

Airspace Change Proposal

Glossary of Terms

ACP-2024-039



1. Introduction

1.1 What is the purpose of this document?

- 1.1.1 Doncaster Sheffield Airport is undertaking an Airspace Change Proposal (ACP) to restore the controlled airspace and procedures needed for DSA to reopen safely and bring passenger and cargo flights back to the region following the airport's closure in 2022.
- 1.1.2 This document provides consultees with a glossary of terms that are used throughout our suite of consultation documents.

2. Glossary

Acronym	Term	Definition
ACOG	Airspace Change Organising Group	ACOG is a separate and impartial body set up on the direction of the Department for Transport and Civil Aviation Authority to coordinate the Airspace Change Proposals required to deliver airspace modernisation.
ACP	Airspace Change Proposal	A proposal (usually from an airport or air navigation service provider) to change the design of UK airspace, in line with the CAA's CAP1616 guidance.
-	ACP Sponsor	An ACP Sponsor is the organisation (usually an airport or Air Navigation Service Provider) that owns and develops an Airspace Change Proposal to make a change to the notified airspace design in accordance with the CAA's airspace change process (CAP1616).
ADS-B	Automatic Dependent Surveillance Broadcast	A means by which aircraft can automatically transmit and/or receive data such as identification, position, and additional data, as appropriate in a broadcast mode via a data link.
AIP	Aeronautical Information Publication	A publication which contains details of regulations, procedures and other information pertinent to the operation of aircraft in the particular country to which it relates.
AMS	Airspace Modernisation Strategy	The long-term strategy of the CAA and the UK Government is called the Airspace Modernisation Strategy (AMS). Its CAA document reference number is CAP1711. The AMS sets out the 'ends, ways and means' of modernising airspace through a series of 'delivery elements' for the future design, technology and operations of airspace.
AMSL	Above Mean Sea Level	
ANSP	Air Navigation Service Provider	An organisation that provides the service of managing the aircraft in flight or on the manoeuvring area of an airport and which is the legitimate holder of that responsibility.
AONB	Area of Outstanding Natural Beauty	All areas of AONBs were re-branded as 'National Landscapes' in 2023-2024, however AONB is still a widely recognised term.
ATC	Air Traffic Control	The ground-based personnel and equipment concerned with controlling and monitoring air traffic within a particular area.
ATM	Air Transport Movement	One air transport movement (ATM) is one aircraft departing, or one aircraft landing, which is either transporting passengers, freight, or mail on commercial terms.

Acronym	Term	Definition
ATZ	Aerodrome Traffic Zone	An airspace of defined dimensions established around an aerodrome for the protection of aerodrome traffic.
CAA	Civil Aviation Authority	The Civil Aviation Authority (CAA) is UK's specialist aviation regulator responsible for the regulation of aviation safety in the UK, determining policy for the use of airspace, the economic regulation of designated airports and ANSPs, the licensing and financial fitness of airlines and the management of the ATOL financial protection scheme for holidaymakers. The CAA co-sponsor airspace modernisation. CAA is a public corporation of the Department for Transport.
CAP1616	Civil Aviation Publication 1616	The airspace change process regulated by the CAA.
-	Capacity	A term used to describe how many aircraft can be accommodated within an airspace area without compromising safety or generating excessive delay.
CAS	Controlled Airspace	Generic term for the airspace in which an air traffic control service is provided as standard; note that there are different sub classifications of airspace that define the particular air traffic services available in defined classes of controlled airspace.
	Centreline	The nominal track for a published route.
CDC	City of Doncaster Council	The Change Sponsor of ACP-2024-039.
-	Concentration	Refers to a density of aircraft flight paths over a given location, this generally refers to high density where tracks are not spread out; this is the opposite of dispersal.
CCO	Continuous Climb Operations	An aircraft operating technique facilitated by the airspace and procedure design and assisted by appropriate ATC procedures, allowing the execution of a flight profile optimised to the performance of aircraft, leading to significant economy of fuel and environmental benefits in terms of noise and emissions reduction.
CDO	Continuous Descent Operations	An aircraft operating technique in which an arriving aircraft descends from an optimal position with minimum thrust and avoids level flight to the extent permitted by the safe operation of the aircraft and compliance with published procedures and ATC instructions.
-	Conventional Navigation	The historic navigation standard where aircraft fly with reference to ground-based radio navigation aids.
-	Conventional Route	Routes defined to the conventional navigation standard, i.e. using ground-based radio navigation beacons to determine their position.
CTA	Control Area	Controlled airspace extending upwards from a specified limit above the earth. Control Areas are

Acronym	Term	Definition
		situated above the Aerodrome Traffic Zone (ATZ) and afford protection over a larger area to a specified upper limit.
CTR	Control Zone	Controlled airspace extending upwards from the surface of the earth to a specified upper limit. Aerodrome Control Zones afford protection to aircraft within the immediate vicinity of aerodromes.
db	Decibels	A unit used to measure the intensity of a sound (or the power level) of an electrical signal by comparing it with a given level on a logarithmic scale.
DfT	Department for Trasport	The Department for Transport (DfT) along with the Civil Aviation Authority (CAA) co-sponsor airspace modernisation and oversee ACOG's work. The Department for Transport (DfT) work with agencies and partners to support the transport network that helps the UK's businesses and gets people and goods travelling around the country. DfT is a ministerial department, supported by 24 agencies and public bodies
-	Dispersal	Refers to the density of aircraft flight paths over a given location, this generally refers to lower density – tracks that are spread out; this is opposite of Concentration.
DP	Design Principle	Design Principles encompass the objectives that an airport seeks to achieve through an airspace change, including safety, policy, environmental and operational factors. Design Principles are set through engagement with stakeholders at Stage 1 of the process, and they guide the airspace designers to create suitable flight path options at Stage 2.
DPE	Design Principle Evaluation	An evaluation of each option against each design principle which forms part of Stage 2 of the CAP1616 process.
DSA	Doncaster Sheffield Airport	
-	Final Approach	The final part of an arrival flight path that is directly lined up with the runway.
FL	Flight Level	The Altitude above sea-level in 100 feet units measured according to a standard atmosphere. A flight level is an indication of pressure, not of altitude. Only above the transition level (which depends on the local QNH but is typically 4000 feet above sea level) are flight levels used to indicate altitude; below the transition level feet are used.
FLARM	Flight Alarm	FLARM (an acronym based on 'flight alarm') is the proprietary name for an electronic device which is in use as a means of alerting pilots of small aircraft, particularly gliders, to potential collisions with other aircraft which are similarly equipped.

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FUA	Flexible Use Airspace	Airspace, which is not solely designated for a single purpose, but can be allocated flexibly according to need, or switched entirely on/off according to a schedule or agreed process.
-	Flightpath	The track flown by aircraft when following a route, or when being directed by air traffic control
ft	Feet	The standard measure for vertical distances used in air traffic control.
FOA	Full Options Appraisal	The second appraisal required by the CAP1616 process which builds on the work carried out as part of the Initial Options Appraisal (IOA).
FASI	Future Airspace Implementation Strategy	Under the Government's Airspace Modernisation Strategy (AMS) airports in the UK are required to update their airspace and routes in a coordinated way.
GA	General Aviation	All civil aviation operations other than scheduled air services and non-scheduled air transport operations for remuneration or hire. The most common type of GA activity is recreational flying by private light aircraft and gliders, but it can range from paragliders and parachutists to microlights, balloons, and private corporate jet flights.
-	Hold/Holding Stack	A published airborne hold, sometimes referred to as a holding stack, is a structure for arriving aircraft to fly in a racetrack pattern at assigned altitudes and speeds waiting for instructions from controllers to begin their approach for landing.
HRA	Habitats Regulation Assessment	A screening assessment carried out by the Change Sponsor that determines whether development plans could negatively impact local plans on a recognised protected European site beyond reasonable scientific doubt. This is required by all competent authorities.
IFP	Instrument Flight Procedure	A published procedure used by aircraft flying in accordance with the instrument flight rules, which is designed to achieve and maintain an acceptable level of safety in operations and includes an instrument approach procedure, a standard instrument departure, a planned departure route and a standard instrument arrival.
ILS	Instrument Landing System	An ILS operates as a ground-based instrument approach system that provides precision lateral and vertical guidance to an aircraft approaching and landing on a runway, using a combination of radio signals to enable a safe landing even during poor weather.
IOA	Initial Options Appraisal	A qualitative appraisal of an option against a baseline 'do nothing' scenario. The first of 3 the appraisals, required at Stage 2 of CAP1616.

Acronym	Term	Definition
L_{Aeq}	-	The most common international measure of noise, meaning, 'equivalent continuous sound level'. This is a measurement of sound energy over a period of time.
L_{Aeq} 16h	-	The A-weighted Leq measured over the 16 busiest daytime hours (0700-2300) is the normal time-period used to develop the Airport Noise Contours for day-time operations.
L_{Aeq} 8h	-	The A-weighted Leq measured over the 8 night-time hours (2300-0700) is the normal time-period used to develop the Airport Noise Contours for night-time operations.
-	Lower Airspace	Airspace in the general vicinity of the airport containing arrival and departure routes below 7000ft. Airports have the primary accountability for the design of this airspace, as its design and operation is largely dictated by local noise requirements, airport capacity and efficiency.
-	Masterplan	The Masterplan, developed by ACOG, is the single coordinated implementation plan for the ACPs needed to modernise airspace up to 2040.
MTMA	Manchester Terminal Manoeuvring Area	The MTMA is a busy portion of airspace in the centre of the UK, with air traffic controllers routinely managing high volumes of both arriving and departing flights. The MTMA Masterplan coordinates changes proposed by East Midlands, Leeds, Liverpool and Manchester airports to upgrade the arrival and departure routes below 7,000 ft.
NAP	Noise Abatement Procedures	Noise abatement procedures are designed to minimise exposure of residential areas to aircraft noise, while ensuring safety of flight operations.
NATS	National Air Traffic Services	NATS is the UK's main navigation service provider for en-route operations and is sponsoring airspace change proposals to modernise the network that sits above 7000ft.
NATS NERL	NATS En-Route	NATS (NERL) provides Air Traffic Control services to aircraft flying in airspace above 7,000 feet over the UK and eastern part of the North Atlantic.
-	National Landscapes	National Landscapes are designated exceptional environments whose distinctive character and natural beauty are protected and enhanced for the nation's benefit. In the UK, the term is the rebranded, modern name for Areas of Outstanding Natural Beauty (AONBs)
nm	Nautical Mile	Aviation measures distances in nautical miles. One nautical mile (nm) is 1,852 metres. One road mile ('statute mile') is 1,609 metres, making a nautical mile about 15% longer than a statute mile.

Acronym	Term	Definition
-	Network Airspace / Upper network	En route airspace above 7,000ft in which NATS has accountability for safe and efficient air traffic services for aircraft travelling between the UK airports and the airspace of neighbouring states.
NTK	Noise Track Keeping	A system that monitors and records radar data to monitor aircraft operations and report statistics focused around noise.
-	Omni-directional departure	An omnidirectional departure procedure is designed on the basis that an aircraft maintains runway direction to a safe altitude above aerodrome level before commencing a turn.
PANS OPS	Procedures for Air Navigation Services Aircraft Operations	PANS-OPS is contained in an ICAO Document 8168 which sets out the design criteria and rules for instrument flight procedures which include approach and departure procedures.
PBN	Performance Based Navigation	Referred to as PBN; a generic term for modern standards for aircraft navigation capabilities including satellite navigation (as opposed to 'conventional' navigation standards)
RMA	Radar Manoeuvring Area	An ATC operational area articulated as a volume of airspace by the ANSP. It facilitates the close-in radar vectoring by ATC that is required to take the aircraft safely from a holding stack and established onto final approach.
RMZ	Radio Mandatory Zone	A designated block of airspace where pilots are legally required to carry and operate specific two-way radio equipment. Before entering an RMZ, pilots must establish two-way communication with air traffic control (or a flight information service) and maintain a continuous listening watch.
RNAV / RNAV 1	aRea NaVigation	This is a generic term for a particular specification of Performance Based Navigation. The suffix '1' denotes a requirement that aircraft can navigate to within 1nm of the centreline of the route 95% or more of the time. In practice the accuracy is much greater than this.
RNP-RF	Required Navigation Performance – Radius to fix	An advanced navigation specification under the PBN umbrella. The suffix '1' denotes a requirement that aircraft can navigate to within 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.
RNP-AR	Required Navigation Performance – Authorisation required	An advanced navigation specification under the PBN umbrella. 'Authorisation required' refers to aircraft and operators complying with specific airworthiness and operational requirements. RNP-AR allow airspace designers to set extremely specific curved paths to a

Acronym	Term	Definition
		greater accuracy than RNAV1, these can be designed before and after the Final Approach Fix.
SID	Standard Instrument Departure	Usually abbreviated to SID; this is a route for departures to follow straight after take-off.
STAR	Standard Arrival Route	A published, pre-defined instrument flight path for aircraft arriving at an airport.
SYAC	South Yorkshire Airport City	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 and CDC.
-	Tactical Intervention	Air traffic control methods that involve controllers directing aircraft for specific reasons at that particular moment (see Vector).
TMZ	Transponder Mandatory Zone	Airspace of defined dimensions where the carriage and operation of transponder equipment is mandatory
-	Vector / Vectoring	An air traffic control method that involves directing aircraft off the established route structure or off their own navigation – ATC instruct the pilot to fly on a compass heading and at a specific altitude. In a busy tactical environment, these can change quickly. This is done for safety and for efficiency.
VFR	Visual Flight Rules	Visual Flight Rules (VFR) are the rules that govern the operation of aircraft in Visual Meteorological Conditions (VMC) (conditions in which flight solely by visual reference is possible)
VMC	Visual Meteorological Conditions	Visual meteorological conditions (VMC) are the meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling equal to or better than specified minima.
VSA	VFR Significant Area	A volume of airspace which has been identified as being particularly important to VFR operations. A VSA might take the form of a route, a zone, or an area chosen for its particular importance to GA users. These areas do not have any official status but are intended to highlight the importance of a particular area so that future airspace development plans can take account of the GA activity.