AECOM

Freight Matters

Insight into the UK freight industry's key data, trends and issues 2021

Delivering a better world

Freight Matters

Foreword

AECOM's freight and fleet team often talks about 'freight blindness', meaning that the high-tech and innovative process of moving goods to where they can be used and consumed goes unnoticed and is taken for granted.

The combined effects of post Brexit era, the ongoing coronavirus pandemic and some of the freight industry's own problems such as the driver shortage, have thrown the growth patterns and trends of freight movements into some turmoil, as can be seen from the statistics noted in this report. Nonetheless, the sheer volume of activity, together with the spotlight that has been shone on the industry have brought into clear focus, for both policy makers and the public, the importance of the 24/7 freight sector and the value of the people that work in it. The challenges for the freight sector have never been greater, but the sector presses on and continues to deliver, not only because it is resilient but also because it is a critical element of our way of life and our very physical existence.

With the heightened global focus on climate change, in 2021 the UK Government released its Transport Decarbonisation Plan, the broad roadmap to achieve a net zero future, which includes plans to consult on ending the sale of all new, non-zero emission road vehicles by 2040 at the latest. The freight industry must respond to the climate emergency by planning and implementing its own response whilst continuing to quite literally 'deliver the goods'.

We hope this document provides some insights into the importance of the sector and the figures illustrated demonstrate the enormity of the challenge ahead which will require continual sharp focus for many years to come if we are to succeed in delivering the change that is required to support and deliver our net zero future.

Keyvan Rahmatabadi
Director of Transport Consulting

Contacts:

John Hix
Head of Freight and Fleet Planning
AECOM UK and Ireland
john.hix@aecom.com

Keyvan Rahmatabadi
Director of Transport Consulting
AECOM UK and Ireland
keyvan.rahmatabadi@aecom.com

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Authors:

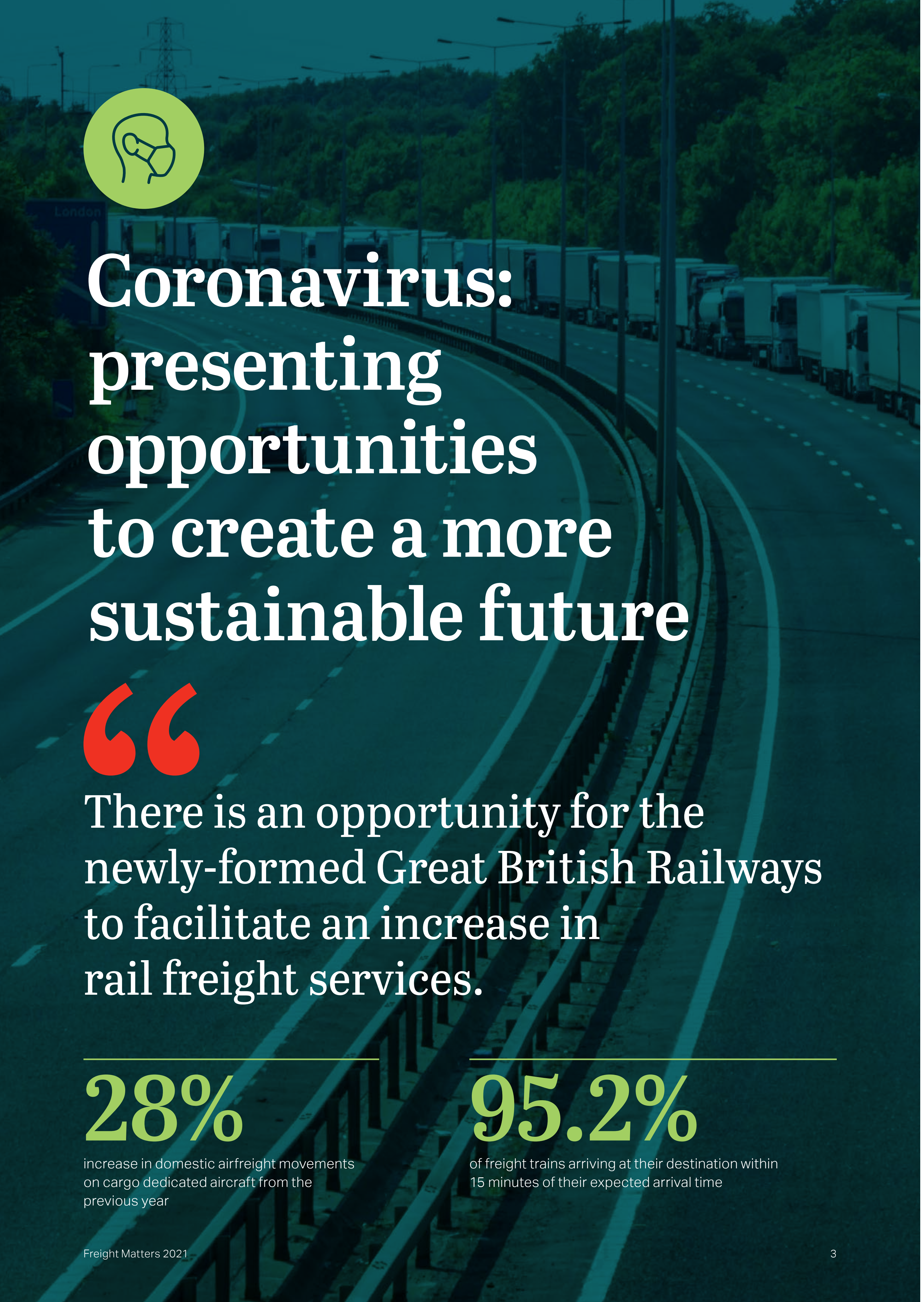
Anne Johnson
Regional Director
anne.johnson@aecom.com

Paul Davison
Associate Director
paul.davison@aecom.com

Raj Sharma
Principal Consultant
rajinder.sharma@aecom.com

Aida Kaddoussi
Principal Consultant
aida.kaddoussi@aecom.com

Matt Webb
Consultant
matt.webb1@aecom.com



Coronavirus: presenting opportunities to create a more sustainable future

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There is an opportunity for the newly-formed Great British Railways to facilitate an increase in rail freight services.

28%

increase in domestic airfreight movements on cargo dedicated aircraft from the previous year

95.2%

of freight trains arriving at their destination within 15 minutes of their expected arrival time

By stepping up to ensure the continuous movement of goods in the face of changing demand, the freight and logistics industry has played a hugely important role in the response to the challenges presented by coronavirus.

As the UK and many other countries have a better grip on the pandemic, there is an expectation that the industry will return to pre-pandemic normality (or close to it). It may be better however, for the industry to examine the potential opportunities that coronavirus has opened up — through shifts in travel and consumer patterns and behaviours — which could be highly beneficial if taken.

Air freight is a good example. During lockdowns, passenger air travel declined by 75 per cent[1], and many planes were converted quickly to carry freight cargo. This shift increased domestic air freight movements by 57 per cent[2] from the previous year. But what will happen when passenger air travel increases again? Instead of air freight services returning to normal, there could be an opportunity to build on what has been learnt over the past months. Airlines and airports could be more flexible in their approach to freight and explore new routes, air freight services, or simply increase their existing freight operations. Smaller airports could adapt — shorter processing times would mean that goods are delivered to customers more quickly — giving themselves an advantage over larger freight handling airports.

The pandemic also saw a decrease in rail passenger services and demand as employees followed government advice to work from home if they could. This fall in demand had a positive effect on the punctuality of freight trains, with the percentage of trains arriving at their destination within 15 minutes of their expected arrival time rising from 92.8 per cent in 2019/20 to 95.2 per cent in 2020/21 (the highest ever achieved[3]).

It is worth noting however that total rail freight moved from July to September in 2020 was 3.89 billion net tonne-kilometres which is the lowest Q2 total since the time series began in 1998-99[4].

As many organisations adopt the ‘new normal’ way of working, where home working or travelling outside peak periods is more common, there is an opportunity for the newly-formed Great British Railways to facilitate an increase in rail freight services, therefore lessening the carbon impact of the sector as a whole through the shift from road to rail.

Finally, freight and logistics could play a role in revitalising town centres. Coronavirus has had a negative effect on many local high streets — many retailers have gone out of business and one in seven retail units in Great Britain stand unoccupied[5]. However, local authorities could transform suitable unoccupied premises into micro-consolidation hubs for good deliveries to local areas. By adopting this approach, they could increase employment opportunities, as well as reducing the number of delivery trips and delivery vehicles on the road, which would in turn help to improve local air quality.

Coronavirus has led to a widespread recognition of the crucial role played by the freight sector and its importance to both the economy and society. Our industry now needs support and buy-in from industry, government agencies and operators to build on the legacy outcomes of the pandemic by capitalising on these opportunities to create a more sustainable future.

[1] https://www.caa.co.uk/News/Aviation-2020--Data-summary/
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Post-Brexit the UK needs a national freight strategy

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We need to understand what impact new trading relationships might have on our transport network.

Brexit has dominated political discourse for some time, and continues to do so as we transition from a paid-up full member of the European Union to a future as a non-affiliated trading nation.

Almost 50 years of tariff-free trading with a growing number of European countries has naturally led to a significant proportion of our exports and imports being associated with the European Single Market and our freight sector has evolved accordingly.

So how can the freight sector support government policy keen to exploit new and emerging markets and potentially re-engage with our historic trading partners in the Commonwealth? Recent challenges have demonstrated how resilient and effective the freight sector can be in adapting to changes in the supply chain, however unexpected. Pivoting to a more expansive trading outlook will require a long-term strategy which looks to quickly increase imports and exports with countries with which we have limited prior relationships.

Our biggest container ports are well located for trade with the Continent and feeder services from major European ports such as Rotterdam and Antwerp. Our role as a land bridge for Irish road freight operators is well established. Ports such as Liverpool, which developed as a gateway to the New World, may see an increase in trade from North and South America as new trade deals are (hopefully) struck. However, the question arises: are road and rail connections able to support this growth?

We need to understand what impact new trading relationships might have on our transport network. Key freight routes such as the M20 through Kent to Dover may become less important as we increase our trade from non-EU countries, whilst the M62 and connections to ports such as Liverpool and those on the Humber could see an uplift in port-related traffic. The Freeports initiative may also see growth in freight and logistics activity.

Furthermore, we may see an increase in air freight as perishable and high value goods from far flung nations reach (and leave) our shores. If that’s the case, we need to make sure principal freight airports (such as Heathrow and East Midlands Airport) have sufficient capacity to accommodate (or that smaller airports can be upscaled to cope with) an increase in air freight.

With so many unanswered questions we need a national freight strategy that reflects these challenges and opportunities and helps put in place the infrastructure required to facilitate new trading relationships. We also need to support freight operators and those tasked with facilitating trade by training and educating staff in new ways of working.

A national freight strategy should not just focus on associated administration and paperwork (although this is vital), but should also ensure that cultural barriers are navigated, and new relationships formed. Understanding of different regulatory environments and expectations of customers will also be important in ensuring service levels are high and effectively facilitate trade. The strategy has to be aligned with the UK net zero strategy and incorporate plans and structured progress towards our environmental aims.

What we can be sure of is that the freight sector will continue to perform its vital role in supporting the economy and ensuring that products get to where they need to go. However, policy makers should support these efforts by providing the infrastructure and skills needed to do this effectively. It will be fascinating to see how this develops.

Road freight matters

> Decarbonisation, driver shortages and road safety have remained at the top of the road freight industry's agenda in 2021.

Decarbonisation will be an enduring theme for the sector for many years to come, and the release of the Department for Transport's Decarbonisation Plan sets out the intention for larger zero-emission road freight vehicles to be on UK roads by 2030 and a pledge of £20 million investment in Zero Emission Road Freight Trials.

During 2020, road freight activity saw a decline both internationally and domestically due to the effects of coronavirus restrictions.

Goods lifted in the UK by GB-registered heavy goods vehicles (HGVs) in the twelve months ending December 2020 decreased by 12 per cent to 1.27 billion tonnes compared with the previous twelve months.

Goods moved in the UK by GB-registered HGVs in the twelve months ending December 2020 decreased by 11 per cent to 136 billion tonne-kilometres compared with the previous twelve months.

Road freight

Domestic

Licensed HGVs:

485,900

HGVs were licensed in Great Britain at the end of 2020

Goods moved:

136 billion tonne-kilometres ↓ 11% (on 2019)

2020

Employment:

289,000

individuals in 2019

Goods lifted:

1.27 billion tonnes ↓ 12% (on 2019)

2020

Commodities

In 2020, the five most common divisions (representing 66 per cent of all goods) lifted by GB-registered HGV in the UK were:

19%	14%	13%	12%	9%
239 million tonnes of food products lifted	**173 million tonnes** of groupage lifted	**166 million tonnes** of metal ore, mining and quarrying goods lifted	**151 million tonnes** of waste-related products lifted	**111 million tonnes** of non-metallic mineral products lifted

International

3.8 billion tonne-kilometres

moved in 2020

↓ 23% (on 2019)

Goods moved:

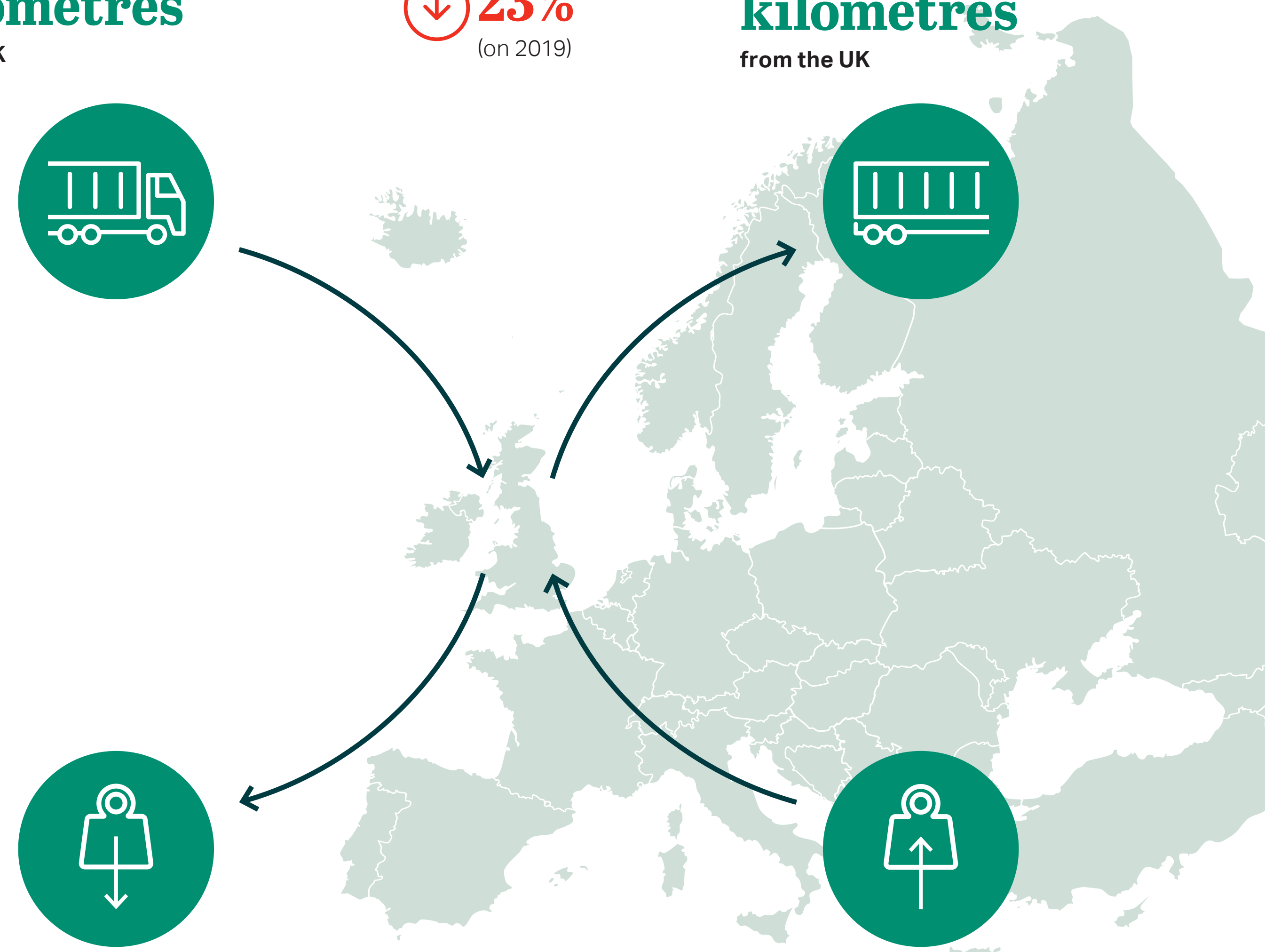
2 billion tonne-kilometres

to the UK

Goods moved:

1.8 billion tonne-kilometres

from the UK



3.2 million tonnes

exported **from the UK**

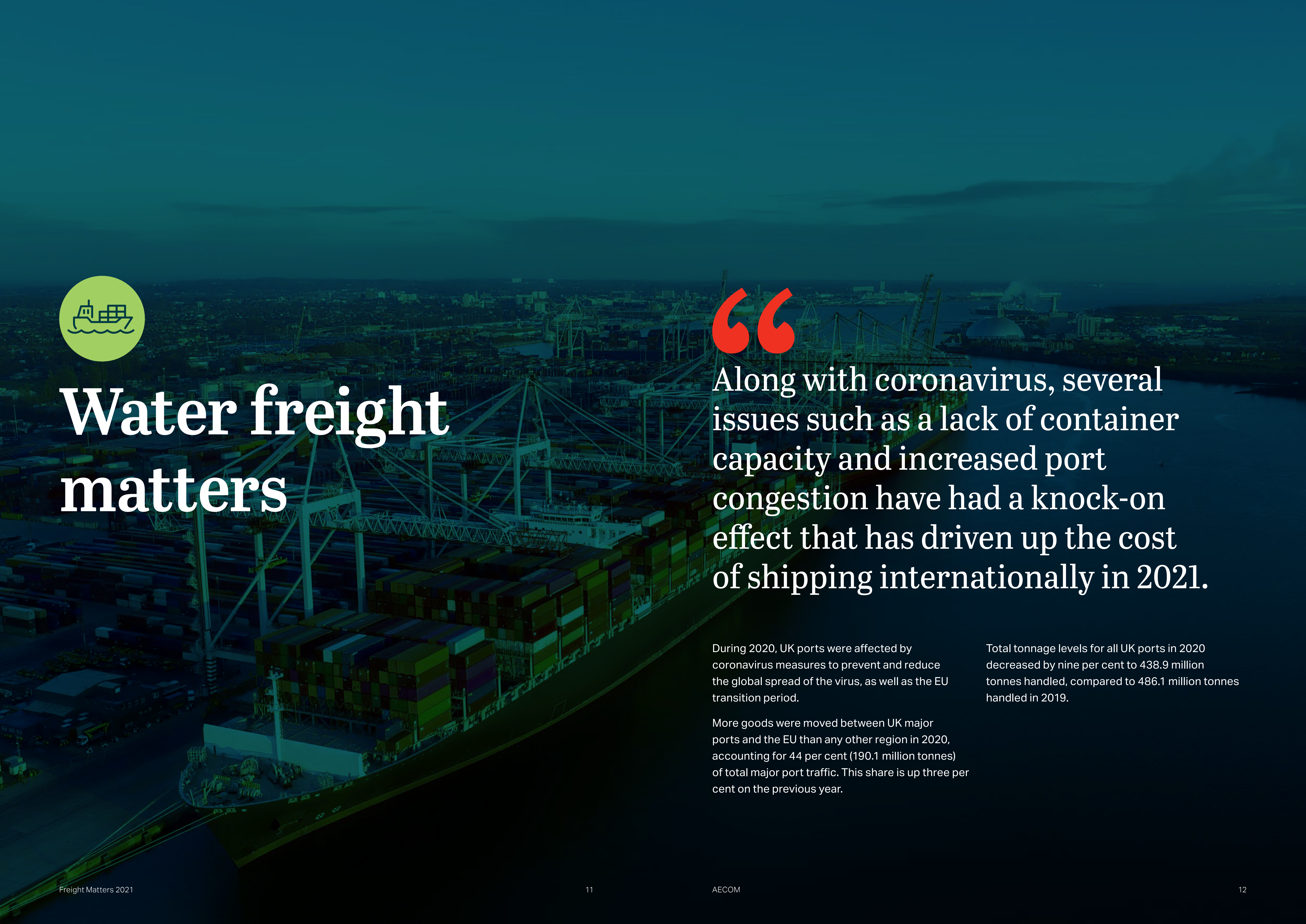
6.6 million tonnes

lifted in 2020

↓ 20% (on 2019)

3.4 million tonnes

imported **to the UK**



Water freight matters

> Along with coronavirus, several issues such as a lack of container capacity and increased port congestion have had a knock-on effect that has driven up the cost of shipping internationally in 2021.

During 2020, UK ports were affected by coronavirus measures to prevent and reduce the global spread of the virus, as well as the EU transition period.

More goods were moved between UK major ports and the EU than any other region in 2020, accounting for 44 per cent (190.1 million tonnes) of total major port traffic. This share is up three per cent on the previous year.

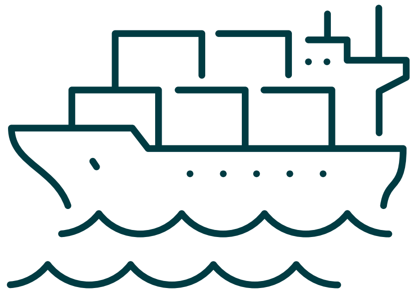
Total tonnage levels for all UK ports in 2020 decreased by nine per cent to 438.9 million tonnes handled, compared to 486.1 million tonnes handled in 2019.

Water freight

Domestic

85.7 million tonnes
UK major port domestic traffic 2020

101,000
directly employed in 2018

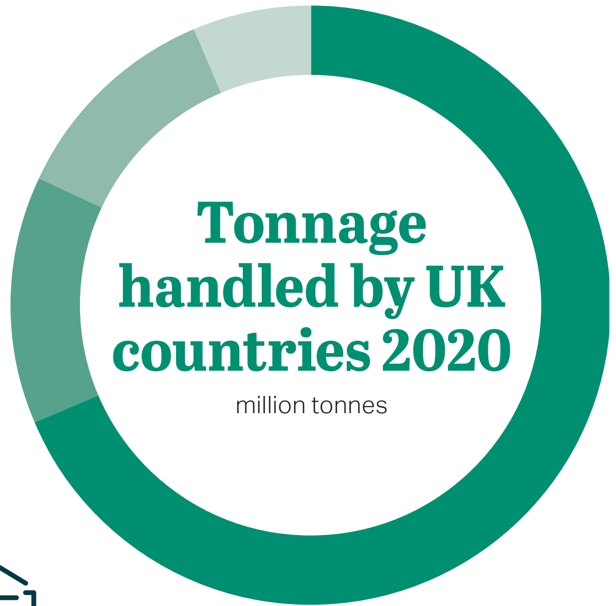


37.6 million tonnes
exports 2020

48.1 million tonnes
imports 2020

- Liquid bulk | 31.5
- Ro-Ro | 25
- Dry bulk | 24.4
- Lo-Lo | 2.7
- Other cargo | 2.1

439 million tonnes
handled by the UK 2020



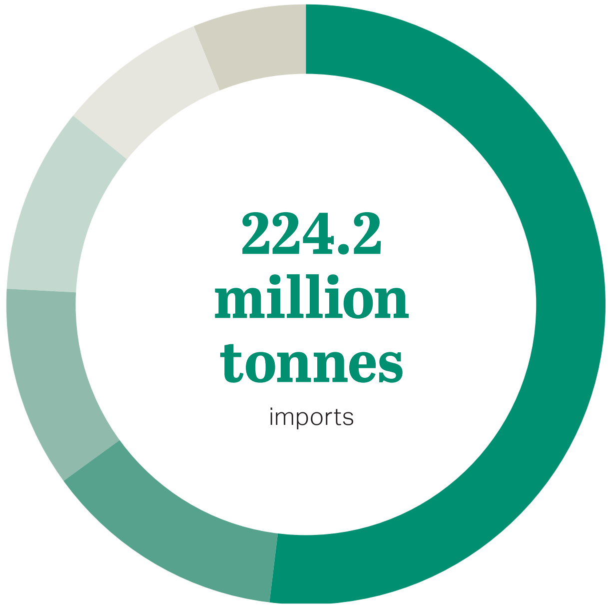
- England | 301.6
- Scotland | 59
- Wales | 51.3
- Northern Ireland | 27.1

International

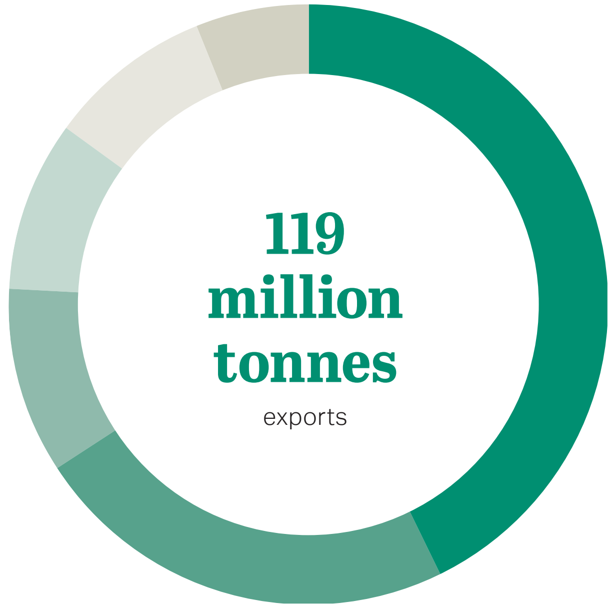
343.2 million tonnes
UK major port international traffic 2020

UK major port traffic by cargo type

million tonnes 2020



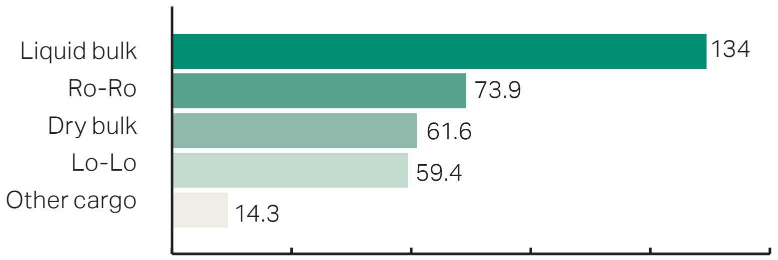
- Rest of the world | 52%
- Netherlands | 13%
- USA | 10%
- Norway | 11%
- France | 8%
- Belgium | 6%



- Rest of the world | 43%
- Netherlands | 23%
- France | 10%
- Belgium | 9%
- Republic of Ireland | 9%
- Germany | 6%

UK major port traffic by cargo type

million tonnes 2020



98.1 million tonnes
international deep sea traffic 2020

19%
(on 2019)

Rail freight matters

"2021 has been one of the most important years for the rail freight industry with the publication of the Williams-Shapps rail review.

The 30-year plan has promised to deliver, under the newly-formed Great British Railways national body, a clearer strategic direction, and a duty to promote and increase rail freight.

Freight moved in 2020-21 fell by 8.6 per cent compared with 2019-20, driven by a 17.2 per cent reduction in volumes during the first six months of 2020-21. The proportion of freight trains arriving within 15 minutes, as measured by the Freight Delivery Metric, reached 95.2 per cent in 2020-21; the highest level of punctuality achieved since the time series began in 2012-13.

The number of freight train movements across Great Britain in 2020-21 fell by 9.6 per cent compared with the previous year. Similarly, freight train kilometres decreased by 9.9 per cent to 29.9 million compared with 33.2 million in 2019-20.

Rail freight

Domestic

69 million tonnes
Goods lifted 2020-21

1% (on 2019)

£30 billion
of goods delivered across Britain in 2019

189,371
freight train movements 2020-21
9.6% (on 2019-20)

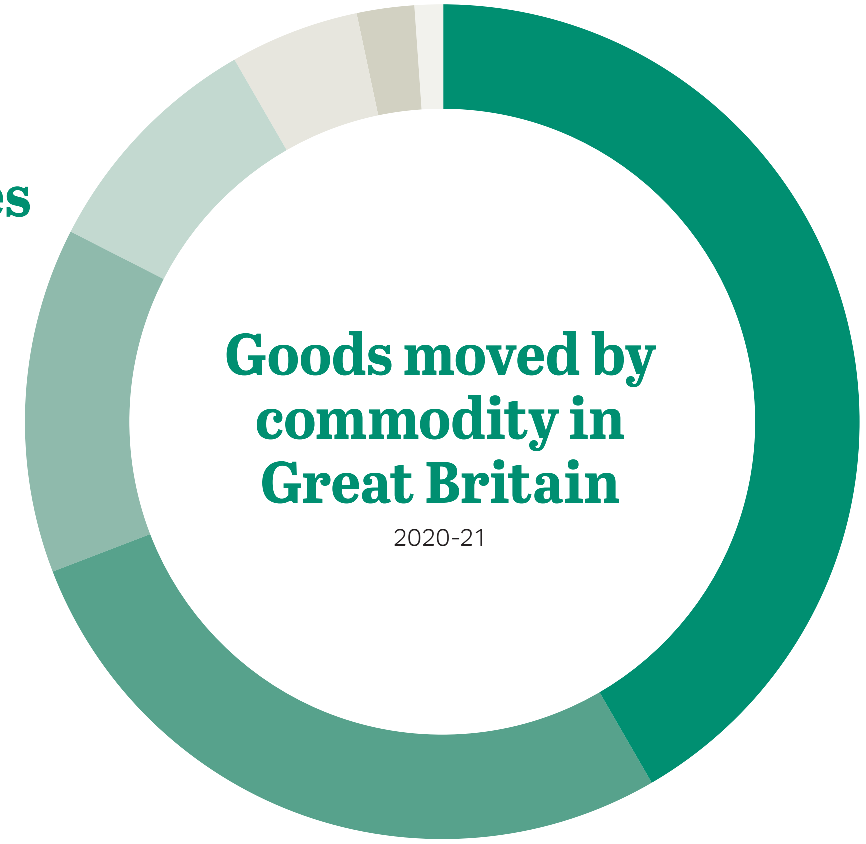
29.9 million
freight train kilometres in 2020-21
10% (on 2019-20)

95.2%
arrived within 15 minutes of scheduled time 2020-21
4.1% (on 2019-20)

Goods moved

15.16 billion net tonne-kilometres
of goods moved in Britain 2020-21

- Domestic intermodal | 42%
- Construction | 27%
- Other | 13%
- Metals | 9%
- Oil and petroleum | 5%
- International | 2%
- Coal | 1%



Lorry journeys avoided:
6.4 million
2019-20
9% (on 2018-19)

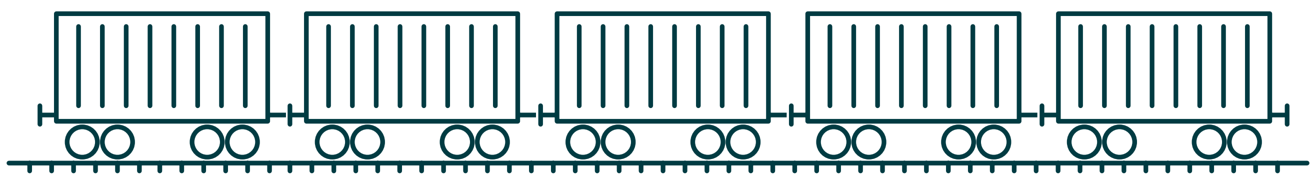
Fewer HGV kilometres:
1.5 billion
2019-20
6% (on 2018-19)

International

1.39 million tonnes
rail freight through the Channel Tunnel 2019
7% (on 2018)

1.56 million freight vehicles
carried on Le Shuttle 2019
6% (on 2018)

350 million net tonne-kilometres
of international freight moved 2020-21



Air freight matters

> The reduction in passenger flights due to the coronavirus pandemic had a direct effect on the air freight sector in 2020.

The reduction in passenger aircraft led to a lack of belly hold capacity and subsequent conversion of some passenger aircraft to cargo only.

During August 2020 to July 2021 international air freight tonnes decreased by 1 per cent to 2,089,079 tonnes. During 2020 international cargo tonne-kilometres fell by 10.6 per cent year-on-year, the largest decline since 1990, which indicates less long haul cargo.

Domestic air freight handled between August 2020 and July 2021 increased by 25 per cent to 86.4 thousand tonnes over the same period the previous year.

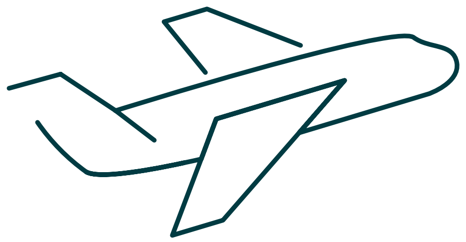
East Midlands Airport handled the most domestic air freight, some 38.8 thousand tonnes between August 2020 and July 2021. Over the same period Heathrow handled 62 per cent of all international air freight, no change from the same period the previous year.

Air freight

Domestic

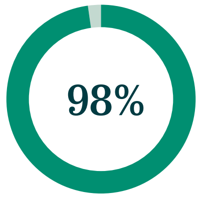
86,419 tonnes
domestic air freight handled by UK
Aug 20- Jul 21

25%
(on Aug 19 - Jul 20)



85,033 tonnes
carried on freight dedicated aircraft
in Aug 20 - Jul 21

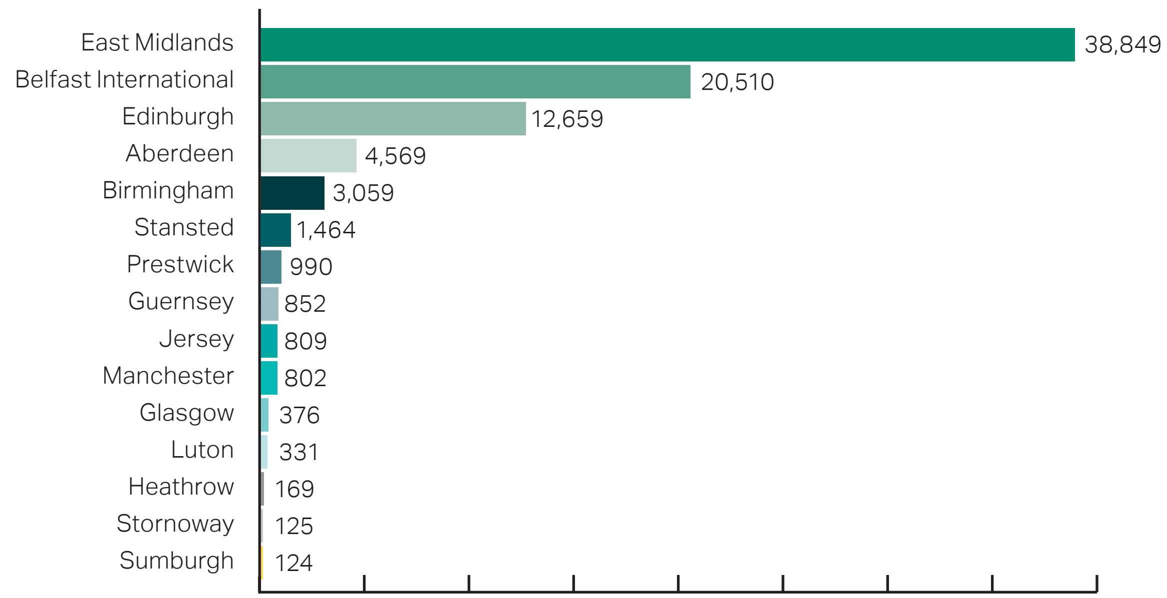
28%
(on Aug 19 - Jul 20)



98% of domestic freight was carried on freight dedicated aircraft
Aug 20 - Jul 21

The top 15 UK airports for domestic goods handled

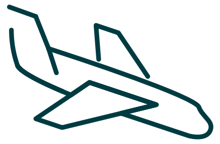
tonnes (Aug 20 - Jul 21)

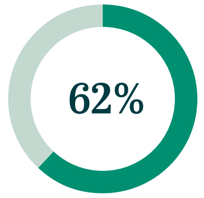


International

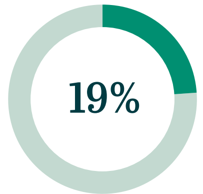
2,089,079 tonnes
international freight Aug 20- Jul 21

1%
(on Aug 19 - Jul 20)





Heathrow
handled the most with 62 per cent



East Midlands
followed with 19 per cent

Top 5 UK airports for international freight handled

Aug 20 - Jul 21

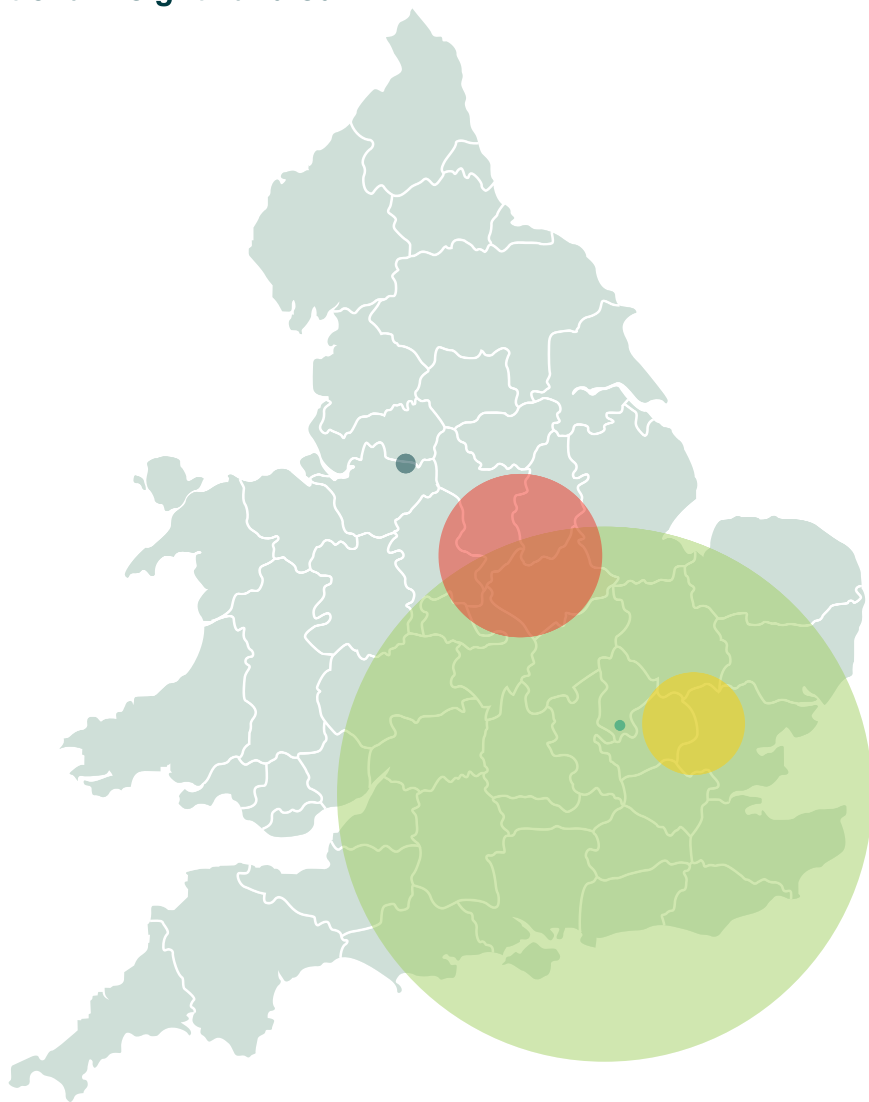
1,284,885 tonnes
Heathrow

393,239 tonnes
East Midlands

247,218 tonnes
Stansted

47,897 tonnes
Manchester

25,969 tonnes
Luton



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AECOM freight and fleet

AECOM is a global network of experts working with clients, communities and colleagues to develop and implement innovative solutions to the world's most complex challenges. As a specialist offer within AECOM's overall service portfolio, the freight and fleet team provides specific expertise across all aspects of freight transport. We work for a wide range of public and private sector clients, offering balanced and tailored solutions to local, regional, national and international issues.

Our people are our greatest asset, combining industry leading knowledge and experience in transport, logistics and economics to help our clients succeed.

Understanding the bigger picture, we can offer informed solutions to help tackle the industry's biggest challenges, as well as enable clients to leverage future opportunities. Our work extends across road, rail, air and water modes, with specific emphasis on measures that drive social value, economic growth and environmental sustainability.

> "We provide robust and cutting-edge advice on freight activity, current and future transport trends, the important determinants of freight demand, evidence-based policy making and technological advancements.

- **Freight and logistics research**
- **Supporting transportation by non-road modes**
- **Freight safety, quality and efficiency programmes**
- **Freight and logistics master planning**
- **Freight and logistics infrastructure feasibility and design**
- **Effective planning for safe and efficient deliveries to sites, premises and developments**
- **Freight demand forecasting for road, rail and water**
- **Truck parking solutions**
- **Carbon emission reduction**

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