19<mark>16 - Statement of Need: Intended Change to Notified</mark>

his form may be used to provide information to the CAA about an intended change. Once this form is civil Aviation of this form, at the end of this form.

1. Change Title

Please enter a title for this intended change, (max 80 characters): *

Manchester Airspace Modernisation - Departures and Arrivals (FASI-N)

2. Change Sponsor Details

Please select the appropriate category and complete	Please sel	ect the app	propriate	category	and	complete.	*
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- A Company
- An Unincorporated Association or other body
- Individual (including sole traders and partnerships)

2-	Λ.	C	
za.	А	Com	pany

Registered Company name (in full) *	
Manchester Airport PLC	
Registered Company Number	
0 1960 988	
Country of Company Registration	
United Kingdom	
Registered Office Address	
Professional Services Ltd, PO Box 532, Town Hall, Manchester	
Postcode	
M60 2LA	
E-mail	
n/a	
Trading name (if applicable) As above	
Trading Address (primary site)	
Olympic House, International Approach, Manchester Airport	
Country	
United Kingdom	
Postcode	
M90 1QX	
Website address	
https://www.manchesterairport.co.uk/	
Primary Point of Contact Name *	
Telephone *	
le le priorie	
- '1 *	
E-mail *	
Secondary Point of Contact Name	
Telephone	
E-mail	

✓ Is an Independent Aviation/Airspa	ce Consultancy involved in this proposal?									
Aviation Consultancy	Registered Company name (in full) *									
,	Os prey Consulting Services Ltd									
Registered Company Number										
	Country of Company Registration United Kingdom									
	Registered Office Address									
	Suite 10, The Hub, Fowler Avenue, Farnborough Business Park, Farnborough, Hampshire									
GU14 7JP Telephone										
						Email				
	Trading Name (if applicable)									
As above										
	Trading Address (primary site) Suite 10, The Hub, Fowler Avenue, Farnborough Business Park, Farnborough, Hampshire Country									
	United Kingdom									
	Postcode GU14 7JP									
	Website address									
	https://ospreycsl.co.uk/									
Primary Point of Contact Name *										
					Primary Contact					
	Should the CAA use the Independent Consultancy as the primary point of contact for this airs pace change proposal?									
	Telephone *									
Email *										
	Secondary Point of Contact name									
TBC										
Telephone										
	Email									
4. Summary of Intended Change	e									
	indicate the nature of the intended change(s):	*								
Flight Information Region (ENR 2.1)	Upper Information Region (ENR 2.1)	Terminal Control Area (ENR 2.1)								
Other Regulated Airs pace (ENR 2.2)	Lower ATS Routes (ENR 3.1)	Upper ATS Routes (ENR 3.2)								
Area Navigation Routes (ENR 3.3)	Helicopter Routes (ENR 3.4)	Other Routes (ENR 3.5)								
En-Route Holding (ENR 3.6)	Name-Code Designators (ENR 4.4)	Prohibited/Restricted/Danger Areas (ENR5.1)								
Military Exercise/ Training Areas (ENR 5.2)	Other Danger/ Hazard (ENR 5.3)	Aerial/Sporting/Recreational Activities (ENR 5.5)								

Bird Migration/Sensitive Fauna (ENR 5.6)	ATS Airs pace (AD-EGXX-2.17)	Flight Procedures (AD-EGXX-2.22)
ATCSMAC (AD-EGXX-5)	Standard Instrument Departure (AD-EGXX-6)	Standard Arrival Route (AD-EGXX-7)
Instrument Approach Procedure (AD-EGXX-8)	Visual Reference Point .	Release of Controlled Airspace .

Please use the check box below to indicate whether this is an administrative change:

☑ Does your proposal represent an administrative change to the Aeronautical Information Publication (AIP)?

5. Statement of Need

Please provide a brief 'Statement of Need' expressing explicitly what airspace issue or opportunity you are seeking to address. Your Statement of Need should dearly articulate the current situation, the issue (and the cause of it) to be resolved or the opportunity to be addressed along with any other factors or requirements. *

MANCHESTER AIRPORT

Manchester Airport is located approximately 7.5 miles south west of Manchester city centre. Its catchment area covers the majority of Northern England, North Wales and the northern part of the Midlands.

It is the third largest airport in the UK, handling more than 28m passengers a year, with over 200,000 air traffic movements (ATMs). The airport also handles over 117,000 tonnes of air freight annually.

First opened in 1938, Manchester has developed a route network providing links to more than 210 destinations around the world. This benefits the 22m people who live within the airport's catchment area and the wider economy with the Airport estimated to contribute £1.4 billion in gross value added (GVA) to the regional economy.

Over the course of its 80-year history, Manchester Airport has connected travellers to a wide range of destinations, both within Europe and, as travel trends have evolved, further afield. This includes direct flights to key regions for business including the United States, China, India and the Middle East. Manchester is the only airport in the North to provide a network of long haul connections and increasingly, the airport is linking businesses to long haul international markets, helping them increase exports and attract overseas investment. The airport is also helping to support the region's visitor economy by welcoming tourists from far flung places to the North.

Manchester Airport is currently the only airport outside London with two full-length runways and is part-way through a £1bn transformation programme, the largest investment in its history. The programme will deliver significant benefits for customers, including through the expansion and redevelopment of its Terminal 2 building. The enlarged terminal will incorporate spacious checkin and immigration halls and a state-of-the-art departure lounge.

As the largest airport outside of London, Manchester makes a valuable contribution to the overall UK air travel market, which is forecast to continue growing. Accordingly, it is important that as airspace changes the growing operational needs of the airport are accommodated in airspace redesign required for other reasons as described below.

UK AIR TRAVEL AND AIRSPACE MODERNISATION

The government has made clear that the international connectivity provided by UK airports is important to trade, tourism and investment and that it intends to support the forecast growth in air travel, while balancing the needs of communities and the environment.

With this in mind, the Department for Transport published its strategic rationale for 'Upgrading UK Airspace'[1] in February 2017, recognising that airspace constraints could hinder growth, cause delays for travellers and negatively impact the environment.

It described a UK airs pace network that was originally designed in the 1950s and, while it remained safe, had not kept pace with improvements to aircraft technology.

The network has been developed over time in a piecemeal way, meaning it does not function as efficiently as it could, and that congestion can be experienced, especially at peak times. For passengers, this can result in aircraft being delayed on the ground or held in the air while waiting to land.

The DfT's strategic rationale anticipated that, unless airspace was modernised, these issues would get worse over time, making delays commonplace and reducing the ability of the industry to grow. It predicted as many as one in every three flights could experience a delay of more than an hour unless this modernisation took place.

Therefore, in response to direction from Government, the Civil Aviation Authority (CAA) published its Airspace Modernisation Strategy[2] in December 2018.

A key feature of this was a transition to make greater use of satellite navigation technology. This would allow the removal of physical ground-based navigational aids, which are currently used to guide aircraft flying in to land and departing from UK airports.

The existing air traffic system is based on the use of these aids, despite the fact that modern aircraft are equipped with far more sophisticated and accurate navigational technology.

Making greater use of satellite navigation technology is also a mandatory requirement for all major European airports imposed by the Single European Sky STM Research (SESAR) Programme.

Both the CAA's Airspace Modernisation Strategy and SESAR made clear that the removal of ground-based aids – known as VHF Omnidirectional Range (VOR) beacons – and the increased use of satellite technology are key to improving accuracy, operational efficiency and reducing delays.

Consequently, in October 2018, National Air Traffic Services (NATS) formally notified Manchester Airport of its intention to remove its support for a number of these beacons. This notice requires all airports to have removed their dependency on them by December 2022.

At Manchester, this includes the Manchester (MCT) VOR located on its airfield. This beacon is central to more than 25 "instrument flight procedures," which are what aircraft currently use to fly in and out of Manchester Airport.

These procedures are known as either Standard Instrument Departures (SIDs) or Standard Terminal Arrival Routes (STARs). Removing the VOR used at Manchester will mean these existing routings can no longer be used, requiring a re-design of these routes within the airspace.

Resulting from the policy objectives described in this section, the advantages of modern navigational technology and the removal of VOR beacons, airspace change will be required for Manchester Airport.

The airs pace above the UK is complex for a number of reasons. It covers several different regions, each of which has several airports within them. There are also different "levels" of airs pace, in terms of the height at which aircraft are flying.

The North of England has one of the busiest pieces of airspace, with several airports – including Manchester – in close proximity to each other.

In this context, the Future Airspace Strategy Implementation North (FASI-North) programme has been set up. There is a similar programme for the South of the country. FASI-North, led by NATS, will coordinate all Airspace modernisation across the North of England at a higher level. FASI-North will then "plug-in" to the UK-wide airspace above it, while airports are required to lead the coordination of airspace modernisation at lower levels.

For Manchester, this means modernising its instrument flight procedures for aircraft operating to and from the Airport at altitudes of 7,000 feet and below. As described above, changes to operations at Manchester are part of a national programme of modernisation, integrating with lower airs pace changes carried out by other airports within the FASI-North "catchment", as well as connecting to the modernisation programmes being carried out at a higher level across the UK.

The modernisation process that Manchester seeks to implement, will involve introducing the new technologies described in this document, while phasing out the old ground-based navigational aids.

As a result, it will seek to deliver benefits to passengers, by reducing delays, and to the environment, by facilitating more efficient operations, including reducing unnecessary aircraft holding.

The airs pace change process needs to deliver an airs pace design that will enable Manchester Airport to continue to grow to make best use of its available runway capacity, while balancing the needs of communities and the environment in line with Government policy. Meeting the growing demand for air travel will bring with it as sociated economic and social benefits for those living and working in Manchester Airport's catchment across the North.

- [1] Department for Transport; Upgrading UK Airspace, Strategic Rationale.
- [2] Civil Aviation Authority; CAP1711 Airs pace Modernisation Strategy

Please specify the altitudes (where applicable) affected by your Statement of Need:

Surface to below 4,000 feet

4,000 feet to below 7,000 feet

7,000 feet to below 20,000 feet

20,000 feet and above

6. Proposed Dates

Please provide your proposed date for the submission of your change proposal to the CAA. This should be the date on which you are expecting to submit your formal airs pace change proposal to the CAA. Please note that your formal airs pace change proposal must be submitted alongside all of the supporting documentation required by the CAA to complete our regulatory assessment of the Proposal; consequently the date on which you place in this field should represent the point at which you will have the formal airs pace change proposal **and all** of the supporting documentation ready to submit to the CAA. This date is required to assist us with the allocation of the required CAA-resource to your proposal and therefore it is a key date in our planning process. Whilst we will try to accommodate your specified timescales, there may be occassions where it is not possible for us to do so given the large number of projects that are already 'in process' You should also note that any changes to the above date may impact our ability to process your airs pace change proposal within your preferred timescales. It should also be noted that from September 20 18 any amendments submitted by a Data Originator or ANSP for onward promulgation in the UK IAIP will be subject to the Aeronautical Data Quality Requirements. See Commission Regulation (EU) No 73/20 10 (updated by 10 29/20 14) and CAP 10 54: Aeronautical Information Management guidance material for further information. These requirements will be discussed in greater detail during the course of your initial meeting with the CAA.

▼ Confirmation of Understanding *

Please provide your proposed date for the submission of your change proposal to the CAA. *

30 Apr 2021

Please provide your proposed AIRAC effective date *

AIRAC 13/2021

If this change forms a part of a modular airs pace change proposal please provide the relevant title and further information below (Note we will require individual submissions for each module). *

This Airs pace Change Proposal will support the Future Airs pace Strategy Implementation North (FASI-North) programme which will align lower airs pace changes with other airports in the north of England. This modular change will be coordinated NATS and SARG in due course.

If this change requires the implementation of a Five-Letter Name Code (5LNC) please specify your requirements below: *

Unknown at time of submission, to be specified in due course.