

TfN International Connectivity and Aviation Policy Position Statement

September 2022



Table of Contents

1	Introduction	3
2	International connectivity in the North of England.....	4
3	Literature Review	5
4	Key themes.....	6
4.1	The impact of Covid-19 on domestic and international connectivity.....	6
4.2	Decarbonising transport	7
4.3	Optimising the opportunities from the green economy	9
4.4	Surface access to airports and ports	10
4.5	Increasing competitiveness	12
4.6	Supporting cohesion	13
5	Links to other workstreams.....	14
6	TfN’s position on international connectivity	15
6.1	Aviation decarbonisation.....	15
6.2	International gateways as economic hubs.....	18
6.3	Surface access to/from international gateways	19
7	TfN’s suggested role in relation to international connectivity.....	20
7.1	Coordination and influencing:	20
7.2	Providing evidence-based recommendations:	21
7.3	Supporting TfN workstreams	21
8	Proposed next steps	23

1 Introduction

Transport for the North (TfN) is a Statutory Transport Body (STB) of elected leaders and a partnership of business leaders who collectively represent the region's 15 million people. As a partnership, TfN brings 20 Local Transport Authorities and 11 Local Enterprise Partnerships together with Network Rail, National Highways, HS2 Ltd, and UK Government.

Through its statutory powers, TfN provides a single voice for the North to support the development and implementation of transport strategies across the region, determining investment decisions and working with Government to enable northern priorities to be included within national priorities. Operating within this strategic position, TfN and its partners work collaboratively to identify the transport infrastructure and policy measures that are required to achieve the North's ambition. Our current Strategic Transport Plan (STP) (2019) is a formally adopted plan which outlines how strategic investment in transport could unlock inclusive and sustainable transformative economic growth across the North.

The STP is underpinned by a broad evidence base including TfN's Decarbonisation Strategy (November 2021) and a series of policy positions covering a range of topics. The Decarbonisation Strategy defines four plausible baseline emissions trajectories based on our Future Travel Scenarios and assesses the gap between each trajectory and TfN's Decarbonisation Trajectory. Within the strategy, we stated we would work with partners and an independent expert advisory group to:

- Agree TfN's role in relation to aviation and airports.
- Investigate where national policy could be strengthened.
- Identify potential actions that could be taken at a regional and local level to further reduce emissions from aviation and airports, additional to what has been proposed by government within its Jet Zero Strategy.

Within this policy position, we will address the above objectives, linking to our proposed approach for aviation decarbonisation, provided in Appendix A.

TfN's previous policy development within international connectivity and aviation culminated in the publication of TfN's Independent International Connectivity Commission Report (February, 2017). The report considered the economic importance of international connectivity to transform economic performance in the North and close the productivity gap with other parts of the UK. This included assessing the economic importance of the North's airports and ports and opportunities to encourage economic growth and productivity at these international gateways.

Since the publication of this report, the landscape has shifted significantly with greater focus on decarbonisation and Net Zero, creating challenges to support growth ambitions around international connectivity. This policy position aims to reevaluate TfN's position for international connectivity, particularly in the context of aviation both internationally and domestically, but also how other transport modes can support TfN's ambitions for the North. This includes considering international connectivity for the North's ports and how this position can support

the objectives set out in TfN's Freight and Logistics Strategy (2022), to identify potential interventions and policy solutions that will best support economic growth and decarbonisation around the North's international gateways.

For the purposes of this policy statement, **international connectivity** has been defined as "**moving people and goods effectively and efficiently between desired origins and destinations internationally.**" As part of this policy position, domestic aviation is also included.

This position statement will then be embedded within TfN's revised Strategic Transport Plan and its subsequent evidence base which we plan to adopt by December 2023.

2 International connectivity in the North of England

TfN's Independent International Connectivity Commission Report (February, 2017) identified the importance of international connectivity for the North, with the North's airports handling 40 million air passengers in 2016 and contributing £5.5bn to the North's GVA, whilst Northern sea ports contributing 20% of all GVA generated by UK ports in 2014.¹ More recent figures since this report demonstrate the continued importance of international connectivity. Visit Britain figures show that in 2019, there were 3.99 million visits to the North by international visitors, with a total expenditure of £1.99 billion². However, this context has evolved further following the impacts of the Covid-19 pandemic and Brexit, as well as the shift towards Net Zero and decarbonisation.

The original report did not detail the challenges of increased aviation emissions associated with the growth in international connectivity, as well as the innovative technologies that are constantly evolving to overcome these challenges. This policy position serves to update TfN's position on international connectivity and aviation, particularly on decarbonisation, building on the work within TfN's Decarbonisation Strategy. The North contains various airports and ports varying in scale and operations. Several major airports and ports as listed in the Independent International Connectivity report³ are shown in the table below. The report highlighted that if global connectivity is supported, the latent capacity at the North's key airports and ports can deliver an additional 60 million passengers per annum. This was based on current airport masterplans and Department for Transport (DfT) assessments, as of February 2017.

Airports in the North serve a range of destinations both domestically and internationally, with Manchester Airport being the busiest outside of London based on passenger numbers. Manchester is well connected by low-cost carriers

¹ Independent International Connectivity Commissions Report, February 2017, https://transportforthenorth.com/wp-content/uploads/International-Connectivity-Report_websafe.pdf

² Visit Britain, Inbound nation, region, county data. [Inbound nation, region, county data | VisitBritain](#)

³ Independent International Connectivity Commissions Report, February 2017, https://transportforthenorth.com/wp-content/uploads/International-Connectivity-Report_websafe.pdf

serving Europe, as well as various long haul operators serving locations including America, the Middle East and Asia. Low-cost operators also operate services to Europe from airports such as Newcastle, Liverpool, Leeds Bradford and Doncaster Sheffield.

Other airports in the North include Humberside and Durham Tees Valley, both of which support European connectivity. Several of the North’s airports also provide domestic connectivity such as to Belfast, London and the South West, as well as to service offshore energy infrastructure in both the North Sea and Irish Sea.

The North also hosts several key ports for freight and passengers on both the East and West coasts of the UK. Hull, Humberside and Tees/Hartlepool provide direct connectivity to Western Europe and beyond. Further expansion at Liverpool can now accommodate larger post-Panamax vessels increasing freight volumes, whilst also maintaining connectivity with Northern Ireland, the Republic of Ireland and the Isle of Man. A summary of Northern airport and ports by is provided below:

Airports (and total passenger numbers 2019⁴)	Ports (and total cargo tonnage 2020⁵)
Manchester – 29.3m	Grimsby and Immingham – 51.2m
Newcastle – 5.2m	Liverpool – 34.3m
Liverpool – 5.1m	Tees and Hartlepool – 28.2m
Leeds Bradford – 4.0m	Hull – 9.2m
Doncaster Sheffield – 1.3m	Port of Tyne – 4.7m
Humberside – 206,000	
Durham Tees Valley – 145,000	

Within TfN’s Independent International Connectivity Commission Report (February, 2017) we examined the economic role of international connectivity for the North of England. The report included an assessment of the role of the North’s airports and ports in providing global connectivity for passengers and freight and the actions that are required to improve international connectivity in supporting the North’s business and visitor economy. It also identified the potential role of the public and private sectors in delivering the key drivers for international connectivity. This policy position will build on this assessment and provide an updated position for TfN within international connectivity and aviation.

3 Literature Review

To inform this position statement, a literature review has been undertaken of current national policy and wider supporting documentation which is focused on or linked to international connectivity. This has provided TfN a greater understanding of the current context in which the position statement should be

⁴ CAA, 2019, Annual airport data, [Annual airport data 2020 | Civil Aviation Authority \(caa.co.uk\)](https://www.caa.co.uk/annual-airport-data-2020)

⁵ DfT, 2022, Sea passenger statistics: data tables (SPAS), [Sea passenger statistics: data tables \(SPAS\) - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/statistics/sea-passenger-statistics-data-tables)

developed. A full list of the documents contained within the literature review is provided in Appendix A.

4 Key themes

The context in which the position statement has been developed has been summarised under the following key themes.

4.1 The impact of Covid-19 on domestic and international connectivity

Following the enforced Covid-19 restrictions since 2020, the UK Government has moved to reopen the air industry and worked towards overcoming the impacts of the pandemic on the sector. The Civil Aviation Authority's most recent flight data from Q4 of 2021, covering October to December 2021, shows a total of 30.9 million passengers flew in and out of the UK.⁶ Those statistics represent a steady recovery for the sector with flight and passenger numbers at the highest levels since Q1 of 2021. However, those statistics also show a 55% decline in passenger numbers compared with the same period in 2019, before the pandemic. Furthermore, the UK is now the 4th largest aviation market in Europe, compared to being the largest market prior to the pandemic⁷.

The International Air Transport Association (IATA) estimate that Covid-19 will cause a long-term loss of 2 years growth, with 2022 levels of global passengers projected to be 88% of 2019 figures, and 2023 levels projected to be 105% of 2019 figures⁸. However, despite the impact of Covid-19, the number of global air passengers and volume of cargo is expected to increase significantly over the next 30 years⁹.

The pandemic also impacted ports, with over half of global respondents within the IAPH-WPSP Port Economic Impact Barometer report¹⁰ highlighting an initial reduction in container vessel calls by more than 5%. However, the report noted a strong recovery for the sector by May 2021, with 15% of respondents even noting increases in cargo vessel calls compared to pre-pandemic figures.

As TfN, we support the North's international connectivity and understand its continued importance in the context of a post-pandemic recovery. We also recognise the importance of the role of domestic aviation in the UK, particularly in providing connectivity between places that are not directly accessible via rail. As part of the post-pandemic recovery, we must remain proactive to future challenges for these sectors posed by COVID-19 variants which may impact recovery or influence seasonal travel demand.

⁶ House of Commons Transport Committee, UK aviation: reform for take off, April 2022, <https://committees.parliament.uk/publications/21967/documents/163200/default/>

⁷ House of Commons Transport Committee, 17 November 2021, [Committees - UK Parliament](#)

⁸ Pearce, B., IATA, Covid 19 – An almost full recovery of air travel in prospect, 26 May 2021, [PowerPoint Presentation \(iata.org\)](#)

⁹ Department for Transport, COP26 declaration: International Aviation Climate Ambition Coalition, 10 November 2021, [COP 26 declaration: International Aviation Climate Ambition Coalition - GOV.UK \(www.gov.uk\)](#)

¹⁰ Notteboom, T and Pallis, IAPH-WPSP Port Economic Barometer One Year Report, 2021. <https://sustainableworldports.org/wp-content/uploads/IAPH-WPSP-Port-Economic-Impact-Barometer-20-21-View.pdf>

4.2 Decarbonising transport

TfN's Decarbonisation Strategy published in December 2021, outlines the tools, capability and evidence required that will help shape the North's pathway to near net zero emissions. The strategy has been produced by TfN in collaboration with our partners across the North, with the ambition for the North to travel faster and further than national policy and maximise the clean growth opportunities that decarbonisation can provide for our region.

TfN's Decarbonisation Strategy and Trajectory identifies 11% of the UK's total emissions in 2019 were from aviation and shipping (compared to 22% from surface transport sources). In total, 8% of the UK's total emissions were from aviation, of which 96% was international aviation. The North represented 11% of the UK's total aviation emissions in 2020, with 3% of the North's aviation emissions from domestic aviation and the remaining 97% from international aviation.¹¹

As part of the Paris Agreement, the UK Government has committed to supporting the goal to limit global warming to well below 2°C, preferably to 1.5°C, compared to pre-industrial levels. This was further emphasised within the Glasgow Climate Pact which placed more focus on aiming for 1.5°C, recognising that the impacts of climate change will be much lower at the temperature increase of 1.5 °C compared with 2°C.

As a result of COP26, the International Aviation Climate Ambition Coalition (IACAC) remains committed to working together to reduce aviation CO₂ emissions in line with the aim of limiting the global average temperature increase (to 1.5°C). The commitment included promoting the development and deployment of sustainable aviation fuels and promoting new, innovative low and zero-carbon aircraft technologies that reduce aviation CO₂ emissions.

In 2020, the UK aviation industry was the first national aviation sector in the world to commit to net zero by 2050, with a decarbonisation road map now in place¹². This was followed in June 2021, by the UK Sustainable Aviation coalition (a grouping of over 90% of UK airlines, airports, air navigation service providers and aerospace manufacturers) committing to a net zero future for UK aviation with interim decarbonisation targets to net zero aviation by 2050. These include a 2030 interim target of at least 15% reduction in net UK aviation emissions, rising to 40% by 2040. It should be noted that the roadmap relies on a substantial element of aviation funded carbon removals.

Further decarbonisation targets are set out in the Climate Change Committee's 'The Sixth Carbon Budget – the UK's Path to Net Zero,' which has a sector

¹¹ Department for Transport, Jet Zero: Our Strategy for net zero aviation, 14 July 2021, [Jet zero: our strategy for net zero aviation - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/jet-zero-our-strategy-for-net-zero-aviation)

¹² Sustainable Aviation, Decarbonisation Road-Map: A Path to Net Zero, 2020, https://www.sustainableaviation.co.uk/wp-content/uploads/2020/02/SustainableAviation_CarbonReport_20200203.pdf

specific summary on aviation.¹³ The report sets out recommendations including a commitment to a net zero goal for UK aviation, with UK international aviation reaching net zero emissions by 2050 at the latest and domestic aviation by 2040. It also sets out that residual emissions should be offset by verifiable greenhouse gas removals and there should be no net expansion of UK airport capacity unless the sector is set to sufficiently outperform its net emissions trajectory.

To achieve this, DfT's Transport Decarbonisation Plan¹⁴ outlines the ambitions to decarbonise transport sector operations with commitments including domestic aviation to be net zero by 2040, the requirement for international aviation to be offset to non-transport sectors, and the launch of the UK Emissions Trading Scheme (ETS), replacing the UK's membership of EU ETS. As part of the plan, DfT have published the Jet Zero Strategy¹⁵ where the focus is for aviation decarbonisation, which will be delivered by:

- Improving the efficiency of the aviation system.
- Accelerating the deployment of sustainable aviation fuels.
- Supporting the development of zero emissions aircraft with UK routes operating zero emission aircrafts by 2030.
- Ensuring markets drive down emissions in the most cost-effective way.
- Working to influence the behaviour of consumers through encouraging the use of the most sustainable routes and travel providers.

The Jet Zero Council¹⁶ (a partnership between industry and government) has been formed to collaborate on the significant challenges for aviation decarbonisation and to identify the different options to overcome these challenges. The Jet Zero Council has outlined the focus of delivering net zero and zero emission technologies are through developing and industrialising zero emission aviation and aerospace technology, utilising UK production facilities for sustainable aviation fuels (SAF) including Immingham and Ellesmere Port in the North, and commercialising the industry by driving down production costs.

A key focus also remains to develop a coordinated approach to the policy and regulatory framework needed to deliver net zero aviation by 2050 through the above interventions. As part of the Jet Zero Strategy, five year delivery plans will be published to set out the actions needed to achieve net zero by 2050 and monitor the effectiveness and progress of the strategy, whilst also accounting for wider environmental, economic and social changes both nationally and globally.

Additional focus on hydrogen aircraft can also support the shift to decarbonisation, as outlined in the recommendations of Aerospace Technology

¹³ Climate Change Committee, The Sixth Carbon Budget – Aviation, December 2020, <https://www.theccc.org.uk/wp-content/uploads/2020/12/Sector-summary-Aviation.pdf>

¹⁴ Department for Transport, A Better, Cleaner Britain, 14 July 2021, [Transport decarbonisation plan - GOV.UK \(www.gov.uk\)](#)

¹⁵ Department for Transport, Jet Zero strategy: delivering net zero aviation by 2050, 19 July 2022, [Jet Zero strategy: delivering net zero aviation by 2050 - GOV.UK \(www.gov.uk\)](#)

¹⁶ Jet Zero Council (JZC), [Jet Zero Council - GOV.UK \(www.gov.uk\)](#)

Institute's FlyZero¹⁷ programme. The programme illustrates the pathway to create the enabling environment for zero carbon emissions aviation via hydrogen aircraft by the mid-2030s.

It is also important to acknowledge the additional non-carbon warming effects of aviation (contrails) and through further collaboration with our partners it remains vital to limit these with CCC recommendations for no non-CO2 growth after 2050.

Building on the opportunities of technology within aviation decarbonisation, several of the North's airports are committing to net zero emissions. This includes both Manchester Airport and Newcastle International committing to Net Zero airport operations (excluding flights), by 2038 and 2035 respectively.

In 2019, emissions from shipping (both domestic and international) accounted for about 3% of the UK's total emissions. To put this in context, this is approximately the same as that emitted from the entire UK bus fleet, although still significantly less than the 8% of emissions derived from aviation. Additionally, emissions from shipping have been reducing over the last decade, in contrast to aviation emissions which have shown a sharp increase. These relative emissions trends, along with the difficulty of defining regional breakdowns of emissions from shipping, from currently available sources has led to a focus predominantly on aviation emissions within this policy position. TfN is, however, still committed to considering regional shipping emissions within our future carbon baselines when updating our Decarbonisation Strategy.

The UK Government's Clean Maritime Plan¹⁸ sets out the ambition for the UK to become a global leader in the maritime sectors and specifically that by 2050 zero emission ships will be commonplace. There are several types of technology which the plan identifies as having the potential to support zero-emission maritime including electrification and alternative fuels. The report highlights that it is expected that alternative fuels will play the largest role in decarbonising maritime.

4.3 Optimising the opportunities from the green economy

The Government's Ten Point Plan for Green Revolution¹⁹ made it clear that now is the time to build back better and align economic recovery with environmental commitments. The UK Infrastructure Bank has been set up with £22bn of financial capacity to help tackle climate change.

In terms of international connectivity, the UK Government has set out that alternative fuels have a role to play in delivering a decarbonised transport sector. This includes the use of SAF as mentioned in the previous section, which will require the industrialisation of infrastructure including for production and

¹⁷ ATI FlyZero Programme, <https://www.ati.org.uk/flyzero-reports/>

¹⁸ Department for Transport, Clean Maritime Plan, July 2019 - [Clean Maritime Plan \(publishing.service.gov.uk\)](https://www.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/818117/clean-maritime-plan.pdf)

¹⁹ HM Government, The Ten Point Plan for a Green Industrial Revolution, November 2020, [The Ten Point Plan for a Green Industrial Revolution \(publishing.service.gov.uk\)](https://www.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/921117/ten-point-plan-for-a-green-industrial-revolution.pdf)

refuelling, as well as increased commercialisation for the aviation sector to competitively utilise SAF. This forms the primary focus of the aviation sector to transition to more sustainable fuels in the short to medium term.

There are also opportunities for hydrogen technology as outlined in the FlyZero Programme to drive the development and commercialisation of hydrogen-based aircraft. The UK Government's Hydrogen Strategy²⁰ builds on this progress within aviation, providing £15m (for 2021) for the 'Green Fuels, Green Skies' competition to support the production of first-of-a-kind SAF plants in the UK. To meet this requirement, the generation and storage of fuel would need to be part of a wider network. There are also opportunities for maritime technology, with UK Government's Hydrogen Strategy²¹ committing up to £20m (for 2021), for the Clean Maritime Demonstration Competition to accelerate the design and development of zero emission marine vessels in the UK. The Clean Maritime Plan²² highlights several locations in the North of England as potential hotspots in the UK for clean maritime fuel generation, storage or distribution.

As TfN, our Decarbonisation Strategy²³ sets out two specific commitments on hydrogen. The first is to undertake a pan-North study on hydrogen refuelling, initially focused on HGVs but with the view to expand this to rail, aviation and shipping. The second commitment is, as part of that study, to engage with partners and Government to develop hydrogen infrastructure across the North, with one aspect of focus being on the potential for airports for both the generation and storage of hydrogen and hydrogen derived fuels. This builds on the work of the FlyZero Programme to accelerate zero carbon emission air travel, which several stakeholders in the North were directly involved with. Additionally, TfN's Electric Vehicle (EV) Charging Infrastructure Framework provides greater opportunity in supporting sustainable fuel sources as it sets out the ambition for an effective and integrated EV network across the North, which can connect key economic clusters such as at airports and ports within the proposed EV network.

Furthermore, public attitude is changing in relation to aviation and the environment. The Civil Aviation Authority's Consumer Survey (Autumn, 2021)²⁴ highlights that 40% of respondents think about the impact of flying on the environment when deciding to travel by air. This has increased since pre-pandemic levels and almost doubled in the last five years. The survey also finds that business travel is falling as the uptake of online connectivity increases since the initial surge because of the pandemic.

4.4 Surface access to airports and ports

²⁰ HM Government, UK Hydrogen Strategy, August 2021, [UK Hydrogen Strategy \(publishing.service.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/94222/uk-hydrogen-strategy.pdf)

²¹ HM Government, UK Hydrogen Strategy, August 2021, [UK Hydrogen Strategy \(publishing.service.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/94222/uk-hydrogen-strategy.pdf)

²² Department for Transport, Clean Maritime Plan, July 2019 - [Clean Maritime Plan \(publishing.service.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/81422/clean-maritime-plan.pdf)

²⁴ CAA Consumer Survey Wave 10 Full Report (Autumn, 2021) [Title \(caa.co.uk\)](https://www.caa.co.uk/~/media/CAA/Reports_and_publications/Consumer_Survey/2021/Wave_10_Full_Report.pdf)

The UK Government's Aviation Policy Framework²⁵ stresses the importance of surface access for airports, outlining how all proposals for airport development must be supported by surface access proposals which will ensure passengers can readily access efficient and reliable services that increase the use of public transport, minimise congestion and reduce impacts on the local transport network. It also sets out that the general position for existing airports is that developers should pay the costs of upgrading or enhancing road, rail or other transport networks or services, where there is a need to cope with additional passengers travelling to and from expanded airports.

Further to this, airports with good public transport links see a greater proportion of passengers choosing to use trains, light rail, coaches and buses in preference to cars²⁶. An Atkins Last Mile Study undertaken for DfT²⁷ identified that connectivity was cited by stakeholders as a constraint to growth, not just impacting airport users but airport staff too. Consequently, the North's airports have developed surface access strategies which set requirements and interventions in line with this policy requirement. In terms of surface access to ports, the Government's Port Connectivity Review²⁸ looked at the wider UK freight and transport policy picture and its specific impact on ports. It detailed seven recommendations, which included ensuring that the needs of ports are captured in future transport investment decisions.

The UK Government's Northern Powerhouse Agenda – One North²⁹, recognises that the promotion of international connectivity relies on strong surface access connectivity from across the region, and it sets out plans to better connect Manchester airport to neighbouring cities by rail through HS2 and Northern Powerhouse Rail (NPR). This remains critical for the North and should be considered as the IRP is delivered. In addition to this, the airports and ports in the North have their own masterplans and/or strategic visions which encompass surface access, which would need to be considered when identifying surface access interventions.

The road network remains central in providing direct connectivity to the North's key international gateways for both passengers and freight. TfN recognises the importance in ensuring the network supports the move to zero or low emission vehicles, as well as more efficient use of vehicles and road space through shared mobility and autonomous vehicle technologies.³⁰ The road network is a flexible asset which can adapt new and more efficient means of transport, which will

²⁵ Secretary of State for Transport, Aviation Policy Framework, March 2013, [Aviation Policy Framework \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)

²⁶ House of Commons Transport Committee, Surface transport to airports, February 2016, <https://publications.parliament.uk/pa/cm201516/cmselect/cmtrans/516/516.pdf>

²⁷ Highways England, International gateways and the strategic road network, November 2016, [SEGP - Underpinning Report - International gateways and the SRN.pdf \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)

²⁸ Department for Transport, Ports Connectivity Review, 2017, [Transport infrastructure for our global future: a study of England's port connectivity \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)

²⁹ Department for Transport/Transport for the North, The Northern Powerhouse: One Agenda, One Economy, One North, March 2015 [The Northern Powerhouse: One Agenda, One Economy, One North](https://publishing.service.gov.uk)

³⁰ Transport for the North, Draft Major Roads Report, 2021

provide a better end-to-end customer experience and respond to societal, environmental and technological challenges and opportunities.

For TfN, we recognise the need for an increased focus on surface access becoming zero emission. An objective of TfN's Strategic Transport Plan is improving access to transport across all communities as doing so has the potential to make low carbon surface access more accessible and efficient for access to airports and ports across the North.

4.5 Increasing competitiveness

International connectivity is a key driver for economic growth in the UK and for the North, creating jobs and driving productivity for the region. Therefore, it remains vital that the North's aviation and maritime sector is competitive with the wider UK and remains attractive to passengers and businesses. In 2018, aviation contributed £22 billion to the UK economy³¹ whilst air freight and its supporting businesses contributed £7.2 billion³². TfN's International Connectivity Report (February, 2017) identified that international passenger connectivity contributed £5.5bn towards the North's GVA.

In 2021, aviation was estimated to have provided over 536,000 jobs and 4,500 businesses, with 86,000 jobs in the North West alone.³³ With the shift towards decarbonisation, many of these jobs will need to transition to green jobs and therefore it remains vital that investment in skills and technology in the green economy and decarbonising international connectivity is realised for the North. There are also wider benefits for the North in ensuring connectivity to neighbouring international gateways and employment sites outside of the region such as Holyhead port, Hawarden Airport and East Midlands Airport, with key movements serving these areas regularly using the North's transport infrastructure.

Freeports present one opportunity to increase competitiveness and drive productivity in areas nearby to ports, airports and rail hubs. These areas benefit from special regulations with the aim to boost investment, regenerate communities and enhance the local economies. Of the new eight new freeports³⁴ proposed by Government, three will be located in the North of England at Humber, Liverpool and Teesside. Regulatory benefits for businesses within freeports include tax, customs and planning. Local councils will also benefit from 100% business rates retention, which they can use to invest in the surrounding infrastructure to support future growth in and around the sites.

For freeports, we believe in a transition to attract new activity rather than relocating activity from other areas, whilst supporting higher-skilled jobs. This builds on the TfN Freight and Logistics Strategy which recognises the tax and customs benefits freeport status will provide for several ports in the North, as well as the potential to both produce and use green fuels in these locations for

³¹ Economic Benefits from Air Transport in the UK, Oxford Economics, 2018

³² Assessment of the value of air freight services to the UK economy, *Airlines UK*, 2018

³³ Aviation Jobs in Great Britain, *Airlines UK*, 2021

³⁴ Department for Levelling Up, Housing and Communities, *Freeports Guidance*, 2021

fuel intensive industry clusters. The importance of green fuels and new clean energy-specific clusters is also recognised within our Decarbonisation Strategy³⁵.

TfN recognise that by making it easier for businesses to access international markets and by encouraging outward and inward investment, we can facilitate economic growth, increase the number of jobs and businesses, and increase the competitiveness of the North. As part of this, we also recognise the importance of inland ports such as customs cleared logistics and rail freight terminals e.g. I-Port in South Yorkshire. These international gateways play a vital role in facilitating economic growth and boosting productivity and it remains essential that these sites are well-connected via strategic infrastructure to both domestic markets for imports into the UK and to the North's seaports and airports to access export markets abroad. The air freight market has also developed considerably over recent years. In 2021, a York Aviation study³⁶ (commissioned by Airlines UK) set out that for express operators, flying at night is fundamental to their business model and that the operation of passenger and cargo flights at UK airports directly generates £1.4 billion in GVA and 2,200 jobs. DfT's Night flight restrictions consultation³⁷ (now closed) recognised that aviation facilitates global trade with £95 billion of goods exported by air in 2018. This presents further opportunity for the North to capitalise on the economic opportunities for international connectivity as well as TfN's ambitions for air freight as outlined in the Freight and Logistics Strategy³⁸.

4.6 Supporting cohesion

DfT's recently commissioned Independent Union Connectivity Review³⁹ assesses the current transport connectivity within and between the UK to make recommendations to maximise economic potential and improve quality of life. It considers the quality and availability of transport and provides recommendations that seek to address inequalities in connectivity and economic potential across the UK, several of these recommendations are directly related to air connectivity. The review considers the impact of Covid-19 and Brexit and examines economic indicators to build a picture of the economic situation of the UK.

One of the key recommendations of the report is the possible development of a new UK Strategic Transport Network which would act as a UK equivalent of the Trans-European Network of Transport (TEN-T). It will account for many interdependencies including the development of freeports, the Integrated Rail Plan (IRP), the Regional Air Connectivity Review and Aviation Recovery Plan, the Williams-Shapps Rail Review and national transport strategies. Whilst the Union Connectivity Review is focused on domestic connectivity, its development will

³⁵ Transport for the North, Decarbonisation Strategy, December 2021

³⁶ York Aviation, The Economic Impact of Night Flying in the UK, 2021, [The-Economic-Impact-of-Night-Flying-in-the-UK.pdf \(airlinesuk.org\)](#)

³⁷ Department for Transport, Night flight restrictions, updated July 2021, [Night flight restrictions - GOV.UK \(www.gov.uk\)](#)

³⁸ Transport for the North, Freight and Logistics Strategy, <https://transportfornorth.com/freight-logistics/>

³⁹ Department for Transport, Union Connectivity Review (Final Report), November 2021, [Union Connectivity Review \(publishing.service.gov.uk\)](#)

have implications for enhancing international connectivity and attracting further investment and increasing labour demands to support the recovery of the aviation industry post-pandemic.

Transport-related social exclusion is also relevant in the context of international travel, in terms of providing access to international gateways for the North's residents, as well as widening access to employment opportunities in the businesses surrounding airports and ports. This is especially important given the higher deprivation levels of some areas near to the North's airports and ports. The results of our Social Exclusion Research will further develop the evidence base in this area.⁴⁰

TfN have an important role to play in supporting cohesion. As outlined in TfN's Long Term Rail Strategy,⁴¹ we have a role to play in supporting rail to help people travel across the UK, but also in terms of connecting access to airports and ports in the North from Wales and Scotland.

5 Links to other workstreams

International connectivity links to several TfN's workstreams, the key strategies that need to be considered in line with this position statement are:

- **Decarbonisation Strategy:** Consideration of international and domestic aviation emissions within TfN's future baseline trajectories. The evidence base generated by our activities in this area can support future activity in this area.
- **Freight and Logistics:** TfN's Freight and Logistics Strategy highlights the importance of delivering port to port zero-carbon multimodal corridors which will require future collaboration between partners and as well as capitalising on opportunities relating to freeport status for several ports in the North. Ensuring there is suitable freight capacity via rail and road to the North's ports will support future global trade opportunities essential to the UK economy.
- **Visitor Economy and Transport in the North of England Research:** Identifies the importance of the domestic and international visitor economy market for the North of England, with the various tourism assets the North provides. As part of this, accessibility to international gateways is important for enabling future growth in the North's visitor economy, with the report identifying the importance of high-quality, integrated public transport links to enhance surface access and support decarbonisation ambitions.
- **TfN Strategic Rail:** TfN's existing Long Term Rail Strategy recognises the importance of international connectivity for the North and the existing gaps in the North's network where journey times and interchange requirements for access to the North's international gateways reduce the attractiveness of public transport. It also recognises that journey times and networking capacity reduce the attractiveness and competitiveness

⁴⁰ Transport for the North, New Northern Research project set to tackle link between transport and social exclusion, March 2021, [Research project to tackle link between transport and social exclusion | News - Transport for the North](#)

⁴¹ Transport for the North, Long Term Rail Strategy, February 2018

for rail freight. For strategic rail, the ambition is to reduce journey times between the North's economic and freight centres, and between these centres and international gateways, which must form a key consideration as infrastructure for HS2 and the Integrated Rail Plan is delivered.

- Through the **Major Road Network (MRN)** Regional Evidence Base: With most passenger and freight travel via road, it is critical to ensure the MRN is well connected to the North's international gateways. TfN are promoting the delivery of several improvement schemes, including schemes that may support more efficient access to the North's airports and ports, as well as considering the first and last mile of journeys and how they can be sustainably integrated within key economic clusters.
- **Transport Related Social Exclusion (TRSE) Research:** For TRSE, it is important that new transport development linked to ports and airports should not exacerbate severance or increase car dependency, whilst ensuring sustainable accessibility to jobs for those living in areas surrounding ports and airports. Any impacts linked to ports and airports, particularly noise pollution, air pollution, and severance should also be mitigated.
- **Northern Powerhouse Independent Economic Review (NPIER):** Due to be refreshed in 2022, the NPIER sets out a transformational future for the North's economy by 2050 and will consider linkages to international connectivity through international trade.
- **TfN Monitoring and Evaluation Framework:** This will monitor several areas relevant to pan-Northern international connectivity policy, such as surface accessibility to airports and ports, CO2 emissions, international visitor numbers, and exports from northern ports and airports.

6 TfN's position on international connectivity

TfN's position for international connectivity and aviation has been developed in the context of the above key themes and related TfN workstreams. This includes our Freight and Logistics Strategy, Decarbonisation Strategy and our wider policy development work to support the refresh of the STP. As a result of this, we have identified, three key priorities in which we will focus our work across:

- Aviation decarbonisation.
- International gateways as economic hubs and as enablers of growth.
- Surface access to/from international gateways.

6.1 Aviation decarbonisation

TfN's agreed approach to aviation decarbonisation has been developed following the outcomes of our Decarbonisation Strategy (December, 2021), recognising the need to work with partners and an independent expert advisory group to identify potential actions to reduce emissions from aviation and airports. This has resulted in the development of our proposed approach for aviation decarbonisation, provided in Appendix A. A summary of our approach is contained in this section which will influence the recommended actions for TfN within international connectivity and aviation.

TfN are, in general, supportive of the Government's measures as set out in its Jet Zero strategy (July, 2022). We recognise there is an opportunity for the

North to be an early-mover in supporting aviation decarbonisation and to capitalise on the significant regional economic growth opportunities presented by:

- The development of zero emission aircraft.
- The production and commercialisation of sustainable aviation fuel.
- The production and use of liquified green hydrogen.
- Seamless connection of airports to low carbon surface transport choices.

Investment is needed quickly if these technologies are to contribute meaningful towards reaching net-zero aviation by 2050. TfN believe the North can play a key role in realising the opportunities, through the following:

- Capitalising on the North's proximity to sources of renewable energy and potential waste industrial fuel feedstocks.
- Capitalising on our international airports' extensive route networks and promoting a northern airport as a prime candidate for initial investment, from Government, to be a liquid hydrogen 'feeder' location.
- Developing a mature green hydrogen supply and distribution network in the North. Through early investment focused on supply a wider set of end uses (i.e. industrial demand and multimodal transport demand).
- Investing in low carbon surface transport connections to the region's airports.

As TfN, our ambition is to position the North as a leader and centre of excellence for the development of zero emission aircraft through working with partners, academia and local businesses. It is important the North explores zero emission aircraft research, design, production and trialling, with opportunities at Teesside to facilitate zero emission aircraft demonstration activity in collaboration with UK Government and the Tees Valley Hydrogen Hub.

We also aim to position the North as a leader in both SAF production and green hydrogen production, considering the most commercially viable options for the development of green hydrogen supply, distribution and dispense infrastructure across modes and sectors. As part of this, it is essential to build on current progress across the North such as Manchester Airport developing a new direct supply for SAF from Ellesmere Port, or Phillips 66's agreement to supply British Airways with SAF derived from the Humber region. Further investment in SAF infrastructure across the North will ensure that the infrastructure is in place for the North's regional airports to be 'Zero emission aircraft ready' and capitalise on the North's existing strengths within energy and technology, such as in aerospace manufacturing, offshore wind and electrolyser development.

Further to the opportunities in new technology relating to decarbonisation, TfN also recognises the high level of risk of not all technological options for aviation decarbonisation fully delivering the emissions reductions required, as well as the need for aviation to reduce its emissions in the short term (pre-2035), reducing the reliance on other sectors to absorb excess emissions above the allowance recommended by the CCC in their 6th Carbon Budget.

Managing demand can help to reduce emissions in the short and medium term and provide resilience should not all technological options fully deliver the emissions reductions needed. These measures additionally reduce the non-CO2 warming contribution from aviation (as yet unquantified but believed to be significant) and have co-benefits for local noise and air quality.

There are also strong benefits for the North in effective national and local approaches to managing demand, including boosting regional tourism and regional business productivity, as well as making the case for productive use of existing unused air capacity in the North and strengthening the case for NPR.

TfN therefore supports the adoption of voluntary soft incentives to manage demand at the same time as increasing business productivity and boosting local tourism, including:

- Measures that significantly increase the attractiveness of using lower carbon public transport modes, such as train and coach, both as an alternative to land based domestic flights and in improving surface access to airports.
- Encouraging businesses to prioritise video conferencing in preference of air travel where it enhances productivity.
- Promotion of the North's visitor attractions as an alternative to overseas holiday destinations.

Given TfN's focus on creating the right conditions for rebalancing economic growth towards the North, TfN supports the productive use of existing unused runway capacity at Northern Airports to cater for that growth, whilst also acknowledging that increases in aviation demand need to be accommodated within a national cap on demand growth of 25% by 2050 (consistent with the recommendations of the CCC within their 6th Carbon Budget).

In the context of the potential for the North's airports to accommodate significant additional demand through existing unused runway capacity, TfN also supports the adoption, by national government, of a moratorium on 'net'⁴² national airport runway expansion⁴³, as an important part of a national strategy for managing demand. A moratorium on net national airport runway expansion is a robust way of achieving a secure upper limit on possible future emissions.

This should be supported by:

- Measures that significantly increase the attractiveness of using lower carbon public transport modes, such as train and coach, both as an alternative to land based domestic flights (strengthening the case for HS2 and NPR) and in improving sustainable surface access to airports.

⁴² 'Net' in this context is taken to mean no overall increase in national airport capacity, although the re-allocation of both existing demand and future growth in demand (up to 25%) between regions would be allowed. Note that many airports currently have spare runway capacity where expansion is not needed.

⁴³ Support for a moratorium on net national airport runway expansion, does not extend to other airport works which may help make better use of currently unused existing airport runway capacity (e.g. works to terminal buildings).

- Encouraging the decarbonisation of air-side equipment.
- Measures that increase public awareness regarding emissions associated with flying in relation to other modes and other everyday activities e.g. contextualised emissions information at point of booking.
- Ensuring our network of northern airports are able serve all of the North's diverse communities, including the Pakistani, Indian, Bangladeshi, Chinese, African and Caribbean communities, so as to minimise the need for connections to their frequent destinations via other international hubs (e.g. Heathrow or Amsterdam).

Our recommendation is for supporting a national strategy on managing demand and not taking unilateral regional action as this would likely have a disproportionate effect on our regional economy and communities and would also be less effective in reducing aviation emissions due to increased potential of 'leakage' to other regions.

Finally, TfN supports the role that carbon offsetting can play in reaching net zero emissions for aviation. TfN recommends that Government, through CORSIA, should push airlines to utilise the highest quality of offsetting and removal schemes. Any offsetting should be considered in the context of the following key requirements:

- Offsetting schemes must negate emissions of atmospheric carbon produced through reduction or removal.
- Offsets must not cause environmental or social harm and ideally would deliver social and biodiversity co-benefits.
- Whilst nature-based offsets are important in the short to medium-term, offsetting strategies should transition to permanent carbon storage solutions in the longer term.
- A preference for offsetting northern emissions through northern offsetting schemes based in the North.

TfN will also encourage our regional airports and airlines operating flights from Northern airports, to promote schemes based in the North, such as reforestation and peat restoration projects (e.g. the Great Northern Forest, Great Northern Bog and Wild Ingleborough).

6.2 International gateways as economic hubs

As identified in TfN's Independent International Connectivity Commission Report (February, 2017), the North's international gateways are critical economic hubs which offer the opportunity to transform the economic performance of the North and close the productivity gap with other parts of the UK. For the North, it remains important to harness the potential of our international gateways as economic hubs, capitalising on growth in business infrastructure and jobs, whilst also considering the opportunities presented by Freeports at Teesside, Liverpool and Humberside. This builds on the evidence presented in our Freight and Logistics Strategy which strives to realise the ambitions of our Freeport sites in the North.

The North's freight market can capitalise on the overcrowded South Coast ports and encourage further freight growth in Northern ports on both the Eastern and Western coasts. This aligns with our vision to support further development of the North's ports as presented in our Freight and Logistics Strategy which makes the clear case to utilise the assets that exist in our region already, supporting the economic, environmental and social objectives of the North and our forthcoming Strategic Transport Plan.

Additional to the recommendations around aviation decarbonisation outlined above, we also encourage the take up of softer incentive led measures at a regional level which will support the North's economy. These measures are steered towards increasing business productivity and boosting local tourism as it is evident that there is an intrinsic link between international connectivity and supporting the wider Northern economy, particularly the visitor economy.

The North's visitor economy, prior to the pandemic, had a total net GVA impact of £12.33 billion⁴⁴ (pre-pandemic, 2019) and is recognised as a key contributor towards the North's economy. However, the North's visitor economy is more domestically oriented than England's, accounting for 25% of England's total tourism spend but only 14% of international visitors to England. TfN has a role to play through working with partners and relevant stakeholders to facilitate reliable, competitively priced and zero carbon travel to support tourism. This can be achieved through promoting the North's visitor attractions as an alternative to overseas holiday destinations, and ensuring flexible, high-quality and low-carbon access for visitors. This also extends to business tourism (for example, conference delegates), international students and people visiting relatives and friends, all of which will support our international gateways to realise their potential as economic hubs in the North.

6.3 Surface access to/from international gateways

TfN recognises the importance of providing high-quality and efficient surface access to the North's airports and ports, allowing businesses access to international markets and linking economic clusters across the North. For TfN, it remains vital to prioritise the infrastructure that allows these gateways to be economically competitive whilst maintaining sustainable surface access through low carbon modes. We will continue to promote high quality and low carbon public transport connections to and from the region's airports.

Both TfN and Government recognise developers and operators of international gateways are required to pay the costs of upgrading or enhancing road, rail or other transport networks or services, where there is a need to cope with additional passengers and freight travelling to and from expanded gateways. However, we are supportive of strategic infrastructure priorities that may act as a catalyst for wider growth and recognise the role of TfN in supporting the case for investment in these areas. Examples of this include the wider impacts of HS2 at Manchester Airport and East-West rail freight clearance between Immingham and Liverpool.

⁴⁴ TfN, Atkins and the Leisure Consultancy, Visitor Economy and Transport in the North of England, July 2021

We recognise the importance of integrated multi-modal connectivity to allow seamless journeys, particularly for domestic trips within the UK. Future strategic infrastructure investment in nationally significant schemes such as HS2 and NPR are vital to enhance the UK's domestic connectivity and support low carbon travel. This will increase the attractiveness of rail travel for domestic travel within the UK. We also view the importance of policies that focus on improving the relative cost and convenience of land based public transport relative to the cost of flying, making these modes more attractive for domestic travel. Through realising this potential, the North and wider UK can also capitalise on existing high speed rail links via the Channel Tunnel. This will support an integrated and efficient high-speed network that will link the North via HS2 to mainland Europe, providing alternative connectivity in some instances to aviation for passengers and freight.

With a small number of exceptions, airports and ports are not the final destination for people or goods, making onward surface access an important priority. Many of the North's airports and ports are directly served by onward rail, light rail, tram or bus services which link gateways to city centres, distribution hubs and visitor hotspots. For airport passengers, and staff there are challenges around the discrepancy in demand patterns which are different to traditional peak periods. This is particularly relevant to rail connections, where engineering work is generally planned for overnight periods and on weekends.

There is also a need to consider transport options to and from international points of entry. Confusing ticketing arrangements, poor quality services, and insufficient information can act as a barrier to encouraging visitors to use public transport to access international gateways and can impact their experiences of travelling to the North. TfN has a role to play in supporting seamless and user-friendly ticketing, information, and marketing to provide more integrated journeys for those arriving and departing from both domestic and international airports and ports. This also extends to surface access to the North's ports in which infrastructure improvements to rail freight such as gauge clearance would enable modern intermodal containers to be transported via rail.

Furthermore, improvements to local public transport networks are another crucial element in supporting domestic travel and providing an efficient and more integrated travel experience across the North and wider UK. Delivering integrated sustainable travel for local towns and cities can also support surface access improvements to airports and ports as part of our remit to decarbonise travel, aligning with the aspirations of both our Decarbonisation Strategy and Freight and Logistics Strategy. Delivering improvements to surface access will also ensure the North's airports are competitive with the other UK airports and can be readily accessible from larger population catchments of the UK.

7 TfN's suggested role in relation to international connectivity

7.1 Coordination and influencing:

For international connectivity and aviation, TfN can coordinate and influence key priorities and projects for the North's aviation sector in collaboration with our partners. In a coordination capacity, we can bring together relevant stakeholders to ensure that collectively the North maximises opportunities to capitalise on the opportunities of aviation decarbonisation in the North and maintain the competitiveness of the North's airport network within the UK.

It remains essential that TfN considers the views of stakeholders in this industry and through adopting a collaborative approach, our strategic direction will be shaped directly by our stakeholders and partners. This includes making the case for further infrastructure investment that will support low carbon surface access to the North's international gateways. We can also influence national policy in relation to international connectivity, ensuring that the opportunities for the North are maximised.

Action:

- To reintroduce hosting pan-regional airport, port and public transport operator round tables to agree priorities for international connectivity in the North, exploring opportunities for collaboration across aviation decarbonisation and surface access improvements.
- To improve communications with UK Government through greater engagement with DfT, particularly in response to key Government consultations within aviation and decarbonisation. In this capacity, TfN can act on behalf of our partners and key stakeholders as a central voice to influence Government policy in relation to international connectivity.
- To work with technical experts and academia within international connectivity and aviation to receive impartial and expert advice to support TfN's Board and wider governance groupings in relation to the topic.

7.2 Providing evidence-based recommendations:

At TfN, we have a modelling and analysis capability that enables us to provide evidence and support to partners. In relation to international connectivity, there are opportunities to use this capability to support our role in coordinating and influencing international connectivity across the North.

We have examined policy position options in relation to reducing emissions working with independent experts and gaining consensus amongst partners.

Action:

- To provide central accountability for emissions statistics in the North in relation to aviation and maritime, building this into a version of our future carbon emission baselines.

7.3 Supporting TfN workstreams

In addition to the above policy recommendations for international connectivity and aviation, there are also several TfN workstreams we can draw upon to support local partners and wider stakeholders. The below recommendations are taken from wider TfN workstreams:

Action:

- To build upon TfN's objectives for **Connected Mobility** which will explore options for smart ticketing which are integrated across modes and operators. This will make public transport more accessible for all in the North, including international visitors arriving via our airports and ports.
- In line with the recommendations of TfN's **Decarbonisation Strategy** and **EV Charging Infrastructure Framework**, consider further opportunities for the use of hydrogen and electric fuel sources within transport, establishing relationships with private sector organisations that are currently developing alternative fuels e.g. Humberside green energy cluster, TfN's EV Steering Group. We will also maintain a focus on decarbonising surface access to airports.
- To support the visitor economy through the recommendations set out in **TfN's Visitor Economy and Transport study and TfN's Tourism and Rail Covid Report**, which include greater collaboration with partners, integrated ticketing and marketing initiatives and delivering high-quality and efficient public transport and active travel connectivity.
- To consider the recommendations set out in TfN's **Freight and Logistics Strategy** in facilitating and developing partnerships to achieve port to port zero-carbon multimodal corridors. This includes capitalising on the freeport status of several ports in the North and ensuring that there is suitable freight capacity via rail and road to the North's ports, which will also support future global trade opportunities vital to the UK's economy.

8 Proposed next steps

The next steps for TfN's international connectivity and aviation policy position are to progress consultation with partners and key stakeholders to ensure that the policy actions are fit for purpose and will add real value in realising the clean growth opportunities for international connectivity. We will work with our partners and key stakeholders across the North to progress the actions identified within this policy statement, coordinating and influencing key workstreams within international connectivity whilst utilising TfN's own modelling and research capabilities to enhance our evidence base.

We will continue to develop our evidence base, progressing key workstreams that support our international connectivity and aviation policy. This includes the carbon trajectories and ambitions outlined in our Decarbonisation Strategy, our Strategic Rail and Major Roads programmes to support future surface access opportunities and our forthcoming Freight and Logistics Strategy which will consider interventions to improve accessibility for freight to the North's airports and ports. We will also consider TfN's wider programme of work which can enhance the evidence base for international connectivity and aviation such as our Analytical Framework and our Research and Economics work in areas such as Transport Related Social Exclusion and the North's Visitor Economy. The Northern Powerhouse Independent Economic Review is due to be refreshed in 2022 as part of an on-going programme of research, which will also have linkages to international connectivity through international trade.

APPENDIX A:

TfN approach to aviation decarbonisation

APPENDIX B:

List of reviewed documents

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