

Rail Delivery Group

Response to:

**Treasury's and the Department for
Environment, Food and Rural Affairs (Defra)
Consultation;**

Air quality: draft Clean Air Strategy 2018

Date: 14th August 2018

Rail Delivery Group response to:

Organisation: Rail Delivery Group

Address: 200 Aldersgate Street, London EC1A 4HD

Type: Business representative organisation

The Rail Delivery Group (RDG) brings together passenger train operators, freight train operators, Network Rail and HS2 together with the rail supply industry. The rail industry – a partnership of the public and private sectors – is working in partnership for Britain's prosperity¹ to secure prosperity in Britain now and in the future. The RDG provides services to enable its members to succeed in transforming and delivering a successful railway to the benefit of customers, the taxpayer and the UK's economy. In addition, the RDG provides support and gives a voice to passenger and freight operators, as well as delivering important national ticketing, information and reservation services for passengers and staff.

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¹ *In Partnership for Britain's Prosperity*, RDG (October 2017): <http://www.britainrunsonrail.co.uk/files/docs/one-plan.pdf>

1. Overview

RDG welcomes the opportunity to respond to the Department for Environment, Food and Rural Affairs (Defra) consultation on the Air quality: draft Clean Air Strategy 2018. Our responses to the questions in the consultation document are provided in section 2.

However, we would like to stress our support and welcome investment the Government is making in improving the measurement of air quality, also with the proposals to bring together local and national monitoring data into a single accessible information portal. We would be happy to review the rail-related data that would feed into this to ensure it is suitably robust and comprehensive.

We highlight Rail Safety and Standards Board (RSSB) is developing an air quality plan as part of rail industry's Sustainable Development plan. This plan will provide the basis for the industry to manage and respond to air quality challenges in future. We would encourage Defra to work with the Department for Transport (DfT) and the industry to ensure that government policy aligns to the work of the industry.

2. Response to Questions

1. Understanding the problem

Q1. What do you think about the actions put forward in the understanding the problem chapter? Please provide evidence in support of your answer if possible.

RDG welcome's the investment the Government is making in improving the measurement of air quality. Rail is already recognised as an environmentally friendly mode of transport for passengers and freight compared to other modes. [Insert figure] However, it is difficult to say precisely how rail performs on air quality based on current data and it is likely that the same is true for other modes. For example, we are aware of challenges in the methodology of the National Atmospheric Emissions Inventory (NAEI) in measuring emissions for rail freight. The industry is working with Aether (consultants commissioned to produce the rail freight element of the NAEI) to adjust for these challenges and develop better emissions data for rail freight.

We support the proposals to bring together local and national monitoring data into a single accessible information portal. As far as air quality is concerned we would encourage particular attention to be given to local emissions given that this is where their impact is greatest. We would be happy to review the rail-related data that would feed into this to ensure it is suitably robust and comprehensive.

We note that the Rail Safety and Standards Board (RSSB) is developing an air quality plan as part of rail industry's Sustainable Development plan. This plan will provide the basis for the industry to manage and respond to air quality challenges in future. We would encourage Defra to work with the Department for Transport (DfT) and the industry to ensure that government policy aligns to the work of the industry.

Q2. How can we improve the accessibility of evidence on air quality, so that it meets the wide-ranging needs of the public, the science community, and other interested parties?

Different stakeholders are likely to have different needs and varying levels of technical understanding when it comes to accessing evidence on air quality. We suggest that Defra engages with the different communities to find out what information they want and to what level of detail. A possible solution might be to have a single website that provides varying levels of detail and access to the underpinning data depending on the needs of the user.

RDG recommends that the National Atmospheric Emissions Inventory is more clearly signposted on Defra and BEIS websites. We would also recommend that this is clearly signposted in the annually-published Transport Statistics for Great Britain (TSGB).

2. Protecting the nation's health

Q3. What do you think of the package of actions put forward in the health chapter? Please provide evidence in support of your answer if possible.

We recognise the need to reduce emissions from all sources including rail in order to reduce public exposure to particulate emissions. While we support the measures proposed in the draft strategy, any targets need to be underpinned by policies, programmes and projects if they are to be delivered. This should include appropriate investment in public transport.

In principle, we also support the proposals to provide new powers to enable targeted local action in areas with air pollution problems. However, these powers need to be accompanied with the ability for towns and cities to take practical action to improve air quality, for example by investing in electric vehicle charging points and cleaner forms of public transport such as rail, tram and metro schemes.

We support proposals to publish a new set of appraisal tools to enable the health impacts of air pollution to be considered in policy making. Monetising the health impacts of air pollution

could have a significant impact on future transport investment schemes for example by strengthening the case for rail electrification schemes. We would expect Defra to play a significant role in ensuring other government departments embed the appraisal tools in their policy and investment making decisions.

Q4. How can we improve the way we communicate with the public about poor air quality and what people can do?

We welcome the proposals to develop and deliver a personal air quality messaging service. This should offer tailored and timely information and advice to individuals, in particular to those who are most vulnerable to poor air quality. A variety of communications channels will be needed to ensure all vulnerable groups are able to benefit from this information.

3. Securing clean growth and innovation

Q.7. What do you think of the package of actions put forward in the clean growth and innovation chapter? Please provide evidence in support of your answer if possible.

RDG has responded to the call for evidence on non-road mobile machinery and the interaction between the availability of “red diesel”, which benefits from a low rate of fuel duty, and the uptake of cleaner technologies.

Our response highlights that any significant increase in fuel duty for red diesel would have a serious and detrimental impact on rail passenger and freight operators. In particular, the rail freight sector would be materially affected by any increase in its operating costs which puts it at a competitive disadvantage with road transport. The consequence of this would be mode shift away from rail to road freight which would increase, rather than reduce, air quality and carbon emissions as well as leading to higher levels of noise and road congestion. This would run counter to the Government’s policy of supporting modal shift from road to rail, as evidenced by the DfT’s and Transport Scotland’s Rail Freight Strategies.

As we stated in our response to the red diesel call for evidence, and in response to question 9, there are presently few viable alternatives to diesel usage for rail freight.

Q8. In what areas of the air quality industry is there potential for UK leadership?

Given the air quality challenges facing many countries, there are real opportunities for the UK to show global leadership in improving air quality through evidence-based policy making and technology measures. It would be helpful for government to assess the potential global market for clean technologies to inform product development and export activity across different industry sectors.

Q9. In your view, what are the barriers to the take-up of existing technologies which can help tackle air pollution? How can these barriers be overcome?

Rail electrification is a well-established technology for enabling diesel trains to be replaced with zero emission electric trains. With just over 34% of our railway electrified, we have one of the least electrified railways in Europe. However, the Department for Transport has pulled back from supporting further electrification schemes (other than some relatively small projects) and is focussing instead on promoting bi-mode trains that use a combination of diesel and electricity and is calling for the development and introduction of new technologies such as hydrogen fuel cells which have extremely limited track record of working in rail. We believe that further rail electrification is a suitable cost-effective means of reducing environmental impacts and delivering better services to customers in particular on busier lines.

In response to a decarbonisation challenge from Jo Johnson, the Rail Minister, the industry has established a task force to explore a range of measures to reduce carbon emissions and improve air quality. This includes research into options to improve the environmental performance of existing vehicles and to introduce new technologies. In parallel the industry is assessing opportunities to reduce the cost of electrification significantly, for example by

avoiding the need to rebuild bridges.

The rail industry is a relatively small industry sector globally. Trains account for around 1% of all non-road mobile machines. As a result, new clean engine or fuel technologies for rail will need to be transferred from other sectors or developed in collaboration with them. There are opportunities for government to support wider collaboration in sectors facing similar environmental challenges e.g. marine, aviation, construction, rail etc, through its use of innovation funding and grants.

Cost can be a significant barrier to the introduction of new fuels and technologies in rail especially where there is no corresponding likely increase in revenue from passengers or freight consignors. Consequently, the rail industry and government will need to agree how best to introduce new fuels and technologies and ensure the right policies and incentives are in place to make this happen (for example through the rail franchising process) and to give the industry confidence to invest.

Although not necessarily a barrier, the rail industry needs to ensure it understands and can manage safety related risks associated with new fuels and technologies such as lithium ion batteries, hydrogen or natural gas. Adopting these fuels and technologies may require investment in rail infrastructure and new safe working practices.

Q10. In your view, are the priorities identified for innovation funding the right ones?

We support the proposed innovation priorities in particular the theme around low and zero emission options for non road mobile machinery. We would welcome government support in encouraging different sectors to collaborate to tackle common challenges, for example around improving the emissions performance of existing NRMM diesel engines.

We would like to see further research into the potential for retro-fit emissions reducing technology for rail freight locomotives.

4. Action to reduce emissions from transport

Q11. What do you think of the package of actions put forward in the transport chapter? Please provide evidence in support of your answer if possible.

In broad terms we welcome the package of transport actions which recognises the efforts the rail sector is already taking to reduce emissions generally and improve air quality in stations in particular. For example, a tonne of goods can travel 246 miles by rail as opposed to 88 miles by road on a gallon of fuel. Rail fundamentally uses less fuel than road and therefore emissions per tonne of freight moved are also lower. In addition, rail freight operators have taken the following steps to lower emissions:

- Investing in new rolling stock, including dual diesel-electric freight locomotives and passenger trains
- Running fewer, longer trains
- Introducing stop-start technologies and driver training to reducing idling emissions

The plan does not include any proposals to ensure that low emission transport solutions are considered as an integral part of land use planning decisions. As an example, sustainable public transport proposals should be considered at an early stage in new housing or industrial developments to limit increases in the use of private cars.

While we welcome the commitment to encourage more sustainable modes of transport and to shift freight from road to rail, we note that the Mode Shift Revenue Support (MSRS) has been reduced significantly in recent years which impacts the economic sustainability of rail freight services and could lead to a higher number of road movements. We would like to MSRS restored in future.

Q12. Do you feel that the approaches proposed for reducing emissions from Non-Road Mobile Machinery are appropriate or not? Why?

RDG has responded to the call for evidence on non-road mobile machinery and the interaction between the availability of “red diesel”, which benefits from a low rate of fuel duty, and the uptake of cleaner technologies.

Our response highlights that any significant increase in fuel duty for red diesel would have a serious and detrimental impact on rail passenger and freight operators. In particular, the rail freight sector – which is already struggling to remain profitable - would be badly affected by any increase in its operating costs which puts it at a competitive disadvantage with road transport. The consequence of this would be mode shift away from rail to road freight which would significantly increase rather than reduce air quality and carbon emissions as well as leading to higher levels of noise and road congestion. This runs counter to the Government’s policy of supporting modal shift by road to rail, as evidenced by the DfT’s and Transport Scotland’s Rail Freight Strategies.

We therefore believe that the proposed measures for non-road mobile machinery should exempt rail.

5. Action to reduce emissions at home

Q14. Which of the following measures to provide information on a product’s nonmethane volatile organic compound content would you find most helpful for informing your choice of household and personal care products, and please would you briefly explain your answer?

- “A B C” label on product packaging (a categorised product rating for relevant domestic products, similar to other labels such as food traffic light labels);
- information on manufacturer website;
- leaflet at the point of sale;
- inclusion in advertising campaigns;
- other options

9. Leadership at all levels (local to international)

Q26. What are your views on the England wide legislative package set out in section 9.2.2? Please explain, with evidence where possible.

The package of measures includes proposals to “drive up emissions standards for diesel-powered non-road mobile machinery before and after sale”. In practice, of course, the emissions performance of diesel powered engines destined for rail use will be defined by the EU NRMM emissions directive rather than through any domestic requirements. The number of rail diesel engines sold in the UK is so small that global diesel engine manufacturers will not invest in developing bespoke solutions for our market.

Q28. What are the benefits of making changes to the balance of responsibility for clean local air between lower and upper tier authorities? What are the risks?

From the rail perspective we need to ensure that train fleets can travel across the entire rail network in order to meet the needs of our passengers and freight customers. We would therefore be concerned at the prospect of differing local air quality requirements across the country which might restrict rail access. This would also act as a barrier on rail growth and reduce the potential for modal shift from road to rail.

10. Progress against targets

Q31. Do you have any specific suggestions for additional or alternative actions that you think should be considered to achieve our objectives? Please outline briefly, providing evidence of potential effectiveness where possible.

The need for a concerted and holistic national and local government approach, reviewing overall transport investment priorities and potential cross industry impacts and risks.

Response Ends

² RDG response to Department for Environment, Food and Rural Affairs (Defra) call for evidence on Non-Road Mobile Machinery (NRMM) and Red Diesel. (July 2018)