

NATIONAL INFRASTRUCTURE COMMISSION

FREIGHT STUDY CALL FOR EVIDENCE

The National Infrastructure Commission was permanently established by the Chancellor of the Exchequer as an executive agency of HM Treasury on 24 January 2017. Its purpose is to carry out independent and unbiased assessments of the UK's long-term infrastructure needs and monitor the government's and industry's progress in meeting them.

Once each Parliament the Commission will publish a National Infrastructure Assessment (NIA) looking across all key sectors and geographies, to identify the UK's long-term infrastructure requirements and prioritise the most important projects for further development.

Alongside this, the Commission carries out specific studies on pressing national infrastructure challenges in order to support the long-term competitiveness of the UK economy.

Sir John Armitt CBE is the Chair of the Commission. The other members of the Commission are:

- Andy Green
- Bridget Rosewell OBE
- Professor David Fisk CBE
- Julia Prescott
- Dame Kate Barker DBE
- Professor Sadie Morgan
- Professor Sir Tim Besley CBE

Further information about the Commission and its work can be found at www.nic.org.uk

CONTENTS

1. Introduction	4
2. Call for Evidence	5
3. Context	6
4. Questions	7
5. How to respond	9

1. INTRODUCTION

On 22 November 2017, the Chancellor asked the Commission to undertake a study into freight in the UK, covering road, rail, water and other modes and looking specifically at:

- the wider economic role of freight and how its economic benefits are factored into government infrastructure investments;
- the impact of freight on urban congestion and the UK's carbon emissions, and the future of inter-city freight movements;
- the future of freight infrastructure and regulation, to reduce the effects of congestion on productivity (particularly in urban areas) and ensure wider freight connectivity supports economic growth;
- the potential of emerging technologies to improve efficiency and productivity, and reduce the environmental impact of UK freight;
- the future of our roads and highways to be able to adapt to new technology, such as platooning; and
- options for decarbonising the freight sector, including the infrastructure and regulation needed for low emission haulage.

The full terms of reference for this study can be found [here](http://bit.ly/2FJRqQ7) (<http://bit.ly/2FJRqQ7>)

As part of this study, the Commission will produce the following:

- an interim report in autumn 2018 that assesses:
 - the economic impact of freight congestion and the potential benefits of improving freight efficiency;
 - identifies and assesses the new technologies and practices to improve freight productivity; and
 - the value and potential effectiveness of different approaches to reducing the carbon and air quality impact of freight.
- a final report in spring 2019 that provides recommendations on the changes required to infrastructure, regulation, industry practices, and the government's investment priorities in the freight sector, in order to deliver an efficient and low-carbon freight system over the coming 30 years.

2. CALL FOR EVIDENCE

The Commission's call for evidence on the future of freight in the UK will run for six weeks, closing on 5 March 2018. Interested parties are encouraged to submit evidence, ideas and solutions to the questions outlined in part 3 of this document.

Those providing responses are strongly advised to provide details of the evidence and data which support their positions to enable the Commission to understand more fully the basis on which those conclusions have been reached.

In addition, the Commission will work with key stakeholders across government and industry as part of an open and transparent process of engagement to support the call for evidence.

Information on how to respond can be found in part 5 of this document.

3. CONTEXT

The effective movement of freight is an essential enabler to the growth and prosperity of the UK. Consumers and businesses all rely on it in their daily lives and the requirements on freight are continuing to expand, with demand for faster, cost effective and more convenient delivery of goods ever growing.

The UK freight infrastructure and industry has continued to meet this challenge and has shown its ability to work around constraints to keep freight moving. In 2016/17, Our ports handled almost half a billion tonnes of freight into and out of the country¹; UK HGVs moved 174 billion tonne kilometres around the UK²; our railways moved over 17 billion tonne kilometres of freight³; and there has been substantial growth in the use of light goods vehicles for freight distribution.

But the movement of freight is not without issues or wider impacts – and whilst these are not necessarily solely caused by freight, freight both contributes and is affected by these issues. With limited space on the road and rail network, particularly in urban areas, changes to the way the freight system operates will be required to tackle congestion. HGVs account for around 18% of the UK's CO₂ emissions from road transport – if the UK is going to meet its targets to reduce greenhouse gas emissions (as well as improve air quality), part of the solution will be decarbonising road freight⁴. Reducing freight volumes or the amount of goods moved is unlikely to be a realistic option or solution. Therefore, alternative means of maximising the use of road and rail capacity – through infrastructure changes and upgrades, regulatory reform, and harnessing the opportunities that new technology presents – need to be explored.

The Commission's freight study seeks to understand the key constraints to freight distribution between cities and within cities, its wider implications on our transport systems, and the ways in which innovations, including but not restricted to HGV platooning, autonomous vehicles and alternative fuels, could improve the efficiency and resilience of the freight system while at the same time helping to tackle the broader issues and challenges that face our national transport network, urban centres, and population as a whole.

1 In the four quarters to June 2017, UK major ports handled 471.9 million tonnes of freight (UK port freight statistics 2017, Department for Transport)

2 Road freight statistics, UK, April 2016-March 2017 (Department for Transport)

3 Transport Statistics Great Britain 2017 (Department for Transport)

4 HGVs account for 18% of all greenhouse gas emissions from road transport in 2015 - 98% of all HGV greenhouse gas emissions were carbon dioxide emissions (Congestion, Carbon and Capacity, NIC 2017)

4. QUESTIONS

The questions the Commission is particularly keen to focus on in this initial phase of work are as follows. You may wish to respond to all or any of the below:

1. What are the key constraints to the effective and efficient movement of freight in the UK and what can be done to overcome them?
 - 1.1. What do you see as the key drivers to a successful freight system that is fit for the future?
 - 1.2. Which are the key freight corridors that matter the most? Where are the bottlenecks in the freight network, and what investments in upgrades could deliver the best value for money for freight efficiency and UK plc?
 - 1.3. To what extent are the economic benefits of freight factored into wider transport infrastructure investment planning?
 - 1.4. What are the regulatory and legal issues that, if changed, could improve freight efficiency without increasing costs or reducing efficiency?
2. How might the demand for freight develop and change over the next 20-30 years?
 - 2.1. How has the demand for freight, and types of freight, changed over the last two decades, and what will be the drivers for changes in the future?
 - 2.2. How is the freight industry planning for future changes in the demand? What levers might be available to shape future demand for freight transport?
3. What effects does congestion have on the efficiency of freight movement and emissions?
 - 3.1. How does congestion impact upon the productivity and economic contribution of freight? To what extent does congestion affect changes to mode, time or other freight choices?
 - 3.2. How does congestion affect the environmental impacts of the movement of freight?
 - 3.3. With limited space for new infrastructure, how can we better use our existing urban network to support freight? Are there changes – such as changes to modes, methods, or delivery times - that could help reduce the stress on the urban transport network?
4. How can freight lower its carbon and air quality impacts?
 - 4.1. Are there efficiencies within freight management and distribution practices that could help reduce the CO₂ and NO_x emissions from freight?
 - 4.2. What role do alternative fuels such as electricity, Liquid Petroleum Gas and biofuels have to play? What are the barriers and challenges to wide-scale uptake of alternatives to diesel and what could be done to help remove these issues?
 - 4.3. What technologies could best and most realistically be utilised to manage the carbon impacts of freight, both within urban areas and on longer strategic journeys?

5. How could new technologies be utilised to increase the efficiency and productivity of UK freight?
 - 5.1. How will new technologies change the capacity and performance of the freight transport network? Over what timeframes might these new technologies begin to affect the freight transport network?
 - 5.2. How can the use of data such as real-time traffic information by artificial intelligence and machine learning systems help to improve freight efficiency and productivity? How might this affect the business models and requirements of freight in the future? Are there any barriers to the greater use of data in freight?
 - 5.3. How do you see technologies such as HGV platooning, digital railway signalling, and autonomous vehicles being integrated into freight distribution?
 - 5.4. How might regulations and physical infrastructure need to adapt to new technologies and business models in the freight sector?

6. Are there good examples internationally of freight systems, policy, infrastructure or technology development and implementation that the UK can learn from to increase freight efficiency and/or reduce the carbon and congestion impacts?

5. HOW TO RESPOND

Responses must be no longer than 10 pages and should be emailed to:

Freightstudy@nic.gsi.gov.uk

The deadline for submissions is **Monday 5 March 2018**.

Evidence will be reviewed thereafter by the Commission. If further information or clarification is required, the Commission Secretariat will contact you.

In exceptional circumstances, we will accept responses in hard copy. If you need to submit a hard copy, please send your response to the Commission Secretariat at the following address:

Freight Study Call for Evidence
National Infrastructure Commission
5th Floor
Eastcheap Court
11 Philpot Lane
London EC3M 8UD

We may publish any responses received. If you believe there is a reason why your response or any part of it should be considered confidential, please provide details.

The Commission is subject to legal duties which may require the release of information under the Freedom of Information Act 2000 or any other applicable legislation or codes of practice governing access to information.