A NORTHERN VISION FOR A CONNECTED NATIONAL ECONOMY
Our vision:

- Become the UK’s most outstanding regional airport
- Capacity to provide international connectivity for up to 25 million people
- Boosting trade through a major freight centre handling 250,000 tonnes of cargo
- The next Aerotropolis for the UK, creating high skilled jobs, opportunity and prosperity in the North

Since Doncaster Sheffield Airport (DSA) opened in 2005, it has become one of the fastest growing airports in the UK. It is the only airport east of the Pennines and north east of London that has the capacity, infrastructure and land to deliver the next international gateway for the UK to meet the long-term aviation needs of the UK regardless of south east expansion.

Today the airport handles over 1.2 million passengers per annum, serving over 45 destinations and 23 countries across the world. With one of the longest runways outside of the south east and ready-made core runway infrastructure, DSA has capacity for up to 25 million passengers per annum and up to 250,000 tonnes of cargo.

As such, our vision will outline how DSA is ready to be transformed from a rapidly growing regional airport into a major international gateway for passengers and freight for catchments east of the Pennines, north and east of London and the Sheffield City Region.

“Doncaster Sheffield Airport is ready to be transformed from a rapidly growing regional airport into a major international gateway for passengers and freight.

It can enable the next global Aerotropolis, a dynamic economic and social catalyst.”
Responding to two national issues

In becoming a major international airport, DSA will offer a robust regional answer to two national issues:

1 The economic transformation of the North of England

The government’s objectives for the North, include a long-term, strategic approach to investment in vital transport infrastructure comprising air, rail and road links to attract new businesses, provide skilled jobs and promote innovation. This will enable the North to become prosperous, successful and self-sustaining in order to play its full part in a balanced and connected national economy.

DSA and its 1,600-acre site known as Aero Centre Yorkshire can enable the creation of an Aerotropolis, a new form of city with the airport highly integrated into a surrounding cluster of manufacturing, aviation, logistics uses, alongside housing opportunities and a central plaza of supporting facilities such as retail, hotels, food and beverage. The Aerotropolis model sees a truly sustainable mix of uses, enabled by comprehensive connectivity, establishing a true community.

The Aerotropolis concept typically extends over an area of up to 25km, which in the case of DSA would see it facilitating a transport and economic corridor connected with the major urban area, Sheffield. The scale that can be achieved would place the DSA Aerotropolis corridor firmly as a major point on the UK’s economic landscape.

2 The provision of future aviation capacity for the UK

DSA provides the answer to delivering additional capacity required in both the short and long term, complementary to the decision to build a new runway at Heathrow. It can relieve surface access challenges faced in the South East by offering uncongested access for passenger markets from north of London and across the eastern half of the country. DSA represents one of the only places in the UK that alongside significant passenger growth, can facilitate major freight expansion, supporting international trade at a crucial time in the country’s development post-Brexit. Government support for these proposals would demonstrate a strategic and balanced approach across the UK to provide long term air capacity requirements.
DSA’s unique position to grow

– The airport benefits from one of the longest runways outside of the South East, offering infrastructure capable of providing direct international connectivity to all global markets, without exception.

– The terminal’s contemporary, modular design offers the ability to phase-in the delivery of additional facilities flexibly and efficiently.

– DSA sits at the heart of the UK motorway network, connected directly by the Great Yorkshire Way link road. The second phase to be completed in May 2018 will further enhance access to the motorway network including the M18, A1(M) and M1.

– DSA is located in a relatively low density area and further development could be delivered without unacceptable impact on the environment and local communities.

– DSA has the capacity to enable large-scale air cargo growth without impacting on the ability to deliver passenger growth.

– Employment and residential catalyst – the airport’s site has the capability to deliver major employment opportunities in high value and highly skilled sectors integrated with new residential developments meeting a local and national need to attract Foreign Direct Investment.

The vision for Doncaster Sheffield Airport is to become the UK’s most outstanding regional airport.
A single infrastructure catalyst to deliver a step change in connectivity and investment

A key aspiration of our vision is to demonstrate how a link from the East Coast Mainline (ECML) located just under a mile from the airport can be the transformational change which can realise the unmet potential at DSA through the provision of a mainline airport station adjacent to the passenger terminal. This would place DSA on a mainline between London and Scotland, offering convenient access to DSA for all passenger markets east of the Pennines and immediately north and east of London. A projected rail travel time from these markets of 1 to 1.5 hours would relieve congestion on cross-London rail routes while making efficient use of existing infrastructure.

The station would serve far more than the airport. It would be at the hub of the Aerotropolis serving the residential, leisure and employment areas, provide a parkway function for the wider area, accelerate the delivery of further settlements and serve major local tourism attractions.

A feasibility study and strategic outline business case for an ECML station has been commissioned from Ove Arup & Partners. Funded jointly by DSA, Doncaster Council and Sheffield City Region Combined Authority, the study will be based on independent aviation forecasting undertaken by Aviation Economics and will include economic modelling by Genecon of the impact of the mainline station connection.

Economic modelling of the impact of the DSA vision has been undertaken by Genecon based on realising the capacity of 25 million passengers and 250,000 tonnes of cargo per annum along with a fully developed Aerotropolis.

The rail link could be in place within a five-year period, opening in 2024/5 delivering national aviation capacity well in advance of planned expansion at Heathrow.
**Vision Plan summary**

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Airport passenger capacity</strong></td>
<td>Passenger capacity for up to 25 million passengers per annum&lt;br&gt;11.8 million passengers by 2050 if ECML station realised and delivered in 2024/25</td>
</tr>
<tr>
<td><strong>Cargo capacity</strong></td>
<td>250,000 tonnes of cargo per annum</td>
</tr>
<tr>
<td><strong>People within 90 minutes public transport of DSA due to ECML connection and station</strong></td>
<td>8.8 million, up from 2.4 million</td>
</tr>
<tr>
<td><strong>Total users of station (Airport, Aero Centre Yorkshire, housing, local travel and tourism attractions)</strong></td>
<td>1.6 million per year by 2037</td>
</tr>
<tr>
<td><strong>Job creation</strong></td>
<td>73,000 new jobs to the Sheffield City Region</td>
</tr>
<tr>
<td><strong>Economic impact (Gross Valued Added)</strong></td>
<td>£3.2 billion per annum by 2048 (30 years)</td>
</tr>
<tr>
<td><strong>Accelerating growth of housing</strong></td>
<td>8,500 new homes initially forecasted</td>
</tr>
<tr>
<td><strong>Employment space delivered</strong></td>
<td>5.5 million sq ft</td>
</tr>
<tr>
<td><strong>Full ECML scheme construction costs</strong></td>
<td>£170 million (standard industry contingency assumed to be added)</td>
</tr>
</tbody>
</table>
An enabler of international trade

The UK is facing a cargo capacity challenge as it is not possible to meet expected long term demand. This will in turn lead to more cargo traffic, including with UK-bound cargo, flying directly into mainland Europe; the economic benefit to UK plc would be lost. DSA represents a prime location in the UK for a global logistics and air cargo facility delivering a central UK and North of England solution.

Our vision sets out what can be delivered, how the impact of the airport’s development will be for the whole UK and the North. This document sets out what is needed to make it happen including the completion of an airport station on the East Coast Mainline to link the airport by rail to its unique catchment.

Our aim is to play a major part in the sustainable growth and economic prosperity of the UK and the North of England.

We will respond to future travel demands by providing global reach for leisure, business and freight customers in the area east of the Pennines.

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Steve Gill
Chief Executive, Doncaster Sheffield Airport

There is a tremendous opportunity here at DSA to plan for the long term and harness the airport’s infrastructure assets to deliver wider economic activity for the UK and set a model to the world.
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An airport fit for the future today

“The airport benefits from one of the longest runways outside of the South East, measuring 2,893 metres by 60 metres and is able to accommodate the largest aircraft.”

- 25 million passenger capacity
- Vast 1,600-acre site
- The fastest growing airport in the UK
- A ready-made international infrastructure
- £200 million invested in the airport to date
- High spec, modular terminal design for easy expansion
- Ideal for long haul flights and cargo
- Excellent connectivity at the heart of the UK
Existing international reach

- The airport currently serves over 45 flight destinations across the world, with a mix of charter and low-cost scheduled, delivered by three key airline and tour operator partners, TUI / First Choice, Wizz Air and Flybe.

- During 2016/17 DSA was the fastest growing airport in the UK and one of the fastest growing airports in Europe. Growth between 2013/14 and the present day has seen passenger traffic increase by 88%.

- It has a rapidly growing cargo business, with regular scheduled flights serving perishables and ad-hoc charters for manufacturers, distributors and globally recognised e-tailers.

- The wider site accommodates over 100 businesses, these include Textron Aviation UK service centre, 2Excel and the northern headquarters of the National Police Air Service. There are also private charter, aviation training and helipad facilities.
An airport fit for the future today

Primed for growth

Infrastructure

– The airfield infrastructure is future proofed with a view to enabling future, cost-effective expansion. In 2017, a £6 million runway resurfacing was undertaken to secure it’s long term condition.

– Commercial flights started at DSA in 2005 and as one of the UK’s newest airports it is designed to the latest standards with a modular passenger terminal design which can expand to cater for a throughput of 25 million people per annum.

– The essential infrastructure is already in place including the runway, fire station, air traffic systems and engineering facilities allowing expansion to be delivered cost effectively and efficiently.

– The runway could be readily extended to over 3,000 metres with additional taxiways and apron stands to cater for up to 25 million passengers per annum can be provided within the airport site.

Operational

– The airport benefits from uncongested airspace, making flight operations and increased international scheduling far easier to implement.

– A 24-hour flight operating environment is available, enabling flexibility of airline operations while meeting high noise and air quality standards, with manageable community impact given its location with flight paths below which there are only limited levels of development.

– The Peel Group owns the majority of the land required to construct the new facilities, enabling the proposals to be developed in as short a timescale as necessary.
Road connectivity

- The airport is at the heart of the UK’s motorway network, with excellent regional and national connectivity.

- Close proximity to five major motorways, the M18, M1, A1(M), M62 and M180, allowing connections to all major UK cities.

- Road access has already been improved significantly by the recent construction of the new motorway link road, Great Yorkshire Way.

- Easy access is available to the UK’s largest port network on the Humber Estuary and 75% of the UK population is within a 4.5 hour HGV drive.

Rail network

- The airport site has the opportunity for direct national and local rail connections through proposed links to the East Coast Mainline and Doncaster–Lincoln lines respectively.

- Major train operators including Virgin Trains East Coast, Cross Country, Grand Central, TransPennine Express, Northern Rail and Midland Mainline serve Doncaster Station and Transport Interchange.

- Trains to London run every 20–30 minutes with a fastest non-stop journey time of 90 minutes and a typical journey time of 1 hour 40 minutes.

- Journey times to London are anticipated to reduce by around 11 minutes by 2019 with the introduction of new Super Express trains.

- DSA sits alongside the Doncaster to Lincoln line, where planning permission has been secured for a new community train station with associated park and ride, providing direct access to the airport for local rail services.

- High Speed 2 rail is due to pass through the Doncaster MBC area which may present additional connectivity to the airport via a connecting service on the Sheffield to Doncaster line.
“A new rail link and airport terminal station would place up to 9 million people in the area east of the Pennines and north and east of London within 90 minutes travel time to the DSA terminal and surrounding facilities by public transport.”
Making the case for rail

Key benefits will be secured at a national, regional and local level by building an airport station at DSA.

**National:**
- In many cases quicker travel times and less changes required for passengers living east of the Pennines and north of London to reach DSA than to Heathrow or Gatwick.
- Peak time journeys will be in the opposite direction to the main commuter flow, making efficient use of existing capacity.
- Reduce the number of journeys on highly congested routes through London towards South East Airports.
- Help achieve maximum benefits from train and network investments being made to the ECML.

**Regional and Northern Powerhouse:**
- Improved connectivity for major population centres within Yorkshire and the Humber and to surrounding areas such as Lincolnshire, North Nottinghamshire and Nottinghamshire.
- A new station can act as a catalyst to deliver a major Aerotropolis around DSA, attracting high quality investment and providing significant GVA and job benefits to the region and the North of England.

**Local:**
- Economic benefits of an expanded DSA and investment at the wider airport site.
- Alleviate platform capacity and expansion limitations at Doncaster Interchange Station, a major rail hub.
- Provide the opportunity for faster trains to overtake slower services which will call at DSA before re-joining the mainline.
The case for rail – the missing link

The journey to a connected national economy

By taking a strategic, joined-up approach to surface transport, air service provision and a number of planned investments in infrastructure and rolling stock, the economic advantages of each element would be multiplied.

In addition to integrating DSA with the ECML, a strategic link would also be facilitated with the planned East West rail project. This is a phased delivery of improved rail connectivity between Oxford and Cambridge, with the section from Oxford to Bedford currently being delivered. A preferred route for the Bedford to Cambridge section was announced in March 2016, with an interchange station planned at Sandy to link to the ECML. In the future, a train stopping at Sandy could be at the DSA station in under one hour.

The delivery of the Great Yorkshire Way link road has dramatically improved accessibility to DSA from the motorway system. Plans announced in 2016 to upgrade all of the A1 north of Peterborough to motorway standard will reduce road travel times further and large parts of the north of London passenger market will fall within the two hour drive time.

High Speed 2

The route of the eastern leg of the HS2 line to Leeds is proposed to pass through Doncaster Metropolitan Borough via Mexborough. This is expected to be completed in 2022/23. A potential parkway station where the HS2 line would cross the existing Sheffield / Rotherham to Doncaster line, could be linked to DSA, further improving connections to the airport.
Major population centres accessible to DSA

A northern vision for a connected national economy
The case for rail – the missing link

Journey times

A new rail link and airport terminal station would place up to 9 million people in the area east of the Pennines and north and east of London within 90 minutes travel time to the DSA terminal and surrounding facilities by public transport.

The table shows existing travel times to Doncaster Central Station from King’s Cross and stations in the Home Counties to the north of London. It also shows the comparable travel times to Heathrow Airport and Gatwick Airport stations, for arrival around 8am.

The travel times to Doncaster become competitive with those to Heathrow or Gatwick from stations located north of London.

Also shown are the projected times that could be achieved from a new ECML Airport Terminal Station at DSA.

This location would be slightly nearer London, giving a travel time of about 90 minutes. With planned investment in the Hitachi built new Super Express trains (IEP) due for commissioning in 2018, the King’s Cross to Doncaster travel time is already planned to be reduced by around 11 minutes and the new airport station would be less than 90 minutes from London.

As well as fast journey times from the south, major population centres on the East Coast Mainline to the North of Doncaster would be directly accessible to DSA, with York, Leeds and Newcastle currently 25, 30 and 90 minutes away respectively.
<table>
<thead>
<tr>
<th>Origin Station</th>
<th>Destination Station</th>
<th>Journey time</th>
<th>Changes</th>
<th>Variance</th>
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<td>Peterborough</td>
<td>Doncaster Central Station</td>
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<td></td>
<td>Projected journey times to DSA Station</td>
<td>00:37</td>
<td>0</td>
<td></td>
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<tr>
<td></td>
<td>Gatwick Airport Station</td>
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<td>2</td>
<td>-1:47</td>
</tr>
<tr>
<td></td>
<td>Heathrow Airport Terminal 2 and 3 Station</td>
<td>02:00</td>
<td>2</td>
<td>-1:23</td>
</tr>
<tr>
<td>Stevenage</td>
<td>Doncaster Central Station</td>
<td>01:22</td>
<td>0</td>
<td>-0:14</td>
</tr>
<tr>
<td></td>
<td>Projected journey times to DSA Station</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Gatwick Airport Station</td>
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<tr>
<td></td>
<td>Heathrow Airport Terminal 2 and 3 Station</td>
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<td>Doncaster Central Station</td>
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<td>-0:14</td>
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<td></td>
<td>Projected journey times to DSA Station</td>
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<td></td>
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<td>Gatwick Airport Station</td>
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<td>Potters Bar</td>
<td>Doncaster Central Station</td>
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<td>1</td>
<td>-0:31</td>
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<tr>
<td></td>
<td>Projected journey times to DSA Station</td>
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</tr>
<tr>
<td></td>
<td>Gatwick Airport Station</td>
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<td>2</td>
<td>-0:13</td>
</tr>
<tr>
<td></td>
<td>Heathrow Airport Terminal 2 and 3 Station</td>
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<td>2</td>
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<td>Projected journey times to DSA Station</td>
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<td>Heathrow Airport Terminal 2 and 3 Station</td>
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</table>
Passenger catchment
DSA station ECML proposed alignment
The case for rail – the missing link

Indicative service pattern for DSA station based on present day network capability

<table>
<thead>
<tr>
<th>Service</th>
<th>Current operator</th>
<th>Trains per hour (TPH) to DSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECML via DSA</td>
<td>Virgin Trains</td>
<td>2</td>
</tr>
<tr>
<td>ECML via DSA</td>
<td>Virgin Trains</td>
<td>2</td>
</tr>
<tr>
<td>Doncaster → Lincoln</td>
<td>East Midlands Trains</td>
<td>1</td>
</tr>
<tr>
<td>Scunthorpe → DSA</td>
<td>Northern</td>
<td>1</td>
</tr>
<tr>
<td>Leeds → DSA</td>
<td>Northern</td>
<td>2</td>
</tr>
<tr>
<td>Other services via Doncaster</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This service pattern has been developed based on feedback from train operating companies currently operating the respective franchises, Northern Rail, TransPennine Express, Virgin Trains and East Midlands.

It shows a service pattern delivering six trains per hour to the station through direct ECML services and regional services. It also envisages two ECML services stopping at Doncaster Central Station with passengers wishing to access DSA station changing onto a short connecting service. An additional ECML service is due to commence in 2021 with significant ECML capacity expected to become available after the delivery of HS2.

The service pattern would be achieved through additional stops on, or changes to, existing services which can be implemented without major operational or commercial impact.

Indeed a new station at DSA with an estimated usage of 1.6 million by 2037 represents a significant new revenue opportunity for train operating companies who would likely wish to capture the opportunity by delivering enhanced services.

A station would be expected to open by 2024 at the earliest, when greater service connections than shown could be delivered through future franchise agreements, train and infrastructure upgrades.
Artist's impression of an ECML station at DSA
East Coast Mainline station at DSA
The realisation of an East Coast Mainline station at DSA will provide benefit at a national, regional and local level. This has been recognised by stakeholders across these spatial levels along with clear alignment of policy objectives.

A range of stakeholders have been consulted before and during the ECML feasibility study to ensure views are represented in the scheme’s development.

Irrespective of the study for the DSA ECML station, a series of key existing and emerging national, pan-northern and regional documents already provide support for the opportunity.

Rail to directly serve each of the North’s airports, with direct services to economic centres within the airport’s catchment.
Transport for the North (TfN) has been formed to transform the transport system across the North of England. It will soon become a statutory body and is tasked with setting out the requirements of the pan-Northern transport network through developing a Strategic Transport Plan for the North.

Within the draft Strategic Transport Plan, DSA is identified as a major economic centre and enhanced rail access to Doncaster Sheffield Airport is highlighted within accompanying documents as an emerging investment priority within TfN's Southern Pennines development corridor. TfN has also published a draft update of it’s Long Term Rail strategy, which include conditional outputs to be achieved with an accompanying minimum standard. One such standard directly relates to airports such as DSA.
Network Rail is one of the main custodians of the East Coast Mainline, responsible for ensuring its resilience, long term investment and maximising its role in facilitating economic growth. Network Rail has recently published its ECML Route Study for consultation, developed with the rail industry and wider infrastructure planning stakeholders.

Its starting point is an understanding that growth in the provision of railway transport is closely linked to economic growth.

A link to the ECML at DSA is identified within the Route Study as a prospect for meeting such criteria with rail investment to drive ‘commercial and wider economic returns.’ The study also identifies the enhanced connectivity to air passengers that the proposed ECML station could unlock.

The Sheffield City Region (SCR) Transport Strategy sets out the transport priorities for the SCR up to 2040. It forms part of the Local Transport Plan and is adopted by the SCR Combined Authority as the Local Transport Body for South Yorkshire.

The draft strategy recognises the key role of the ECML for the SCR and the role of DSA in delivering one of the strategy’s main goals to support inclusive economic growth.

“We will continue to support the growth of Doncaster Sheffield Airport through enhanced surface access. Following on from recent success and £200m investment to date made by its owners, we will work in partnership with Doncaster Metropolitan Borough Council, private developers and service operators, to deliver improved bus services and the potential for a new rail connection and station providing connectivity to the ECML.”
The Independent International Connectivity Commission (IICC) was established to examine the economic role of international connectivity for the North of England. It reported in 2017 with an assessment of the current role of the North’s airports and ports in providing the required global connectivity for passengers and freight.

The IICC report states that “creating the right conditions for the North’s airports to deliver improved international connectivity is all about ensuring that they can draw on the widest possible catchment area, so making it attractive for airlines to expand global connections.”

By acting as regional growth magnets, airports can use land around their core facilities to support the attraction of other activities which value proximity to an airport or seek to benefit from the high quality surface access links.

The report included a series of specific recommendations, including that TfN should support the LEPs to pursue improved surface access to international connectivity hubs across the North, including improved rail connections to DSA.

Aviation Strategy 2018

The need for a creation of a new Aviation Strategy for the UK has been identified by the government, in which it will set out the long-term direction for the aviation sector for 2050 and beyond. The strategy’s call for evidence cites the importance of the air transport and aerospace sector to the UK and the role of airports in attracting inward investment by concentrating economic activity.

The government also recognises the role of regional connectivity to support sustainable economic growth, the need to best utilise existing capacity and the importance of air freight in supporting UK international trade.
Airports that shape the economy

The single most important measure of urban prosperity is the extent to which cities and the people who live there are connected with each other. More specifically in the global economy, it is access to air transport that is increasingly shaping the fortunes of towns and cities.

From this growing recognition of the importance of air transport to prosperity of regions, the concept of the “Aerotropolis” has evolved, which delivers a specialised urban quarter linking a physical airport to mixed use development.

“Aerotropolis” is a new urban form where cities are built around airports speedily connecting time-sensitive suppliers, manufacturers, distributors, and business people to distant customers, clients, and marketplaces. By promoting both a clear understanding of this concept and high-quality urban design, our vision illustrates how land-use can be optimised at the airport through the integration of various components in one inclusive and sustainable approach.

AECOM who worked with Peel to transform RAF Finningley into DSA, has been involved with a number of Aerotropolis masterplans of varying scales across the globe, including Newark Liberty International Airport, Abu Dhabi International Airport and Sabiha Gokcen International Airport and has brought its experience to informing and helping to shape this vision document.
“Airports will shape business location and urban development in the 21st century as much as highways did in the 20th century, railroads in the 19th and seaports in the 18th.”

Dr John D Kasarda
The UK’s next Aerotropolis
Aero Centre Yorkshire

DSA presents a golden opportunity to deliver an Aerotropolis in the north through delivery of its Aero Centre Yorkshire (ACY) proposals. This would include strategically designed development zones with an integrated central plaza facility with retail, hotels and local services alongside the proposed ECML station, to support a growing living and working population.

ACY already accommodates a thriving business community with over 100 businesses occupying more than half a million sq ft of existing space.

The wider ACY estate extends to nearly 1,600 acres and an updated Airport Masterplan proposes a sustainable mix of commercial, residential and supporting uses centred around the airport and proposed ECML station.

“The airport is the catalyst to stimulating a combination of economic activity both at Aero Centre Yorkshire and beyond its boundaries.”
The UK’s next Aerotropolis

1. **MRO Campus and Innovation District**

   Creation of world-leading home for MRO and research activity adjacent to the runway. The zone would include a satellite operation of the existing Advanced Manufacturing Research Centre.

2. **Landside Advanced Manufacturing and Logistics**

   In excess of 3 million sq ft of logistics and advanced manufacturing space, with ability to accommodate up to and in excess of 1 million sq ft.

3. **Global Air Cargo Campus**

   Split into two areas:

   Cargo North – located to the north of the passenger terminal, with existing Cargo Transit Shed facility, mixed use and general aviation hangars.

   Cargo South – located to the south of the terminal, with land assigned for new cargo transit operations and integrator facilities.

4. **Residential zones**

   To the south of the airport access road, up to 175 acres of residential development, space for 2–3,000 units.

5. **Central plaza of retail, hotel, food and beverage and other supporting facilities**

   Fronting the south side of the airport access road over 1 million sq ft of land adjacent to the proposed ECML station for uses supporting the planned residential and employment areas.
Our vision has the ability to create a bespoke and innovative approach to supporting industries and local communities in a single comprehensive approach driving agglomeration.

The Sheffield City Region’s economy has a gross value added (GVA) or output of more than £30 billion per year and contains approximately 52,000 businesses. With its increasing connectivity, DSA will play a key role in attracting investment to the City Region and boost the productivity of existing firms.

Connectivity is widely seen as driving agglomeration, it is considered likely that growth in the SCR will be focused around existing motorway/highway junctions that offer businesses easy access to the airport, the wider AMID corridor and the national motorway network.

This can be seen in current labour market patterns below along the M18/M1 and Great Yorkshire Way in connecting a 20-mile corridor from DSA and onto Sheffield.
There are currently around 453,950 FTE jobs located within this corridor. Research by Brueckner\(^1\) into US airports found that a 10% increase in airline traffic raises employment in surrounding metropolitan areas by 1.1%.

Applying this ratio to those junctions across the corridor and assuming less pronounced impact further from each junction, would see an additional 79,750 jobs (gross), 72,700 jobs (net) added to the corridor area by 2048 based on DSA achieving 25 million passengers per annum.

\(^1\)Brueckner, 2003, reported in Causal Relationships Between Airport Provision, Air Traffic and Economic Growth: An Econometric Analysis, Alroogen and Malina, 2010
The graphic below highlights the potential transformational impact of the Aero Centre Yorkshire (ACY) Aerotropolis on the labour market growth trajectory for Sheffield City Region.

The City Region’s Regional Econometric Model (REM) forecasts show a projected baseline growth (i.e. without ACY), from 683,400 at current (2017) levels to 786,600 by 2048.

Add in the impact of the development of a thriving Aerotropolis / Airport Corridor and the projections show the potential to boost this by a further 72,700 jobs to 859,300 jobs; i.e. a total uplift of 175,900 rather than 103,200 jobs.

Net transformational effects on Sheffield City Region’s labour market by 2048 (000’s)

It is therefore estimated that the ACY Aerotropolis would make a very significant contribution towards this projected growth, accounting for around 40% of the 175,900 additional FTE jobs in the City Region by 2048.

Based on the current average Gross Value Added (GVA) per job estimate across all sectors in Doncaster (£43,872 per job, ONS, 2015), the overall annual additional contribution of the 72,700 net additional FTE jobs brought about through the ACY Aerotropolis is estimated to be in the order of £3.2 billion per year by 2048.
Global Innovation Corridor

Part of the Global Innovation Corridor – an engine of national growth

A new complementary urban model is now emerging called ‘innovation districts’.

Innovation districts have become recognised as a spur to regeneration and economic growth by creating a nurturing environment for collaboration and knowledge sharing.

These are geographic areas where leading-edge anchor institutions and companies cluster and connect with start-ups, business incubators and accelerators.

They are physically compact, with strong domestic and international transport links, technically-wired and offer mixed-use housing, office, and retail.

They alter the location preferences of people and firms, re-conceiving the link between economy shaping, place making and social networking.

Global Innovation Corridor (GIC) in the Sheffield City Region
Sheffield City Region is a leader in global innovation exemplified by the Advanced Manufacturing Innovation District (AMID) and the recent AMRC Factory 2050 campus development by the University of Sheffield.

This district includes the Advanced Manufacturing Park (AMP) between Sheffield and Rotherham which has seen over a decade of development, propelled by the Advanced Manufacturing Research Centre (AMRC).

The AMRC is a 540,000 sq ft research complex co-founded by the University of Sheffield and Boeing; it’s unrivalled connection of industry and research led innovation has been a force for the agglomeration of advanced manufacturing and technology firms at the Advanced Manufacturing Park. These include Rolls Royce, Boeing, BAE Systems McLaren, Alcoa, Tata, and Forgemasters.
The success of the AMRC as a catalyst for growth in the SCR has captured the attention of governments globally and the AMRC is now being replicated in South Korea and the USA.

Aero Centre Yorkshire, just 20 miles and only a 20-minute drive away is already home to over 100 businesses and well placed to deliver a thriving aviation associated innovation district. Combining the two innovation districts in AMID and ACY into one economic corridor can provide an even greater engine for growth on a national scale, the Global Innovation Corridor (GIC).

An expanded DSA will provide the global connectivity required to benefit the businesses within the GIC and deliver further high quality investment to the DSA site and wider GIC. Businesses such as Rolls Royce require specialist facilities and a live airport for on-site training.

The AMRC, the Sheffield City Region and Doncaster Council have all confirmed their support for an AMRC satellite training facility at Aero Centre Yorkshire to deliver the necessary high level skill requirements for the businesses locating on the site. This will complement the existing enterprise zone on the airport site.

The GIC can make a significant contribution towards delivering the Government’s Industrial Strategy to support investment in science, research and innovation, as well as encouraging international trade.
By combining these two innovation districts, a Global Innovation Corridor can act as a major spur for attracting investment to an area that has:

- High quality, innovative employment and research facilities
- Sustainable, liveable and walkable mixed use development
- Excellent transport links on a local, regional, national and international level
“A Global Innovation Corridor will traverse the heart of the City Region capitalising on assets of global significance – linked by the region’s multi-modal transport connectivity to drive growth through innovation-led research, advanced manufacturing and engineering.”
An international logistics and air cargo facility

“DSA’s prime location, operational capacity and on-site service support makes it the airport of choice for an international logistics and air cargo facility.”

The airport combines the convenience of a regional airport with first-class cargo facilities for scheduled services and the ad-hoc movement of goods.

Few airports have the capability to fulfil future cargo demand. Our prime location, operational capacity and on-site service support make DSA the airport of choice for an international logistics and air cargo facility.
The challenge – cargo capacity constraints in the UK

UK cargo capacity is already constrained and expected to become more so over the coming decades.

– No major increases to UK cargo capacity are on the horizon, with industry studies concluding that regardless of additional runway capacity being constructed in the South East, London’s air cargo capacity will be full.

– Increasing demands to allocate slots to passenger operations at major airports will result in limited opportunities for pure freighter traffic. Restricting cargo operations to bellyhold operations facilitated by cargo capacity on long haul passenger services. Evidence of this trend is already emerging in Europe and likely to occur in the UK impacting airports in the South East along with Manchester and Birmingham.

– Increasing congestion in the air and on the ground affecting both cargo processing times and surface access to airports, cargo operators are seeking more efficient solutions to speed up their supply chains, threatening cargo viability.

– As a result of these constraints, the UK is already losing inbound air cargo services to the continent with goods trucked by road across the channel to the UK.

– These constraints are impacting on the UK economy through the loss of direct cargo traffic and accompanying impact on local supply chains.

Developing DSA into a nationally significant air freight hub for the UK, based on its central location, strong transport network, runway capability and capacity and the available space to develop large scale airside and landside logistics facilities.
An international logistics and air cargo facility

The demand – a national need for UK cargo facilities:

- Integrator market key players – DHL, FedEx and UPS are all looking to expand capacity.

- New entrants into the air express market will increase pressure on airport capacity for European networks and transatlantic connectivity.

- The rationalisation of global freight fleets and the introduction of fuel efficient aircraft has improved the viability of dedicated freight operations.

- Capacity and product constraints along with regulatory costs have constrained and actively reduced the UK’s cargo capacity, handing more traffic to mainland Europe and reducing the economic benefit to UK plc.
The DSA difference – a unique capability for large-scale growth:

- DSA is in a unique position of having the capability to enable large-scale air cargo growth and the land holding to facilitate growth without impacting on the ability to deliver equally ambitious passenger growth.

- The length of the runway means the airport can accommodate international freight from all global locations.

- DSA’s central UK location and direct motorway access, facilitated by the £56 million link road – Great Yorkshire Way, means that DSA is well positioned to serve most regions of the UK – London is accessible in just 3.5 hours.

- The Sheffield City Region is already home to large-scale logistics development including iPort. This national and international distribution facility is just 3 miles from DSA and comprises of 6 million sq ft of floor space.

- DSA is already trialling new technology to enable it to compete on a cost base comparable with its EU counterparts.

- Doncaster is a major centre for logistics with clusters of new business, warehouse and distribution parks.

- Almost 470,000 tonnes of cargo a year bound for Asia and America originates within 100 miles of DSA.

- Space to create a global logistics or air cargo campus capable of handling in excess of 250,000 tonnes.
The Peel Group – committed to helping the region fly

The airport is owned by Doncaster Sheffield Airport Ltd, which is a subsidiary of the Peel Group. The group is one of the leading infrastructure, real estate and investment enterprises in the UK, operating mainly in the North of England in transport and logistics, retail and leisure, land and property, energy and media. The group has been developing airports for over 20 years and has extensive expertise in airport infrastructure planning and development.

Peel is passionate about the growth, regeneration and prosperity of the North of England and the remit of the Northern Powerhouse to support economic growth and productivity in those regions.

The group is also committed to ensuring the long-term growth and success of DSA as part of a wider remit to create a connected national economy, whereby vital regional infrastructure including the rail and road networks enable the North to play its part in powering the UK economy.
With a track record of reinvesting into communities to create economic activity, employment and a better standard of life for everyone in the North, to date Peel has invested £200 million developing DSA and Aero Centre Yorkshire. The land estate acquired future proofs the expansion of Doncaster Sheffield Airport. Its potential is almost unrivalled in the context of UK aviation when considering its unconstrained capacity, expansion land, central location and enviable access to road and rail infrastructure.

Peel takes a global perspective, trading with international partners for investment, but delivers through strong partnerships with local businesses, communities, public bodies and third party organisations. The group reinvests profits back into its businesses and communities to create positive legacies for people in the North of England. Indeed, over the last four decades Peel and its partners have invested over £5 billion across the North and built on the region’s strengths to help drive its economy.

Further, our recent investment of over £1 billion in providing infrastructure is bearing fruit and stimulating new investment for the next wave of growth. Our company motto reflects our track record of regeneration and innovation, delivering transformation and creating vibrant places through ‘determination, perseverance and patience’.

MediaCityUK is home to the northern headquarters of both the BBC and ITV – a leading international hub for the creative and digital sectors.
Statements of support

The development of this Vision Plan has been undertaken closely with a range of national, pan-Northern, transport, regional and local stakeholders who will continue to play a key role in bringing our plans to fruition.

We continue to work closely with our immediate stakeholders in Doncaster, Barnsley, Rotherham and Bassetlaw councils, the Sheffield City Region LEP and Combined Authority to deliver the Airport’s Masterplan.

“The Vision Plan truly encapsulates transport infrastructure driving significant economic growth. Connecting our airport to a UK main rail line in the ECML would put it in a unique position. It would attract investment across the Sheffield City Region and deliver Aero Centre Yorkshire as the next global Aerotropolis.

With a single piece of new infrastructure, one of the region’s biggest employment centres would be achieved, stimulating high value business investment, new housing, tourism, regional and international connectivity. Seeing this delivered to realise the DSA Vision is a major part of our transport and economic strategy.”

Sir Nigel Knowles, Chair of Sheffield City Region LEP

“Doncaster Sheffield Airport is a huge asset for Doncaster and we are committed to making it a big success. This Vision shows how the airport can be an integral part of the local community, a place to live, work and travel. The size of the economic prize within this Vision is unrivalled and will be a long lasting contributor to the rebalancing of our economy.”

Ros Jones CBE, Mayor of Doncaster
“We see powerful synergies between the Advanced Manufacturing Innovation District and Aero Centre Yorkshire. Establishing MRO 2050, a satellite AMRC training centre at Aero Centre Yorkshire, will support the airport in realising its vision of attracting global Maintenance Repair Overhaul operations to the Sheffield City Region.

Doncaster Sheffield Airport is not only the international gateway into our region, it is also playing an increasingly important role in shaping the economic and industrial future of the region, connecting advanced manufacturing with our innovation, skills and logistics assets.”

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Professor Keith Ridgway CBE, Executive Director of the AMRC Group

“Doncaster Sheffield Airport is in a great position geographically and economically to continue growing and realise its ambition to become a major international gateway for passengers and freight. The airport’s plans aim to boost trade and connect more people internationally which will provide a huge benefit to tourism in Yorkshire as increased numbers of visitors will have better access to our county.”

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Sir Gary Verity, CEO of Welcome to Yorkshire
A northern vision for a connected national economy
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