNP1+RF
20 Omni-directional departure	n/a
02 Omni-directional departure	n/a

The core proposed departure routes are RNAV1 and RNP1+RF Standard Instrument Departures (SIDs). RNP1+RF is an advanced navigation specification under the PBN umbrella. The suffix '1' denotes a requirement that aircraft can navigate to with 1nm of the centreline 95% or more of the time, with additional self-monitoring criteria. In practice the accuracy is much greater than this. The RF means Radius to Fix, where airspace designers can set extremely specific curved paths to a greater accuracy than RNAV1.

The use of RNP1+RF specification has a number of benefits in terms of integrating DSA traffic into the wider MTMA network, reducing the size of CAS required, and also aiming to avoid overflight of populated areas..

Figure 2 and Figure 3 show indicative procedure information. At each waypoint label, the text indicates any at / above / below restrictions; with a '+' indicating an above restriction, a '-'indicating a below restriction, and only the altitude stated for an 'at' restriction. Where applicable, a speed restriction on the SIDs is also shown. For example, the following waypoint 'NEW10' indicates aircraft must be above 4,000ft at the waypoint, with a speed restriction of not above 190Kts. In brackets, the climb gradient to the waypoint is shown. For altitude constraints, the climb gradient is fixed but for Flight Level constraints, the height above sea level changes depending on pressure. For example, when the QNH is very high, FL90 is higher above the ground than when the QNH is very low. For Flight Level restrictions we show two climb gradients; one for standard atmospheric pressure (1013 hPa) and one labelled "VHP" where we have assumed another 1000ft climb is required to reach the FL restriction. e.g for a FL90 restriction, the CG required to climb to 10,000ft AMSL. Typically in the UK, we see VHP around 6 days per year. We haven't provided gradients for days of very low pressure, for example when FL90 would only be 8000ft AMSL.



ⓘ In preparation for Stage 3, DSA have prepared draft procedure charts. The CAA do not permit sponsors to publish draft charts, even if co-ordinates are redacted, however any airlines wishing to see the draft charts, please get in touch via DSA-airspaceconsultation@flydsa.com

ⓘ The previous SIDs promulgated at DSA had low initial speeds (for example -185Kts). DSA are still requiring similar speeds, in some cases not above 185Kts. This is for controlled airspace containment purposes as well as to achieve avoidance of population.

Within the feedback form at https://consultations.airspacechange.co.uk/doncaster-airport/dsa-airspace we are specifically asking airlines for feedback on whether there are any operational incompatibilities with these proposed speed restrictions.

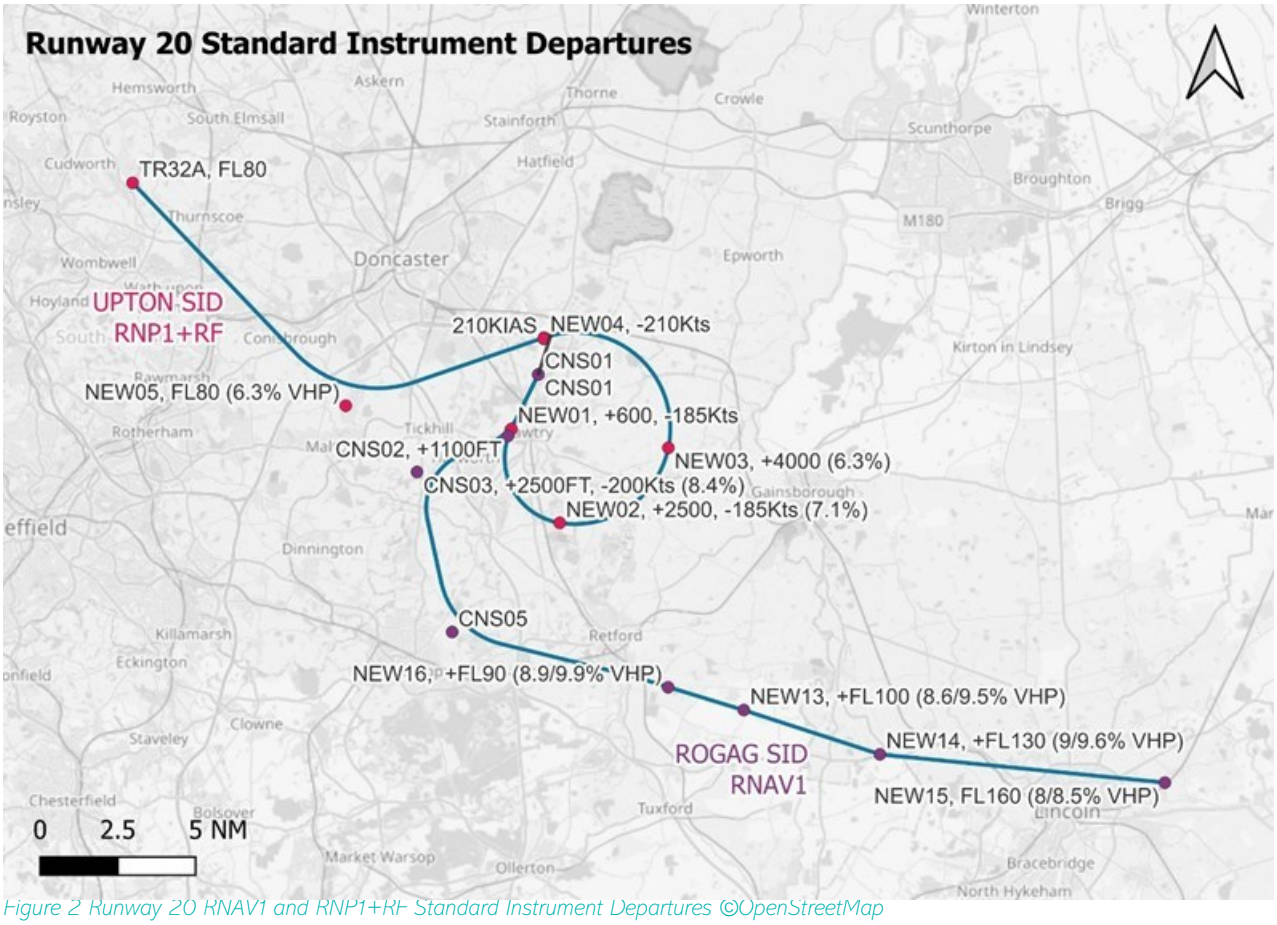


Figure 2 Runway 20 RNAV1 and RNP1+RF Standard Instrument Departures ©OpenStreetMap

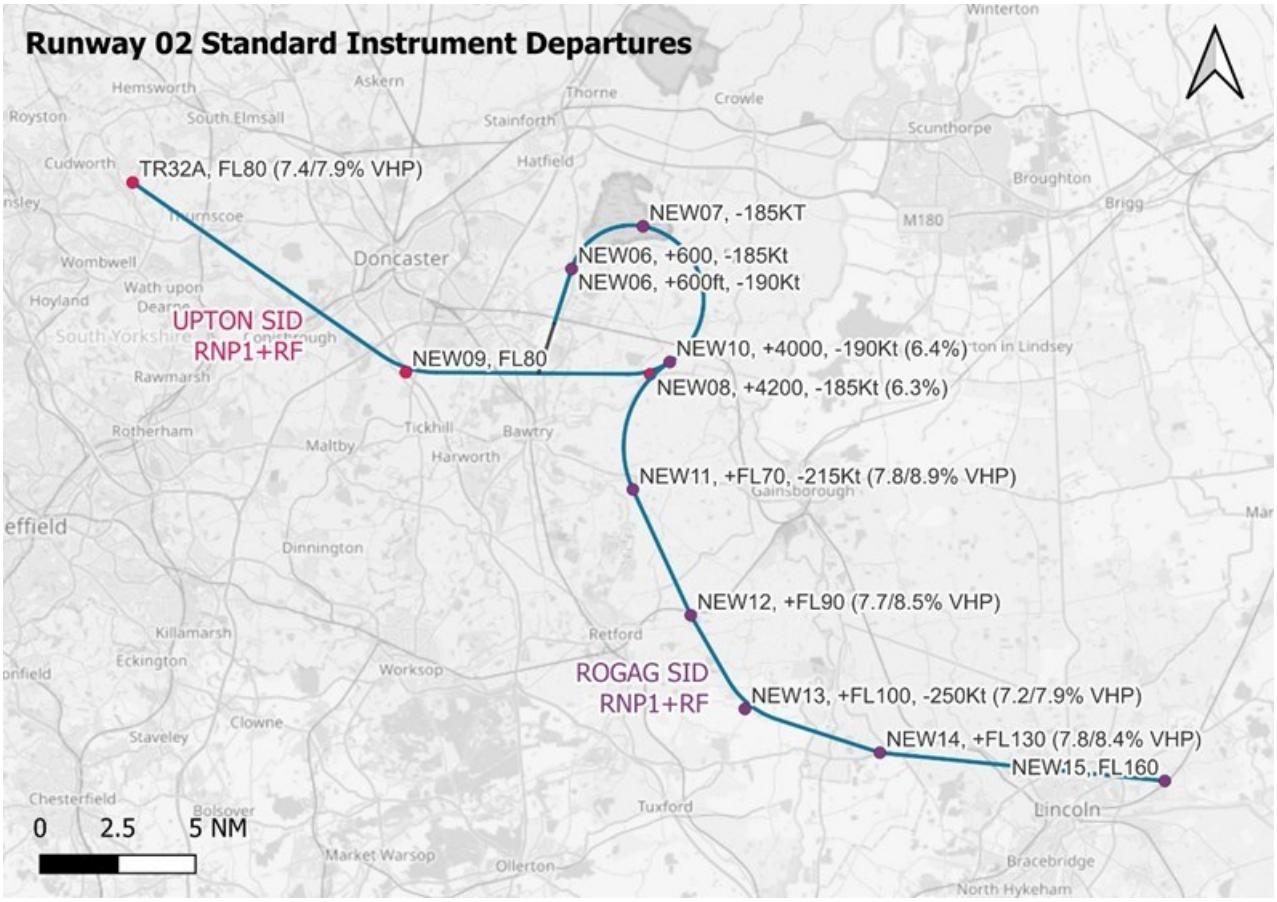


Figure 3 Runway 02 RNP1+RF Standard Instrument Departures ©OpenStreetMap

As part of the ongoing development of the designs, the exact position of ROGAG and UPTON may differ marginally compared to today. Beyond UPTON and ROGAG the NATS NERL airspace network is not changing as a result of this ACP – aircraft will be directed by NERL to join the network and routed onwards towards their destinations.

Omni directional departures

Aircraft will be issued an Omni-Directional Departures together with appropriate ATC instructions to access the Terminal and Network ATM systems if they are either:

- non-RNP1+RF capable;
- non-GNSS equipped; or
- not capable of complying with the demands (climb gradients) of the SID procedures.

An example of an Omni-directional departure is 'Climb straight ahead to 3500ft AMSL then turn on track in accordance with ATC clearance. PDG 3.3%'. The omni-directional departure procedures will be fully defined at Stage 4 as part of the IFP package.

Noise Abatement Procedures and Noise Preferential Routes (NPRs)

The RNP1+RF centrelines are contained within DSA's existing defined Noise Preferential Routes (NPRs). Aircraft departing on a SID shall remain within 0.5nm either side of the SID centreline until above 3000ft unless needing to deviate for safety reasons. An exception will be applied for tactical vectoring of aircraft under <=5,700kg MTOW.

Transition altitude

The transition altitude at DSA will be 5,000ft which is aligned with the surrounding MTMA airspace.

Expected route usage

Table 6 provides data about the number of scheduled departures expected on an average day and the number of scheduled arrivals expected on a busy day. For the average day, we have applied the same runway direction split as used in the FOA, which is 62% Runway 20 and 38% Runway 02.

ⓘ Forecast numbers will ultimately be determined with a number of commercial deals which we are currently progressing with airlines and freight companies at pace. Given this evolving situation, the forecasts used within this Stage 3 submission are based on appropriate intelligence at this time and within the constraints of existing planning permissions. Forecasts may be updated at the next stage of the process should more firm information come to light this year.

Table 6 Forecast route usage in 2028 (Note numbers have been rounded)

Forecast route usage	Percentage of the year with no movements (Taking into account runway direction varies depending on wind direction)	Percentage of overall departures on average (Based on 62% Runway 20 and 38% Runway 02 runway direction data from 2022)	Average number of daily departure movements (Based on 62% Runway 20 and 38% Runway 02 runway direction data from 2022)	Busy summer day runway 02 departure movements (All departures use runway 02 for one full day)	Busy summer day runway 20 departure movements (All departures use runway 20 for one full day)
2028					
Runway 20 UPTON PBN departures	30-40%	24%	1	0	1
Runway 20 ROGAG PBN departures	30-40%	26%	1	0	1
Runway 20 UPTON vectored departures	30-40%	6%	Less than 1	0	Less than 1
Runway 20 ROGAG vectored departures	30-40%	6%	Less than 1	0	Less than 1
Runway 02 UPTON PBN departures	60-70%	15%	Less than 1	1	0
Runway 02 ROGAG PBN departures	60-70%	15%	Less than 1	1	0
Runway 02 UPTON vectored departures	60-70%	4%	Less than 1	Less than 1	0

Runway 02 ROGAG vectored departures	60-70%	4%	Less than 1	Less than 1	0
2037					
Runway 20 UPTON PBN departures	30-40%	30%	5	0	13
Runway 20 ROGAG PBN departures	30-40%	31%	5	0	14
Runway 20 UPTON vectored departures	30-40%	Less than 1%	Less than 1	0	Less than 1
Runway 20 ROGAG vectored departures	30-40%	Less than 1%	Less than 1	0	Less than 1
Runway 02 UPTON PBN departures	60-70%	18%	3	13	0
Runway 02 ROGAG PBN departures	60-70%	19%	3	14	0
Runway 02 UPTON vectored departures	60-70%	Less than 1%	Less than 1	Less than 1	0
Runway 02 ROGAG vectored departures	60-70%	Less than 1%	Less than 1	Less than 1	0

6.2 Arrival procedures

DSA is proposing to introduce the following Instrument Approach Procedures (IAPs) and arrival transitions:

Table 7 Overview of proposed arrival procedures

Procedure name	PBN specification (if applicable)
20 ILS IAP	n/a
02 ILS IAP	n/a
20 RNP IAP	RNP APCH 0.3
02 RNP IAP	RNP APCH 0.3
20 Arrival Transition Procedure (west of DSA)	RNP1 +RF
20 Arrival Transition Procedure (east of DSA)	RNP1 +RF
02 Arrival Transition Procedure	RNP1 +RF

It is expected that ATC would commonly vector arrivals onto the arrival transitions which then guide aircraft from c.FL60/5000ft to join final approach. An Instrument Landing System (ILS) Instrument Approach Procedure (IAP) would be available for both runways or, alternatively there will also be RNP Approach procedures available. Any aircraft unable to fly the PBN procedures will be vectored onto the ILS or RNP approach or make a visual approach. For Runway 02, the Approach Transition will only be available for ILS approaches. Aircraft requesting an RNP Approach will be vectored to the IF.

Figure 4 and Figure 5 show indicative procedure information for proposed IAPs and arrival transitions. At each waypoint label, the text indicates any at / above / below restrictions; with a '+' indicating an above restriction, a '-' indicating a below restriction, and only the altitude stated for an 'at' restriction. Where applicable, a speed restriction is also shown.

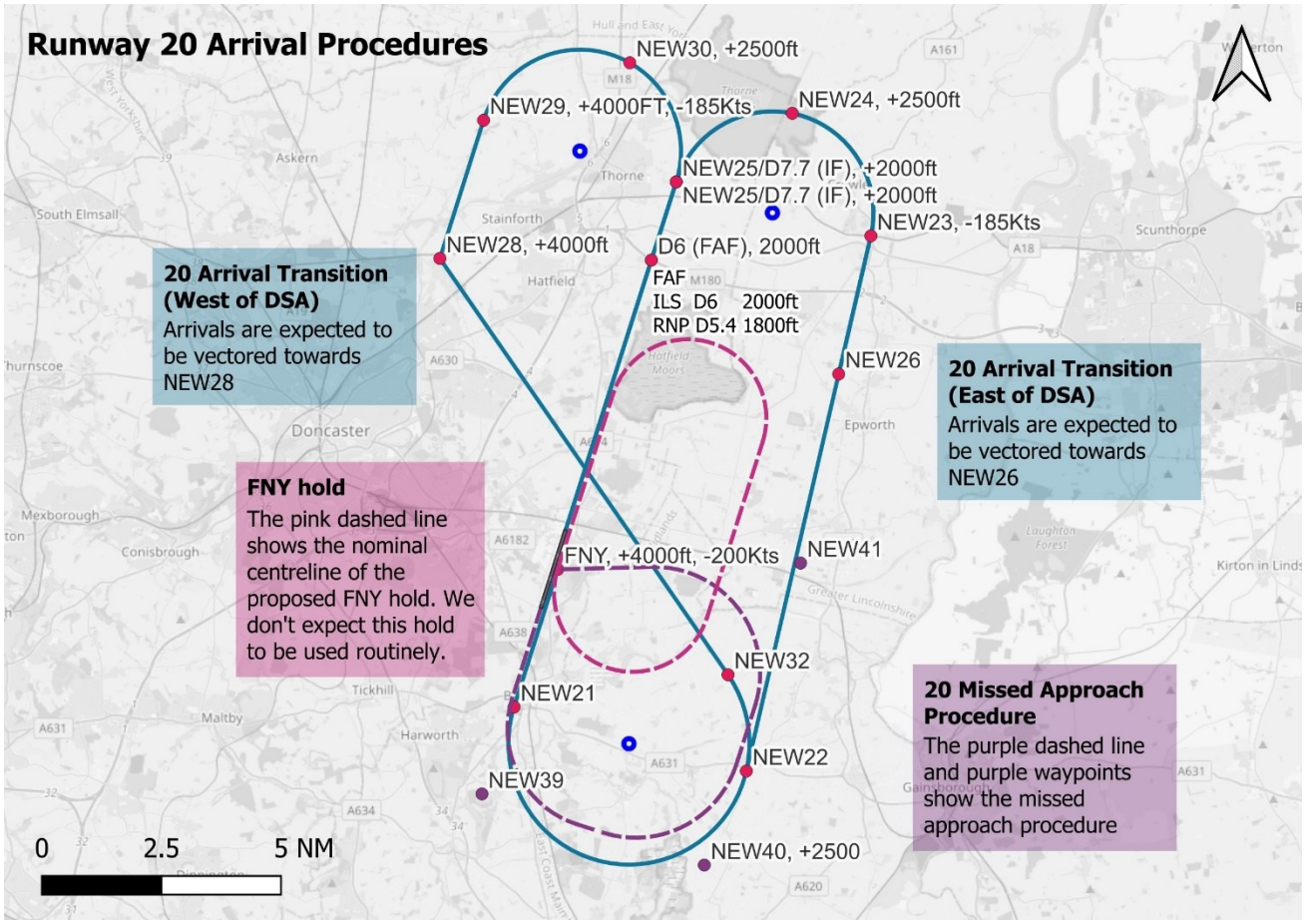


Figure 4 Proposed Runway 20RNP1+RF arrival transitions, RNP approach, ILS approach, hold and Missed Approach ©OpenStreetMap

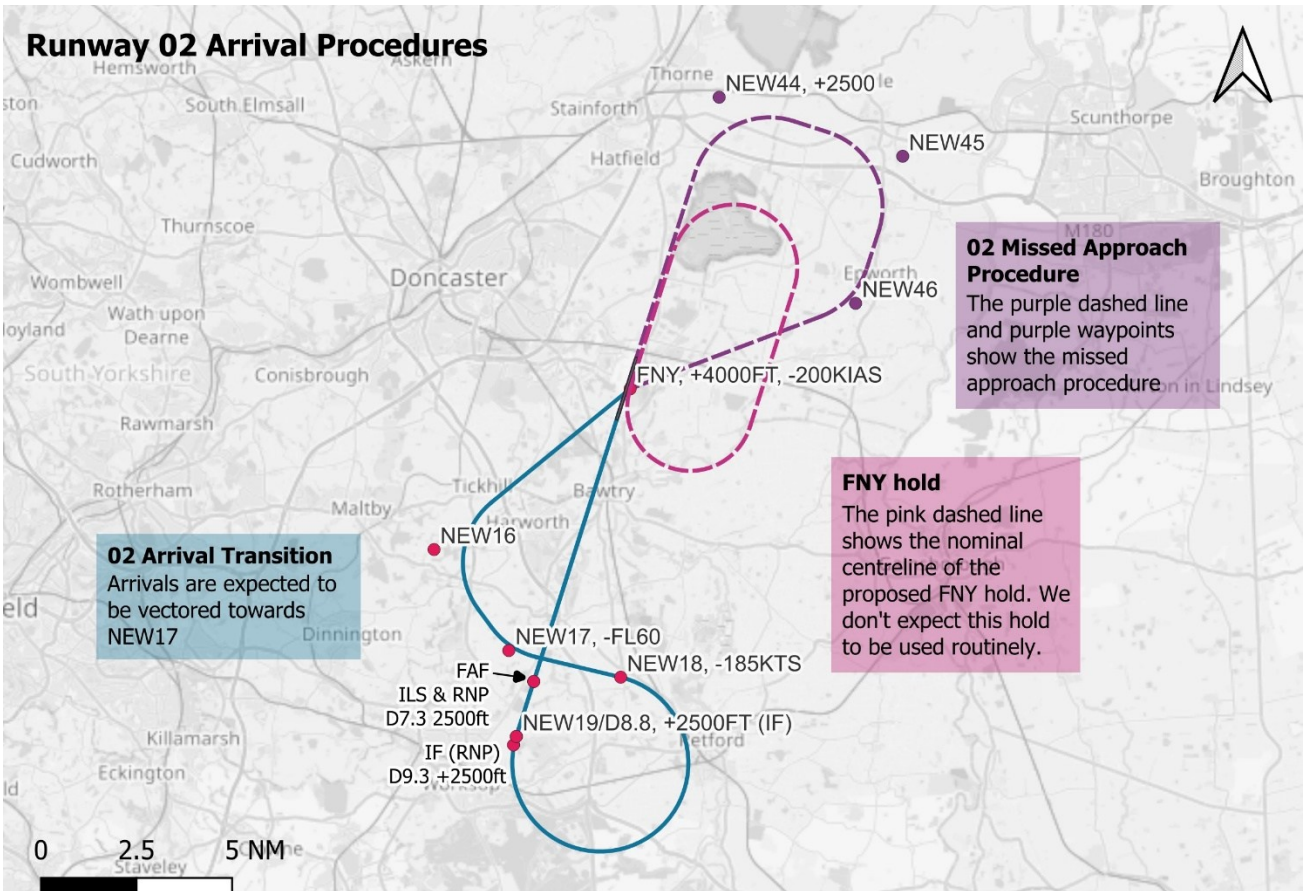


Figure 5 Proposed Runway 02 RNP1+RF arrival transition, RNP1 approach, ILS approach, hold, and MAP procedure ©OpenStreetMap

Missed Approaches

The proposed Missed Approach Procedures are shown on Figure 4 and Figure 5 above and the descriptions are within Table 8 below.

Table 8 Proposed Missed Approach descriptions

Runway	ILS	RNP
20	Continuous climb to 4000, straight ahead to 2500, then turn left to NDB(L) FNY at 4000 or as directed.	Continuous climb to 4000 straight ahead to NEW39, then turn left to NEW40 at or above 2500, NEW41 and FNY to join the hold or as directed.
02	Continuous climb to 4000, straight ahead to 2500, then turn right to NDB(L) FNY at 4000 or as directed.	Continuous climb to 4000, straight ahead to NEW44 at or above 2500, then turn right to NEW45, NEW46 and FNY to join the hold or as directed.

GNSS resilience

Air Navigation service providers are required to ensure they have sufficient procedures to cater for GNSS outage and/or interference. The DSA proposals make provision for GNSS outages by providing omni-directional departure procedures and the provision of ILS for arrivals with an NDB for holding, when required.

STARs

NERL have advised that it is likely no STARs will be promulgated at the point of implementation. In this instance, operators will flight plan in accordance with the Standard Route Document to the FNY where Instrument Approach procedures will commence. However operators can expect positioning onto the PBN arrival transitions by ATC prior to reaching the FNY.

It is expected that STARs will eventually be promulgated as part of the future modernised NATS NERL MTMA airspace; this would form part of the NERL ACP ACP-2019-77.

Expected route usage

Table 9 provides data about the number of scheduled arrivals expected on an average day and the number of scheduled arrivals expected on a busy day. For the average day, we have applied the same runway direction split as used in the FOA, which is 62% Runway 20 and 38% Runway 02.

ⓘ Forecast numbers will ultimately be determined with a number of commercial deals which we are currently progressing with airlines and freight companies at pace. Given this evolving situation, the forecasts used within this Stage 3 submission are based on appropriate intelligence at this time and within the constraints of existing planning permissions. Forecasts may be updated at the next stage of the process should more firm information come to light this year.

Table 9 Forecast route usage in 2028 and 3027 (Note numbers have been rounded)

	Percentage of the year with no movements (Taking into account runway direction varies depending on wind direction)	Percentage of overall arrivals on average (Based on 62% Runway 20 and 38% Runway 02 runway direction data from 2022)	Average number of daily arrival movements (Based on 62% Runway 20 and 38% Runway 02 runway direction data from 2022)	Busy summer runway 02 day arrival movements (All arrivals use runway 02)	Busy summer runway 20 day arrival movements (All arrivals use runway 20)
2028					
Runway 20 PBN arrivals west of DSA	30-40%	32%	1	0	2
Runway 20 PBN arrivals east of DSA	30-40%	18%	1	0	1
Runway 20 vectored arrivals west of DSA	30-40%	8%	Less than 1	0	Less than 1
Runway 20 vectored arrivals east of DSA	30-40%	5%	Less than 1	0	Less than 1
Runway 02 PBN arrivals	60-70%	30%	1	3	0
Runway 02 vectored arrivals	60-70%	8%	Less than 1	Less than 1	0
2037					
Runway 20 PBN arrivals west of DSA	30-40%	37%	6	0	17
Runway 20 PBN arrivals east of DSA	30-40%	22%	4	0	10
Runway 20 vectored arrivals west of DSA	30-40%	2%	Less than 1	0	Less than 1
Runway 20 vectored arrivals east of DSA	30-40%	1%	Less than 1	0	Less than 1
Runway 02 arrivals	60-70%	36%	6	26	0
Runway 02 vectored arrivals	60-70%	2%	Less than 1	1	0

At this time, there are no plans to have flying schools or any Doncaster-based General Aviation operators however some local airspace users may wish to make use of the arrival procedures for training and these will be accommodated wherever possible by ATC. The MoD have also expressed an initial interest in this. Due to the nature of these flights, they are not classified as an Air Transport Movement (ATM) and therefore they are not included in Table 9 above or within the forecast table 3 in section 5.2. This is due to the definition of an ATM and, because of the unscheduled nature of these flights, quantifiable forecasts are not available.

Holding

DSA is not expecting to routinely need to hold aircraft before they undertake an approach to land, however a hold overhead the airport will be available. This is more likely to be used in poor visibility conditions such as fog. The hold could also be used if an aircraft wishes to fly the full instrument approach procedure for training/practice purposes or during periods of runway unavailability.

There are no records of the frequency of use of the overhold (FNY) hold when Doncaster Airport was previously operational. However, from analysis of radar data from Summer 2022, there were 4 holding patterns flown in the FNY although this was from a single arriving flight. It is therefore expected that use of the FNY hold will be a rare event.

In the event that radar is unavailable, Doncaster Air Traffic Control may be required to operate procedurally for that period of time. This means that arrivals would not be vectored to join a waypoint on the PBN arrival routes, and instead they would be required to fly to the FNY hold and follow the full arrival procedure to landing. In this case, most aircraft will fly the full PBN arrival procedure as shown in figure 4 and figure 5. Non RF-equipped aircraft would fly the conventional arrival procedures shown in Figure 6 below.

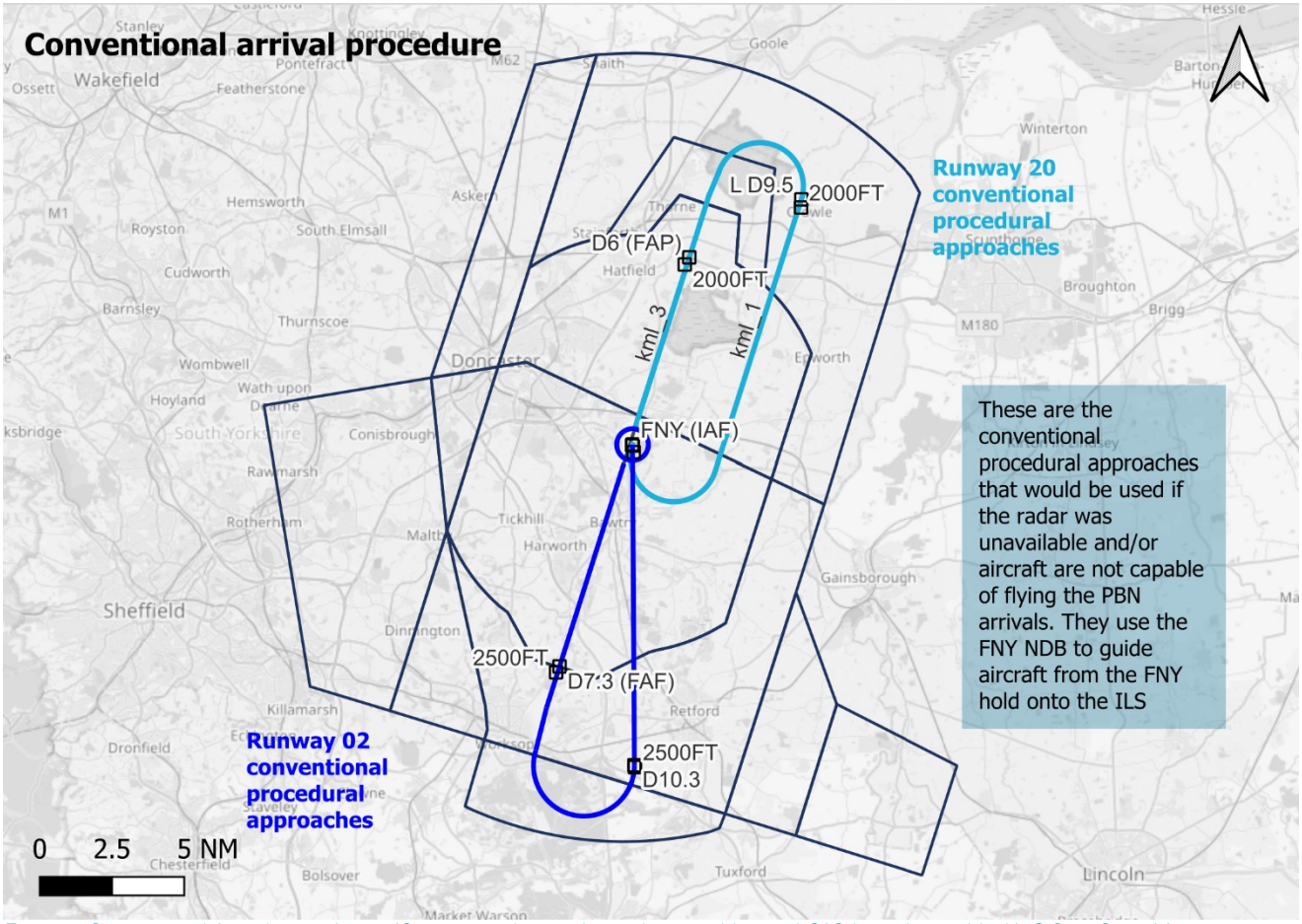


Figure 6 Conventional Arrival procedures. (Conventional procedures shown in blue and CAS boundary in black) ©OpenStreetMap

6.3 Noise Abatement Procedures

DSA has various Noise Abatement procedures that form part of the planning agreement. Draft AIP details of these are shown in Appendix B. A full draft AIP section will be developed as part of Stage 4 of the ACP.

6.4 Navigation Aids

Navigation aid availability

DSA is proposing to introduce RNAV1 and RNP1+RF satellite-based procedures which are not dependent on conventional ground-based navigation aids unless DME/DME is being used for the RNAV1 SIDs[3]. The ILS will however be available for arrivals to both runway 20 and runway 02. The NDB will also be reinstated and used for some of the procedures described in the sections above, however DSA are not proposing to re-introduce NDB Approaches.

6.5 Interdependencies with wider airspace

Airspace Modernisation Strategy and the Masterplan

The Airspace Modernisation Strategy (AMS) was first published in 2018 and set out the 'ends, ways and means', of modernising airspace through a series of 'delivery elements' that will update its design technology, and operations.

As covered in the Statement of Need, in 2018, DSA successfully implemented PBN procedures, becoming an early adopter of PBN concepts and aligning its procedures with the UK AMS and ICAO global navigation plan. More information on that airspace change can be found here.

The AMS was updated in 2023 and split into 3 parts, published separately. The AMS does not propose specific airspace change, but a key deliverable is a masterplan of airspace changes that will be necessary for modernisation.

Following the publication of the AMS, the Airspace Change Organising Group was established to co-ordinate the national programme. ACOG developed the Masterplan, a single coordinated implementation plan for airspace changes in the UK up to 2040.

The Masterplan is now on Iteration 3 and is being developed separately for each region of the UK. The masterplan region for the airports in the vicinity of Doncaster Sheffield Airport is referred to as the Manchester Terminal Manoeuvring Area cluster and includes Manchester Airport, Liverpool Airport, East Midlands Airport, Leeds Bradford Airport (LBA), Birmingham Airport and NERL.

Doncaster Sheffield Airport is not part of the MTMA Masterplan, and therefore the masterplan does not articulate any dependencies with other airports in the cluster. The following subsections therefore look at potential interdependencies with the wider airspace based on current operations and potentially in the future.

Interdependencies with current airspace

Owing to the smaller volume of CAS to the NW of DSA (compared to the airspace in 2022) we expect that routine co-ordination between LBA and DSA will not be required as LBA arrivals will not need to descend through DSA's airspace. The positioning of DSA's UPTON SIDs to the south of DSA will significantly help to reduce conflictions.

DSA UPTON departures could be vertically separated from LBA southbound departures enabling free-flow for both airports but this is to be confirmed as part of the ATC procedure development ahead of implementation.

The Ministry of Defence (MOD) have noted that military traffic within the area frequently routes GOLES-Humberside and so having the DSA SIDs to the south of the airport will help to reduce conflictions and enable ATC to provide military aircraft with routine clearances through the airspace on that route.

ⓘ Within the feedback form we are specifically asking for feedback on the proposed Navigation Aids at DSA.

[3] Low level DME/DME coverage has not yet been tested

Interdependencies with future MTMA airspace

The future MTMA airspace is expected to be implemented in 2030 and therefore it will not have been deployed at the point of DSA airspace implementation (Year 1 - 2028) however it could be available from Year 3 onwards. The MTMA airports and NERL are currently in Stage 3 of the CAP1616 process, but they are not yet at the stage of public consultation and therefore specific design information is limited.

DSA's use of RNP1 and RNP1+RF procedures is likely to be a benefit when considering the integration of DSA procedures into the wider MTMA airspace. This is because the route separation distance requirements for an RNP+RF procedure are reduced compared to RNAV1.

In addition to this, the systemisation of both arrivals and departures, along with locating the routes to the south and east of DSA (where possible to do so), means that traffic is located away from the main areas where interactions between Leeds Bradford Airport and DSA traffic are likely to occur. At this stage, LBA have only very high level 'swathe' designs however there will more opportunity to understand how LBA traffic and Doncaster traffic could integrate as the MTMA designs mature. DSA are willing to facilitate further change to their routes, procedures and airspace if required for an optimised future MTMA design.

With regards to the NERL proposal which looks at the airspace above 7,000ft, NERL have indicated that there are currently considerations for a hold for LBA arrivals somewhere to the north of DSA. If this transpires, the use of RNP1+RF along with the configuration of the runway 02 departure routes to wrap around to the south of DSA will mean that it is easier to separate these routes from a hold and also free up airspace for LBA arrivals to descend free from confliction with DSA traffic and without LBA requiring clearance through any of DSA's airspace.

7. Proposed Controlled Airspace (CAS)

7.1 What is Controlled Airspace (CAS)

What is Controlled Airspace (CAS)?

Controlled Airspace (CAS) is airspace of defined dimensions within which Air Traffic Control (ATC) service is provided in accordance with the airspace classification. Its purpose is to create a known air traffic environment to achieve the objectives of the ATC service to prevent collisions between aircraft and to expedite and maintain an orderly flow of air traffic.

Different types of airspace are classified by a lettering system specified by ICAO. Class A to E airspace is known as "Controlled Airspace"; Class G airspace is "Uncontrolled Airspace". The airspace classification type establishes the extent to which airspace users must comply with various regulations (embracing, for example, aircraft equipage, pilot qualification and applicable Rules of the Air) and the types of air traffic services that are provided in the airspace.

In the UK, CAS is established primarily to protect commercial air transport passenger flights from other flights and is where ATC needs to have positive control over aircraft flying in the airspace in order to maintain safe separation between them. Uncontrolled Airspace is airspace where aircraft are able to fly freely without being constrained by instructions from ATC, unless they request such a service.

CAS contains the network of corridors (known as Airways or the Route Network) which link the busy airspace surrounding the major airports. The CAS around airports is designated into variously as Control Zones (CTR), from the ground upwards to a specified upper limit and Control Areas (CTA), from a specified base level to a specified upper limit. Above these are Airways and the network airspace. An illustrative diagram of CAS is shown in Figure 7.

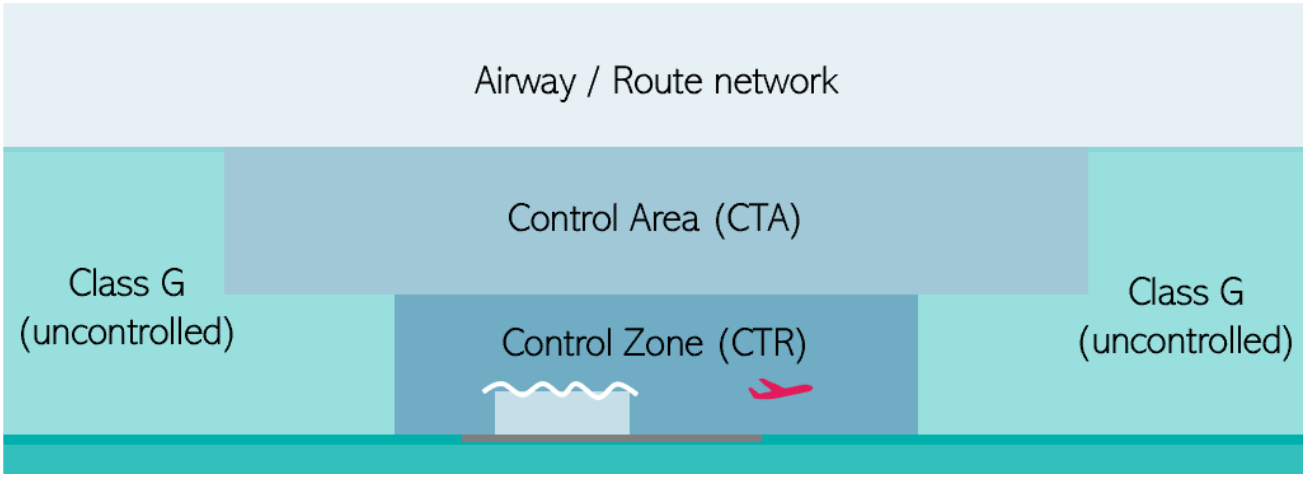


Figure 7 Illustrative diagram of CAS

There are different classes of Controlled airspace. Table 10 explains the different classes of airspace, the flight rules associated with the airspace, aircraft requirements and separation standards.

Table 10 Classes of Airspace

Class	Flight Rules	Aircraft Requirements	ATC separation Requirements
A	Instrument Flight Rules (IFR) only	Air Traffic Control (ATC) clearance before entry. Aircraft must comply with ATC instructions.	ATC separate all Aircraft from each other.
C	IFR and Visual Flight Rules (VFR)	ATC clearance before entry. Aircraft must comply with ATC instructions.	ATC separate IFR flights from other IFR and VFR flights. ATC separate VFR flights from IFR flights, And ATC pass Traffic Information (TI) to VFR flights on other VFR flights.
D	IFR, Special VFR and VFR	ATC clearance before entry. Aircraft must comply with ATC instructions.	ATC separate IFR / SVFR flights from other IFR / SVFR flights ATC pass TI to IFR flights and SVFR flights on VFR flights and give traffic avoidance advice when requested. ATC pass TI to VFR flights on all other flights and provide traffic avoidance advice when requested.
E	IFR and VFR	IFR flights to obtain ATC clearance before entry and comply with ATC instructions. VFR flights do not require clearance or to speak to ATC.	ATC separate IFR flights from other IFR flights. ATC provide IFR flights, wherever practicable, TI and if requested by the pilot provide traffic avoidance advice on participating and non-participating VFR flights. ATC provide participating VFR flights FIS in accordance with CAP774.
E+ TMZ / RMZ[4]	IFR and VFR	IFR flights to obtain ATC clearance before entry and comply with ATC instructions. VFR flights do not require clearance however must be equipped with a Transponder and Radio and establish two-way communication prior to entry.	ATC separate IFR flights from other IFR flights. ATC provide IFR flights, wherever practicable, TI and if requested by the pilot provide traffic avoidance advice on participating and non-participating VFR flights. ATC provide participating VFR flights FIS in accordance with http://www.caa.co.uk/cap7743 CAP774.
G	IFR and VFR	None.	None – separation of aircraft is the responsibility of the pilot.

7.2 Developing CAS for DSA

The case for CAS

As part of our Stage 2 submission, some stakeholders suggested that DSA did not require CAS and therefore we provided a section within our Stage 2 submission documents which outlined the justification for the establishment of Controlled Airspace at DSA. To read more about this, please see Appendix D of the Full Options Appraisal document.

Developing CAS for DSA

In the UK, the guiding principle in establishing a volume of CAS is that Sponsors must seek to ensure that the amount of Controlled Airspace is the minimum required to maintain a high standard of air safety and, subject to overriding national security or defence requirements, that the needs of all airspace users is reflected on an

[4] E+ is not an official classification but is a term frequently used for Class E airspace which is supported by a TMZ and/or RMZ.

equitable basis. This has led to the adoption that the least restrictive classifications of airspace should be the norm in UK airspace design. This is reflected in DSA's design principles where DP6 says *'Any airspace structure(s) should be of the minimum size and lowest classification needed to achieve its aims to minimise disruption to, and maximise integration with, other airspace users'.*

In developing DSA's proposed CAS, there are several key CAA documents that all feed in to determining an appropriate volume of airspace. Note the previous CAS arrangements promulgated by DSA pre-2022 may pre-date many of these policy documents:

- Policy for the Design of Controlled Airspace Structures, 11 Aug 2022
- Policy for the Classification of UK Airspace,12 Oct 2023
- CAP 778 Policy and Guidance for the Design and Operation of Departure Procedures in UK Airspace, 1 Nov 2012
- Performance-Based Navigation (PBN): Enhanced Route Spacing Guidance CAP1385, Dec 2022

CAS in the vicinity of an aerodrome consists of Control Zone (CTR), Control Areas (CTA) and may include Terminal Control Areas (TMA). The CAS volumes and classifications proposed by our ACP are designed to meet all aspects of CAA policy.

The following, non-exhaustive, list summarises some of the key requirements:

- CAS containment that provides sufficient airspace to contain instrument approach procedures (including holding and missed approach procedures) and the area in which aircraft receive vectoring instructions to join the final approach track.
- The term 'sufficient airspace' is considered to mean that the volume of CAS should safely contain the primary areas of these procedures and permit compliance with Air Traffic Management procedures for the tactical handling of flights to achieve a safe and efficient volume of traffic.
- Where competing airspace requirements preclude containment by primary area, containment of the nominal track defined by the procedures may be less but should not be less than 3nm from the lateral limit of CAS.
- SIDs and approach transitions should remain wholly within CAS where the nominal track should not be less than 2nm from the edge of CAS on straight or RF legs or 3nm on non-straight legs.
- Vertical containment that ensures the flight profile remains at least 500ft above the lower limit of CAS.
- Sponsors may present proposals for a CAS design that results in less lateral containment than this, subject to an acceptable safety assessment.
- The lower limit of a CTA shall not be less than 700ft AGL.
- Where practicable the lower limit of a CTR joining a CTR should be no lower than 1,500ft AGL. The use of an expanded CTR to permit higher CTA base levels is preferable.
- Those portions of airspace where an Air Traffic Control Service will be provided to VFR flights shall be Class B, C or D airspace. Class D is the minimum classification notified where a known traffic environment is necessary in both Visual Meteorological Conditions (VMC) and Instrument Meteorological Conditions (IMC). A CTR cannot have a classification lower than Class D, However, in CTAs where airspace classes A-D cannot be justified, Class E may be notified. The classification depends on consideration of multiple factors including the type and density of air traffic, specifically, the presence of commercial air transport flights involving the movement of passengers on a scheduled journey, the number and frequency of IFR flights and the complexity.
- Instrument Flight Procedure (IFP) design criteria, Flight Management Computer (FMC) coding and the 5,000ft Transition Altitude (TA) limit where waypoints can be placed and what/where altitude/Flight Level restrictions can be assigned.

In addition to the CAA's requirements, we have also considered local requirements, such as how the wider airspace is utilised (For example, how ATC control traffic into LBA, and local ATZs such as Retford Gamston).

7.3 DSA's Controlled Airspace Proposal

Figure 8 shows the CAS proposal for DSA including the proposed CTR and CTAs, and other airspace information such as Visual Reference Points (VRPs) and VFR lanes. Figure 9 shows the proposed arrival and departure routes overlaid with the proposed CAS. Figure 10 shows the proposed CAS overlaid on a VFR chart.

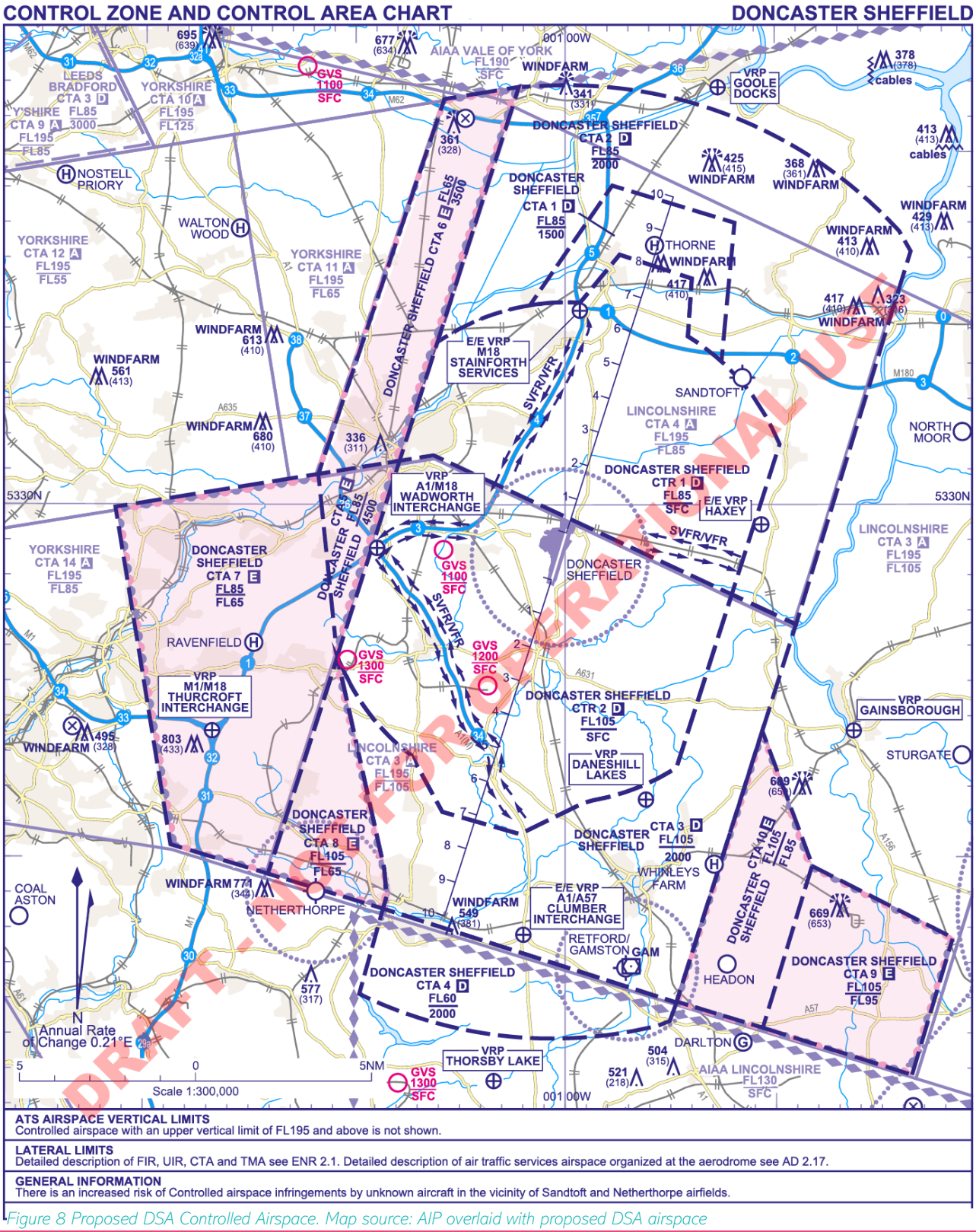


Figure 8 Proposed DSA Controlled Airspace. Map source: AIP overlaid with proposed DSA airspace

ⓘ Any stakeholders wishing to see a .kml map file of the CAS boundaries, please get in touch via: DSA-airspaceconsultation@flydsa.com

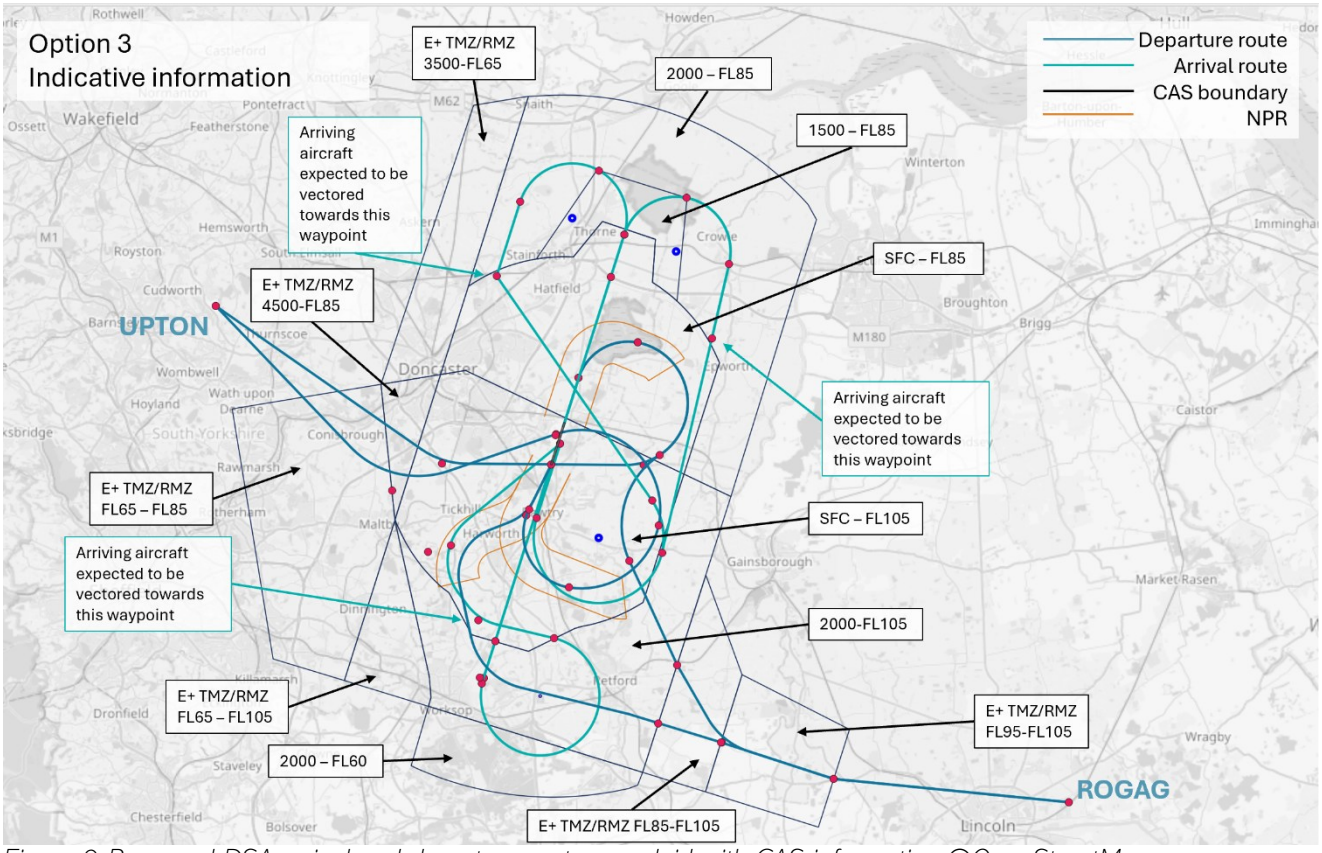


Figure 9 Proposed DSA arrival and departure routes overlaid with CAS information ©OpenStreetMap

Table 11 provides details of the volume of CAS associated with what is shown in Figure 9.

Table 11 Proposed CAS volumes

Proposed CAS volumes	Class	Lower	Upper	Volume (NM³)
DONCASTER SHEFFIELD CTR 1	D	SFC	FL85	82.5
DONCASTER SHEFFIELD CTR 2	D	SFC	FL105	135.4
DONCASTER SHEFFIELD CTA 1	D	1500ft	FL85	13.6
DONCASTER SHEFFIELD CTA 2	D	2000	FL85	90.9
DONCASTER SHEFFIELD CTA 3	D	2000	FL105	76.8
DONCASTER SHEFFIELD CTA 4	D	2000	FL60	11.4
DONCASTER SHEFFIELD CTA 5	E+	4500	FL85	4.0
DONCASTER SHEFFIELD CTA 6	E+	3500	FL65	11.0
DONCASTER SHEFFIELD CTA 7	E+	FL65	FL85	16.9
DONCASTER SHEFFIELD CTA 8	E+	FL65	FL105	7.8
DONCASTER SHEFFIELD CTA 9	E+	FL95	FL105	3.3
DONCASTER SHEFFIELD CTA 10	E+	FL85	FL105	5.3
Total volume of Class D				410.6
Total volume of Class E+				48.3
Total volume				458.9

CTA's 5 - 10 use Class E+ airspace rather than Class D which means pilots do not need to ask for a clearance if they are flying VFR and are suitably equipped with the correct radio and transponder. Class E+ airspace also allows VFR pilots maximum autonomy as they can be in receipt of no service, a Basic Service or a Traffic Service whereas in Class D airspace they would be in receipt of a Radar Control Service. Furthermore, it overcomes the issues articulated in CAP3096 where VFR inside Class D airspace must be in receipt of an ATC service with two-way communications and provision of traffic information by ATC and reduces the need for Special Use Airspace for those operators who would have been in need of regular access through a Letter of Agreement, should these volumes be Class D.

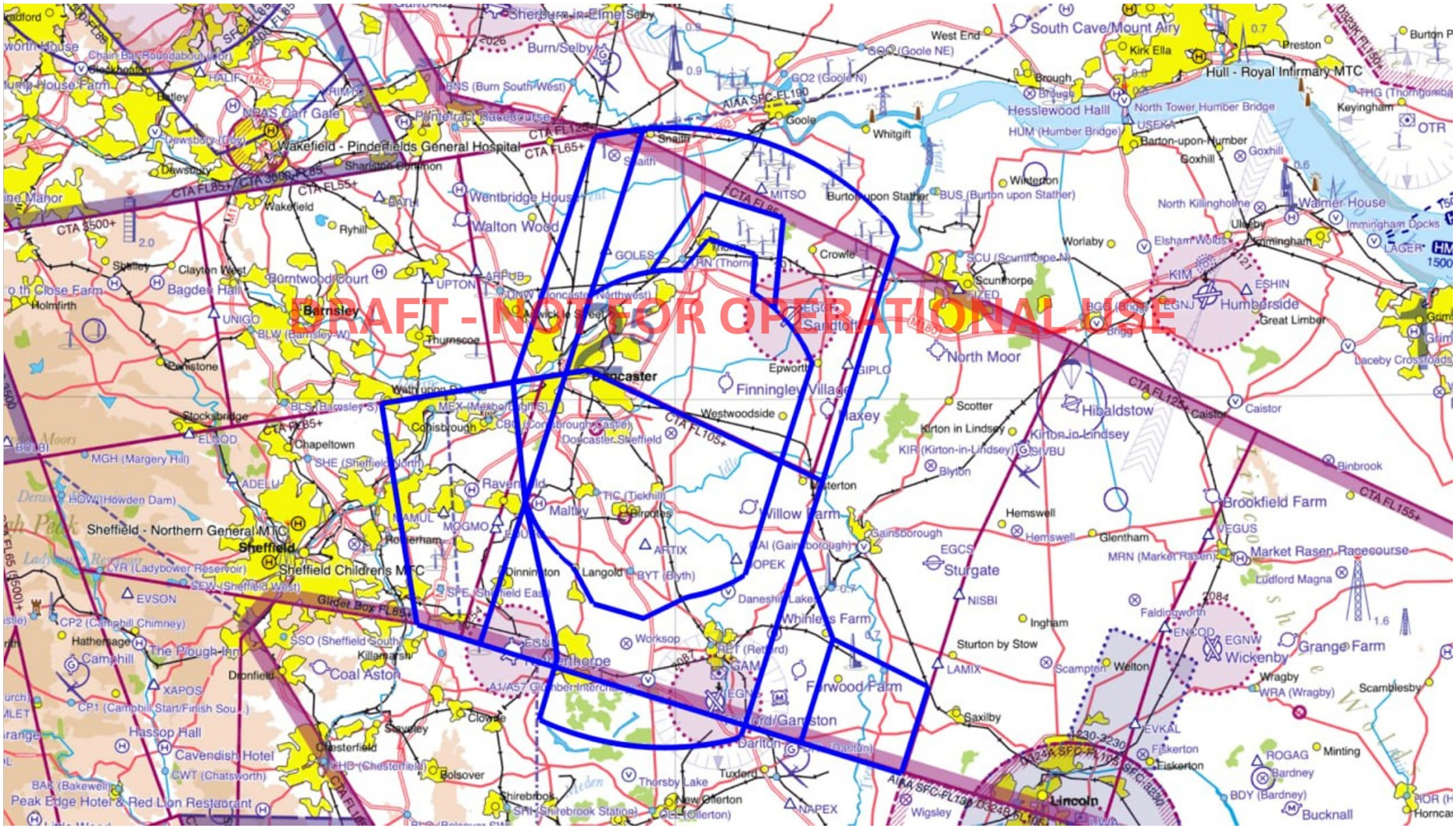


Figure 10 VFR chart overlaid with proposed DSA CAS. Map source: SkyDemon

7.4 What are the expected impacts of the changes to CAS?

To help articulate the changes that could occur as a result of the re-introduction of CAS at DSA, we have looked to historic data around how traffic patterns have changed before and after the DSA airspace was withdrawn. It's important to note that this ACP proposes significantly less CAS than the previous DSA CAS, but nonetheless the data does help to articulate where we expect to see the main areas of change.

Figure 11 and Figure 12 show Secondary Surveillance Radar (SSR) data split into 1000ft bands. Figure 11 shows the data for between May-Oct 2025 which is the most recent data since DSA's CAS was withdrawn. Figure 12 shows the data for between May-Oct 2022 when DSA's previous airspace was still in place.

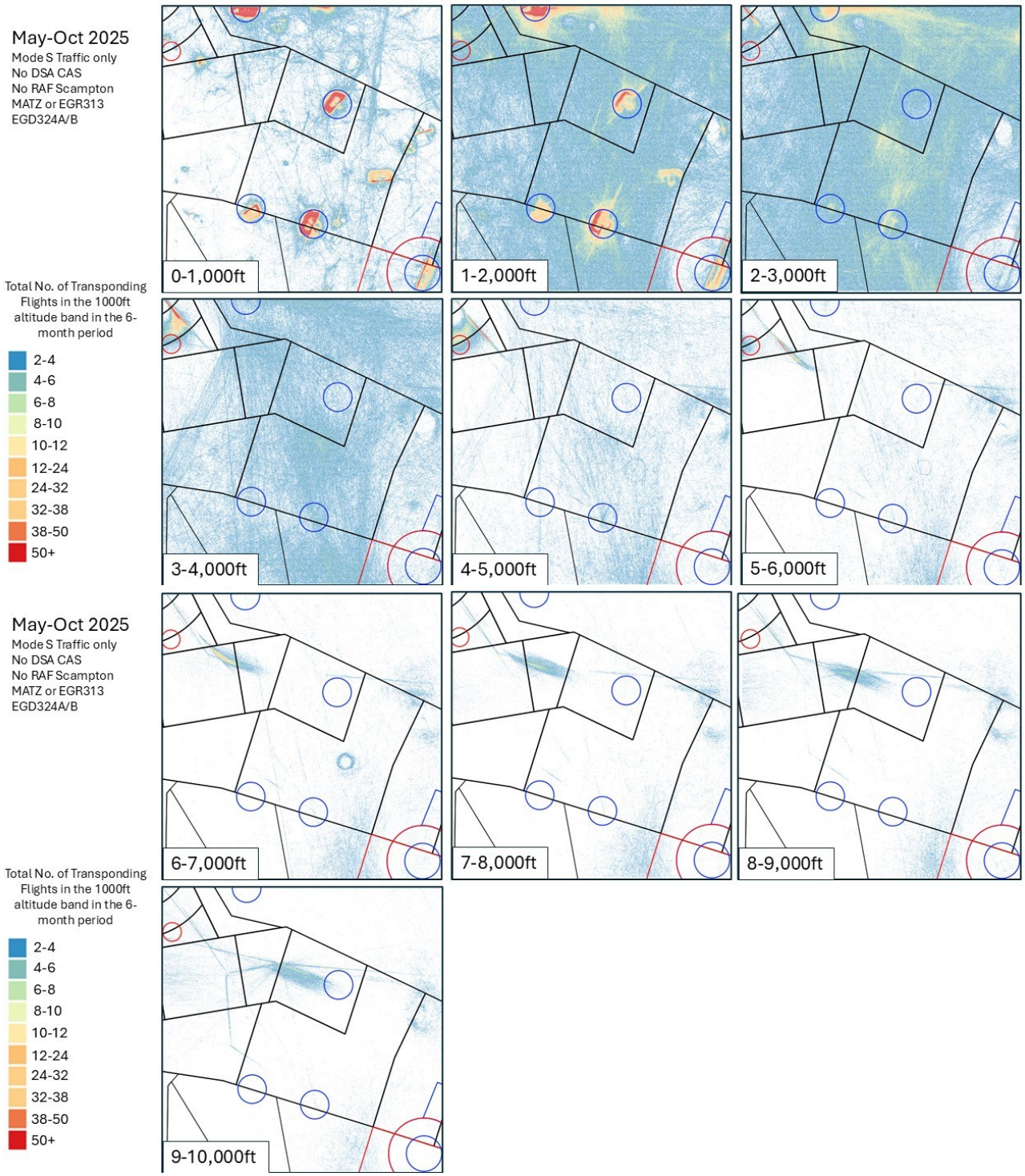


Figure 11 Secondary Surveillance Radar data split into 1000ft bands (May - Oct 2025)

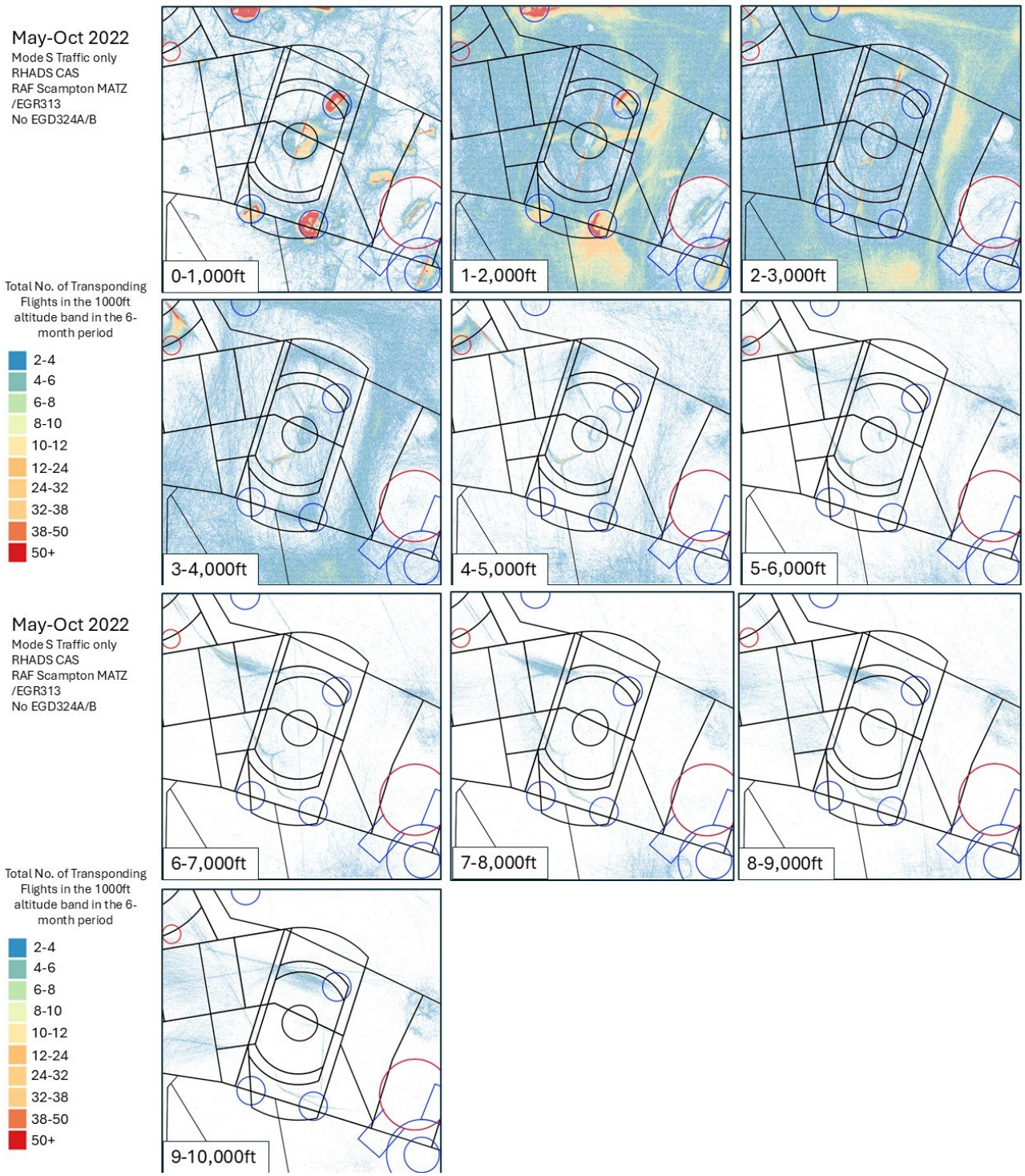


Figure 12 Secondary Surveillance Radar data split into 1000ft bands (May - Oct 2022 before the previous DSA airspace was withdrawn)

As noted above, the proposed CAS that forms part of this ACP is considerably less than DSA's previous airspace which is the subject of the 2022 traffic patterns. The main differences are:

- Less CAS to the west and what airspace has higher bases and lower classifications. This region to the west was identified as having particular importance to the BGA with the BGA claiming that the 2022 design creating "narrow, shallow corridors to the west of DSA". The airspace proposed in this design removes the requirement for any DSA CAS underneath Yorkshire CTA 12 and a considerably reduced volume under Yorkshire CTA 11 (compared to the previous 2022 airspace). Traffic will be able to transit to the west of DSA outside CAS over Conisborough, Thurnscoe, South Elmsall and Pontefract up to FL60 (FL50 under Yorkshire CTA 12 as per current arrangements).
- Removal of the Netherthorpe ATZ from controlled airspace.
- In order to reduce impacts to GA to the west of DSA, there would be a need to extend the CTA to the east by c.0.5nm to contain the new RF SIDs, which wrap around to the east of the airport to enable aircraft to gain altitude in this region, not to the west.
- The use of PBN transitions onto final approach results in changes being required to the bases of controlled airspace closer to the airport owing to IFP design criteria and CAA's CAS containment rules. This requires extensions to the CTR to the north, in between Hatfield Moors and Thorne Moors and to the south near Barnaby Moor.

As part of this consultation, we are asking for your feedback on the CAS proposals. We are keen to understand the impacts to your operations, and we are open to suggestions around how the CAS proposal could be improved. As part of the FOA, we identified the following potential areas of change to GA traffic flows as a result of the CAS implementation:

- Retford/Gamston arrivals and departures may be more likely to enter/exit their ATZ from the South, generating higher volumes of GA traffic over Tuxford and Ollerton and also routing to the NE to transit to the east of the DSA CTA over Gainsborough/Sturgate Airfield and Scunthorpe.

- Netherthorpe arrivals and departures may be more likely to enter/exit their ATZ from the East, South and North, generating higher volumes of GA traffic over Clowne and Stavely.

- Sandtoft arrivals and departures may be more likely to enter/exit their aerodrome from the East, generating higher volumes of GA traffic over Scunthorpe.

- There may be a general shift of traffic which is currently transiting N/S overhead DSA to move to the east over Gainsborough/Sturgate Airfield and Scunthorpe should they prefer to or are unable to request a VFR transit. This region is the most obvious region that could experience an increase in density of GA operations. However, in 2022 the RAF Scampton MATZ and EGR313 were active which compressed GA traffic into a 7nm gap between RAF Scampton and Doncaster's CTA 6. The RAF Scampton MATZ and EGR313 no longer exist, increasing the available gap to 10.5nm, considerably wider once north of RAF Waddington. This gap would reduce to just over 6.5nm again when EGD324B is active but only for traffic FL105+. Suitably equipped aircraft can transit through DSA airspace (CTAs 9 and 10), above FL85/FL95 without an ATC clearance. As can be seen from the 2025 radar data, there is already a certain density of GA operations in this region without any DSA airspace - the BGA have advised this region provides better soaring conditions than further to the east or west which are not conducive to good soaring flight.

- The use of PBN transitions onto final approach results in changes being required to the bases of controlled airspace closer in to the airport owing to IFP design criteria and CAA's controlled airspace containment rules. This requires extensions to the CTR to the north, in between Hatfield Moors and Thorne Moors which could negatively impact Sandtoft traffic and to the South which could negatively impact Netherthorpe and Retford/Gamston traffic, where that traffic wants to avoid controlled airspace.

ⓘ As part of the CAA's 2017 PIR (Para 16 and 40) it was noted that DSA never refused any requests for transits through CAS. There is no evidence to suggest the forecast DSA traffic levels will result in any less access to CAS in future.

8. The benefits and impacts of our proposal

8.1 Overview of the benefits and impacts

In preparation for this consultation, we undertook a very detailed assessment of 2 potential options for DSA. To do this, we compared each option against the 'without airspace change' baseline scenario across a variety of CAP1616 metrics, to understand the positive benefits and negative impacts. This was called the Full Options Appraisal (FOA). The outcome of the FOA was our proposed option to take to this Consultation.

The table below provides a very high-level summary of the outcomes of the FOA for the proposed option. You can use the links in the table to navigate directly to find out more information. For detailed analysis, please see the Full Options Appraisal document (note our proposed option is called 'Option 3' within the FOA document).

When reviewing the summary below, it's important to note that this assessment is required to be undertaken across 10 years, from the year of implementation in 2028. The CAA requires DSA to undertake this assessment against a 'without airspace change' baseline which for DSA is no flights arriving and departing from the airport. Therefore, the majority of the CAP1616 categories show an impact.

What the assessment doesn't reflect is the full long-term benefits of re-opening DSA. These benefits will be realised over the next 25 years and beyond, and involve boosting the local economy, and creating job opportunities across aviation, logistics, engineering, construction and local businesses.

CAP1616 category	How our proposal performed against what happens today (No flights from DSA)
Noise See community and local area interest document for more details	The introduction of flights to DSA will mean there are increases in noise for some areas. At the year of implementation, DSA is forecast to have 5 scheduled ATMs per day on average across the year in 2028. By 2037, that will have increased to around 34 scheduled ATMs per day on average (and about 56 flights per day on a busy day). Within the noise section of the community and local area interest document, you can see the different noise contours and there's also information on the overall population numbers within the contours.
Air Quality See community and local area interest document for more details	The introduction of flights to DSA is expected to have negligible impact on local air quality.
Fuel burn & Greenhouse Gas emissions Click here for more details	Aircraft arriving and departing from DSA will burn fuel which has associated Greenhouse Gas emissions. There's more information about Fuel burn and Greenhouse Gas emissions in the section below.
Tranquillity See section 5.3 of the FOA for more details	Flights to and from DSA will have no impact to National Parks or National Landscape (Areas of Outstanding Natural Beauty) below 7,000ft.
Biodiversity See community and local area interest document for more details	A specialist habitats assessment has indicated that there are not expected to be any significant effects on designated habitats, flora or fauna.
Capacity and economic impacts	Re-opening DSA will enable 1,002 passenger flights carrying 155,412 passengers and 839 cargo flights in 2028. By 2037, this is estimated to increase to 8,189 passenger

CAP1616 category	How our proposal performed against what happens today (No flights from DSA)
	flights carrying 1,169,538 passengers and 4,140 cargo flights (there is an existing planning agreement which limits DSA to 4,140 cargo flights per year). The introduction of flights to DSA has economic benefits and there's more information about this in the monetised assessment outcome section below.
Resilience See section 5.3 of the FOA for more details	The proposal includes procedures to account for navigation aid outages and also alternative procedures available for aircraft not yet equipped with the latest technology.
General Aviation See section 7 of this document for more details.	The Controlled Airspace (CAS) proposal includes the introduction of volumes of CAS which may impact General Aviation users such as private light aircraft, gliders, paragliders, parachutists, microlights, balloons and helicopters.
Airline costs See section 5.3 of the FOA for more details	It is not anticipated that the proposed option would result in any additional costs to airlines, such as training costs and other costs.
Airport and ANSP costs See section 5.3 of the FOA for more details	There will be deployment, infrastructure and ongoing operational costs for DSA.
Safety Click here for more details	At this stage no safety risks have been identified that are considered to be intolerable.
Integration with neighbouring airports and wider airspace See section 6.5 of this document for more details.	The proposed design is expected to integrate with neighbouring airports and the wider NATS airspace. It is also likely to be a benefit in terms of compatibility with the future modernised airspace in the surrounding region (based on latest information available).

8.2 Fuel burn and Greenhouse Gas Emissions

How do we assess Fuel burn and Greenhouse Gas Emissions?

The fuel burn and Greenhouse Gas Emissions assessment is undertaken through complex computer modelling which considers the proposed routes, the number of aircraft movements and the types of aircraft expected to fly the routes.

Fuel burn and Greenhouse Gas emissions are calculated across a full year, and when undertaking the assessment, it was assumed 62% of aircraft would use Runway 20 and 38% would use Runway 02; this was based on what happened in 2022 before the airport closed however as runway use is dependent on wind direction and so this percentage could vary year to year.

Fuel burn and Greenhouse Gas Emission assessment outcomes

Forecast fuel burn is estimated to be around 1654 tonnes in 2028 (Year 1) and this would increase to around 10,169 tonnes in 2037 (Year 10). Associated greenhouse gas emissions are estimated to be around 5,261 tCO_2e in 2028 (Year 1) and these would increase to around 32,337 tCO_2e in 2037.

The Government's TAG workbook has been used to assess the greenhouse gas impact over a 10-year appraisal period (2028 – 2037). This has shown that the reinstatement of flights at DSA across the 10-year appraisal period will result in a net present value (NPV) greenhouse gas impact of -£48,362,322 (in 2025 prices). These

negative values indicate a net disbenefit, meaning an overall increase in Greenhouse Gas Emissions which is expected given we are comparing against a baseline of zero operations.

There's lots more information about how we calculate Fuel Burn and Greenhouse Gas Emissions in the Full Options Appraisal document section 4.6 (methodology) and section 5.3 (FOA assessment of Option 3 (Within the FOA, Option 3 is this proposal)).

Changes to fuel burn and emissions for other airspace users

Changes in fuel burn from GA activity is unpredictable, given they do not file structured routes. Publicly available data about GA flights is limited and the fuel burnt by GA varies significantly depending on the type of GA aircraft being flown.

The fuel burn from GA is therefore not incorporated into the main quantitative fuel burn and GHG assessments, however CAP1616 does require sponsors to consider any environmental impacts caused due to indirect consequential changes on the flight behaviour of other airspace users.

The introduction of CAS does not mean that all GA are unable to fly through the airspace. Given the level of air traffic service provision proposed at DSA we expect that refusal of clearances to access the controlled airspace from powered GA will be a very rare event and we have also proposed VFR lanes to help facilitate crossing traffic.

There could be increased mileages for any airspace users who are unwilling or unable to meet entry requirements Class E+ volumes or unwilling or unable to request crossing clearances of Class D airspace. Some unpowered flights may incur additional mileage to avoid controlled airspace volumes they are not able to meet the requirements for (transponder/radio) though given these are unpowered, there will be no impact on greenhouse gas emissions or fuel burn[5].

8.3 Safety

To assess safety, we look at a number of areas, including the following:

- Procedure operability and route separation assessments: to understand the design's compliance with the CAA's route separation requirements and to work with subject matter experts to understand if there are any concerns about how the design might be operated in future.
- Preliminary Instrument Flight Procedure design: to understand whether the design of the routes meets the regulatory criteria for route design.
- Controlled Airspace Containment: to understand whether the controlled airspace associated with the routes meets the CAA's controlled airspace containment safety requirements.
- Safety of operations inside controlled airspace: to understand whether there are any safety concerns for DSA aircraft flying inside controlled airspace.
- Safety of operations outside of controlled airspace: to understand if the changes to controlled airspace will result in any safety concerns for other airspace users, such as general aviation.

Overall, the qualitative safety assessments found that, at this stage, no safety risks have been identified by SMEs that are considered to be intolerable, especially given that DSA previously operated safely with larger volumes of CAS. Note that at the time of writing, DSA is not yet a licensed aerodrome with a licensed Air Navigation Service Provider and therefore, no formal safety assessments have taken place. Further safety analysis will be undertaken in Stage 4 of this ACP.

[5] In our consultation on the preferred option, we propose to ask GA stakeholders to try and quantify any increase to their fuel burn and/or emissions as a result of the establishment of CAS at DSA.

There's more information about the safety assessment within the Full Options Appriasal document available at https://consultations.airspacechange.co.uk/doncaster-airport/dsa-airspace (Our proposal is called Option 3 in this document).

8.4 Monetised assessment outcomes

As part of the Full Options Appraisal, we were also required to generate monetised costs and benefits for the assessment categories where it was possible to do so. This meant noise, greenhouse gas emissions, fuel burn, economic benefits and operational costs were monetised.

A 'Net Present Value' (NPV) was then generated using calculations as required by CAP1616. The noise and greenhouse gas emissions monetisation is undertaken using calculations required by the government.

Overall, the monetised assessment has shown a c.£542,000,000 benefit over 10 years for the proposed option taking into account inflation and discounting using the Government's Social time Preference Rate. More information around this can be found in the Full Options Appraisal section 6.1.

It's also important to note however that this assessment does not take into account the full long-term benefits of re-opening DSA. Re-opening Doncaster Sheffield Airport (DSA) is expected to contribute to long-term economic growth for South Yorkshire. Those estimates show that reopening the airport could boost the economy by approximately £5 billion by 2050, as well as provide wider economic benefits of around £2 billion over the same period[6].

Furthermore, the plans are forecasted to support thousands of jobs, with estimates suggesting more than 5,000 direct employment opportunities could be created across aviation, logistics, engineering, construction and local businesses.

For more information please see:
https://www.southyorkshire-ca.gov.uk/business/doncaster-sheffield-airport
https://www.flydsa.com/

[6] Government backs mayor to reopen Doncaster Sheffield Airport - GOV.UK and i9 Cabinet 051125 SYAC report.pdf

9. Responding to the consultation & what happens next

9.1 How to respond to the consultation

The consultation runs for 9 weeks from Monday 3 August 2026 to Sunday 4 October 2026 (23:59).

To respond to the consultation, please go to https://consultations.airspacechange.co.uk/doncaster-airport/dsa-airspace

ⓘ Further questions?

Please join us on one of our webinars or in person events (for details, please see section 3)

Alternatively, please get in touch:

Email: DSA-airspaceconsultation@flydsa.com
Telephone: 0800 043 3099
Write to us: DSA Airspace Consultation, c/o Heyford House, First Avenue, Finningley, Doncaster, DN9 3RH

The details above can also be used to request hard copy materials and a feedback form. Please note that we cannot accept consultation responses via email or telephone.

9.2 What happens to consultation responses?

All responses to the Consultation, including those received in hard copy form, will be published on the CAA's Citizen Space Portal.

If you wish for your response to be published anonymously, there is an option to redact your name and postcode, and these will only be seen by CDC and the CAA (and organisations working for CDC). For further information on how your private information will be stored and retained, please see the CAA's Privacy policy.

Analysis of your feedback

The Consultation closes on 4 October 2026 (23:59hrs). DSA will then collate, review and categorise the consultation responses. Responses will be categorised into those which present information that may lead to a change in design, and those that would not. We will then produce a Consultation Response document that will summarise the consultation responses we received, and our response.

All your feedback will be considered by DSA, and we will document this process so that you can understand how your feedback has been considered as part of the final proposal. Your feedback will also help us to further understand the benefits and impacts of the proposal and where possible we will incorporate this into future options appraisals.

Reversion statement

CAP1616 requires sponsors to be clear with stakeholders the extent to which the proposed airspace change, once implemented, is reversible if it does not meet the objectives it is designed to achieve as part of the post-implementation review at Stage 7.

In the unlikely event the proposal requires reversal once approved and implemented, permanent reversion to the pre-implementation state could be achieved through withdrawal of the published procedures from the Aeronautical Information Publication.

10. Appendix A: Overview of CAP1616 process to date

Please go to https://consultations.airspacechange.co.uk/doncaster-airport/dsa-airspace and select Main Consultation Document Appendix A: Overview of CAP1616 process to date.

11. Appendix B: Draft Noise Abatement Procedures

DRAFT EGCN AD 2.21 NOISE ABATEMENT PROCEDURES

1 GENERAL

a. All aircraft inbound and outbound from this airport are required to conform to the following procedures, notwithstanding that these may at any time be departed from to the extent necessary for avoiding immediate danger:

i. Every operator of aircraft using the airport shall ensure at all times that aircraft are operated in a manner calculated to cause the least disturbance practicable in areas surrounding the airport.

ii. Unless otherwise authorised by ATC aircraft using the ILS in IMC and VMC shall not descend below 2000 FT before intercepting the glidepath, nor thereafter fly below it. An aircraft approaching without assistance from ILS or radar shall follow a descent path which will not result in its being at any time lower than the approach path which would be followed by an aircraft using the ILS glidepath.

iii. NPRs shall not apply to aircraft whose MTOW (as stated in the certificate of airworthiness) is less than 5700 KG.

iv. Jet aircraft failing to meet certification noise levels appropriate to ICAO Annex 16 Volume 1 Chapter 3 will not be permitted to land.

2 ARRIVALS — CONTINUOUS DESCENT APPROACHES (CDA)

a. Turbo-jet and turbo prop aircraft are expected to apply continuous descent, low power, low drag approach techniques at all times.

b. Subject to ATC instructions, inbound aircraft are to maintain as high an altitude as practical and adopt a low power, low drag, continuous descent approach profile. ATC will provide estimated track distance to touchdown to allow pilots to descend at a rate they judge best suited to achieve continuous descent without using more power or drag than necessary. The object will be to join the glidepath at the appropriate height for the distance without level flight

c. To facilitate these techniques aircraft should be flown no faster than 250 KT from the speed limiting points and below FL 100 and 250-210 KT during the intermediate approach phase. Thereafter speed should be managed so as to achieve a continuous descent using as little power or drag as possible. ATC may impose speed control if required for separation purposes.

d. ATC will provide regular range checks. Pilots who require additional track mileage to facilitate a successful CDA should inform ATC as soon as the requirement is apparent.

3 DEPARTURES

The Noise Preferential Routeings (NPRs) align with the published SIDs and are compatible with ATC requirements and shall apply in both VMC and IMC. The SIDs are to be flown, where possible, by all departing jet aircraft and by all other departing aircraft of more than 5700 KG MTWA unless otherwise instructed by ATC or unless deviations are required in the interests of safety. Omni-Directional Departure procedures are available for aircraft that cannot comply with the requirements of the SIDs. The following measures will also be applied:

a. NPRs terminate at 3000 FT.

b. Aircraft operators shall instigate their aircraft manufacturer' s noise abatement procedures on departure and up to FL 100 or implement the procedures listed below:

i. Take-off to 1500 FT QNH: — Power- Normal Take off — Speed -V2+10 KT (+)
ii. Take-off to 1500-3000 FT QNH: — Power- Reduce to climb thrust — Speed- V2+10 KT (+)

Note: Speed may be higher than V2+10 KT (+) due to aircraft performance or pitch angle.

c. No turns below 500 FT AAL.

d. NPR's after departure do not apply to helicopters above 500 FT.

4 REVERSE THRUST

a. Pilots are requested to avoid the use of reverse thrust or reverse pitch above idle power settings on landing, consistent with the safe operation of the aircraft between the hours of 2300-0700 (2200-0600).

5 ENGINE RUN-UP

a. Test running of aircraft engines shall be restricted to the screened engine test area designated for the purpose unless for essential operational reasons the test must be carried out elsewhere on the manoeuvring area. Aircraft engine testing will not be approved between 2300-0700 (2200-0600), unless an aircraft is urgently required to provide an operational service. For further information contact Airport Duty Manager.

6 APU USAGE

a. Use of APU shall be limited as much as possible. The use of APU equipment at night is discouraged. APUs should be shut down 5 minutes after arrival on stand and are not to be restarted more than 30 minutes prior to departure from the stand.

7 NIGHT OPERATIONS

a. Doncaster Sheffield airport operates and manages a Night Noise Quota System, which is based on the Supplement to the UK AIP, pertaining to the Airport Noise Restrictions Notice for London Heathrow, Gatwick and Stansted. The quota count value for the take-off and landing by individual aircraft types is shown in the Annex to the Supplement.

i. The night restriction period is between 2300-0700 (2200-0600), with the quota count period being between 2330-0600 (2230-0500).
ii. Operators must supply information appertaining to the noise characteristics (aircraft type, engine type, operating weight and maximum certified landing or take-off weight as appropriate) and quota count for all non-exempt aircraft using Doncaster Sheffield, to Apron Control, Tel: +44 (0)1302-625021 as part of the PPR request process.
iii. Quota Count Restrictions:
1. 2300-0700 (2200-0600) – Aircraft with quota count of QC/8 and QC/16 must not be scheduled to take-off or land.

b. Certain exemptions (including emergencies) apply contact the Noise Manager for a full list of exemptions.