



House of Commons
Transport Committee

**Rail technology:
signalling and
traffic management:
Government response
to the Committee's
Seventh Report of
Session 2016–17**

**Ninth Special Report of Session
2016–17**

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Transport Committee

The Transport Committee is appointed by the House of Commons to examine the expenditure, administration, and policy of the Department for Transport and its associated public bodies.

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The following was also a member of the Committee during the inquiry:

[Mary Glendon MP](#) (*Labour, North Tyneside*)

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The Committee is one of the departmental select committees, the powers of which are set out in House of Commons Standing Orders, principally in SO No 152. These are available on the internet via www.parliament.uk.

Publication

Committee reports are published on the Committee's website at www.parliament.uk/transcom and in print by Order of the House.

Evidence relating to this report is published on the [inquiry publications page](#) of the Committee's website.

Committee staff

The current staff of the Committee are Gordon Clarke (Committee Clerk), Nehal Bradley-Depani (Second Clerk), James Clarke (Committee Specialist), Andrew Haylen (Committee Specialist), Daniel Moeller (Senior Committee Assistant), Michelle Owens (Committee Assistant) and Estelle Currie (Media Officer).

Contacts

All correspondence should be addressed to the Clerk of the Transport Committee, House of Commons, London SW1A 0AA. The telephone number for general enquiries is 020 7219 3266; the Committee's email address is transcom@parliament.uk.

Ninth Special Report

The Transport Committee published its Seventh Report of Session 2016–17, *Rail technology: signalling and traffic management* (HC 67), on 27 October 2016. The Government's response was received on 19 December 2016 and is appended to this report.

In the Government's response, the Committee's recommendations appear in **bold text** and the Government's responses are in plain text.

The response from Network Rail was received on 9 January 2017 and is also appended to this report.

Appendix 1: Government Response

Introduction

We welcome the review and findings of the Transport Select Committee.

The Government recognises that the introduction of digital signalling technologies and intelligent traffic management systems across the rail network will become increasingly important in the coming years to enable the railways to cope with growing demand.

The Transport Secretary has appointed a high-level group of industry leaders to advise Government on the policy for Digital Railways and inject best practices from other industries that have successfully delivered digital transformation; their recommendations will be presented to Government early in the new year.

We are also working closely with BEIS and industry to ensure the UK makes the most of the opportunity Digital Railways presents to jobs, skills and exports. To this regard, the Department for Transport welcomes industry's recent *Early Contractor Involvement* publication on Digital Railways.

At the 2016 Autumn Statement, as part of the Government's National Productivity Investment Fund, HMT has allowed for an additional £450m in this Parliament to trial digital signalling technologies. This investment will help set the foundation for successful delivery of digital schemes in the next Parliament and beyond.

European Train Control System and European Rail Traffic Management System

1. The European Rail Traffic Management System is becoming a global standard. While the UK will presumably no longer be bound by EU Directives when it leaves the European Union, it would be counterproductive and costly not to continue using the same standards as used in the rest of Europe and the wider world.

Response: The Government agrees with this finding and recognise that ERTMS has benefits beyond interoperability. Until the UK formally leaves the European Union the Government will continue to negotiate, implement and apply EU legislation.

The Digital Railway Programme

2. We conclude that improvements to signalling and traffic management technology are needed to deliver a world-class rail network in the UK. In principle we support the idea that the deployment of the European Train Control System (ETCS), Traffic Management software and Driver Advisory systems should be accelerated but this should be subject to careful consideration of the Digital Railway business case, clarity about funding, and a clear understanding of how this programme would affect existing plans for work on enhancements and renewals. In particular, Network Rail's Digital Railway business case should include a full cost/benefit analysis of all potential systems for a particular route, and consult upon it, before finalising its Digital Railway strategy.

Response: The Government welcomes this recommendation; we will work closely with industry to ensure that assured and comprehensive business cases are established to support the deployment of the programme.

Network Rail

3. Network Rail's recent history of planning major enhancements work is poor. In producing a plan for the deployment of rail technology, it must be mindful of the consequences and impact of further failures.

Response: The Government recognises the recent history of poor planning and will work with industry to ensure plans for digital technology are deliverable and robust.

ETCS cab fitment fund

4. Cuts to the cab fitment fund may delay the procurement of first-in-class fitment for all rolling stock. Given these cuts, the business plan for Digital Rail should make clear how first-in-class design and cab fitment will be funded. The Department should track how quickly cab fitment is progressing, how changes in funding affect the rate of cab fitment and what implications the rate of progress has for realising the promised increase in capacity.

5. We recommend that the Department for Transport take steps to ensure that work on cab fitment and trackside infrastructure remain broadly aligned; it would be disappointing if trackside infrastructure was ready but could not be used because cab fitment had not progressed quickly enough or vice versa.

Response: The Government agrees with the TSC recommendation; we recognise that the benefits of digital signalling cannot be delivered if train and trackside installation are misaligned.

Supplier confidence

6. The Digital Railway business plan is an opportunity to regain eroded industry confidence. Network Rail must be mindful of the damage that will be done to supplier confidence if another technology procurement is started only to be halted

or abandoned. When planning the Digital Railway programme the Department and Network Rail should consider carefully the risks arising from any further erosion of supplier confidence.

7. The Digital Railway programme cannot be delivered without a cross-industry approach. Technology suppliers are clearly fundamental to a modern rail network. We recommend that Network Rail address the concerns expressed in the evidence we have taken that suppliers and the rail technology industry have not been sufficiently involved. Network Rail and the Department for Transport should take steps to ensure that the views of suppliers and the rail technology industry are heard in consultations on the potential, scope, and cost of projects. It is important that work on the Digital Railway is co-ordinated and is underpinned by a whole sector approach.

Response: The Government agrees with the TSC recommendation. To that regard, the Department for Transport has already engaged with industry in a round table event, jointly chaired by the Transport Secretary and Industry and Rail Ministers, and supports the Digital Railway Early Contractual Involvement programme, set up under the leadership of Network Rail. We will build on this engagement in the coming months.

Claims of increased capacity

8. Over ambitious claims for improvements in capacity must be met with scepticism, and Network Rail should be very cautious about how it uses the 40% claim. The Department should be very clear about the level of capacity improvement likely to be achieved when assessing the business case for the Digital Railway. It should consider alternative ways of achieving the same level of growth in capacity so that it can make an informed decision on the likely cost/benefit ratios and funding for the Digital Railway. Rather than claims of up to 40% we expect to see a more sophisticated assessment of the likely capacity gains that look at different investment scenarios and their associated costs, benefits and risks. It is important that the Department for Transport and Network Rail make a realistic assessment of how much extra capacity each system within the Digital Railway programme can deliver to meet growing demand. Where the Digital Railway offers the best solution it is important that other work, such as that needed to improve station capacity, is done simultaneously to enable the investment in the Digital Railway to deliver its full potential.

Response: The Government agrees with the TSC recommendation; the development of business cases will include a robust analysis of alternative options, as well as an assessment of the benefits.

9. Projections based on ETCS Level 3 should only be considered valid when the Level 3 specification is ready for deployment, and Network Rail should avoid using such projections, or the promise of a “moving block” signalling system, in its publicity until such technology is ready to be deployed.

Response: The Government agrees with the TSC recommendation. It will be important that the case for digital railways is based upon an affordable and deliverable technology.

Delays to ETCS and Traffic Management roll out

10. It is important that projects are flexible, and re-signalling works should not be held to an artificial timetable when a delay is required for legitimate reasons. Nonetheless, we have some concern that the recent announcements of delays in both the Romford ROC and the Norwich–Yarmouth–Lowestoft line may be early indications that the timetable that Network Rail has set for Digital Railway is over-ambitious and will not be met. We look to Network Rail to be realistic and measured in the time frame that it sets in the business case for Digital Railway, even if this means rowing back from the 2029 target.

Response: The Government agrees with this finding; we support an incremental and targeted approach to delivering the digital railway.

11. The appointment of David Waboso to head Digital Railway is an encouraging sign that signalling expertise will be used to inform the Digital Railway programme.

Response: The Government welcomes this appointment.

Making choices

12. Network Rail is right not to present the Digital Railway proposal as a plan to fit ETCS Level 2 across the network; it might not be the appropriate intervention for every line. We recommend that Network Rail keep an open mind in its strategy, pick the most effective intervention for each route, and look to press ahead with Connect Driver Advisory systems and Traffic Management solutions where these are cost-effective.

Response: The Government agrees with this recommendation; we support a deployment where technology is targeted or scaled to most effectively provide the benefits needed by the particular route.

13. While there is no reason to keep all re-signalling work on hold while waiting for ETCS Level 3, we support the continued development of that system and request that Network Rail undertake a full cost/benefit system of introducing that system directly as opposed to evolving to it from a Level 2 system. As part of that analysis, we recommend that any assessment of a Level 2 system should require input from potential suppliers on the feasibility and costs of upgrading to Level 3.

Response: The Government agrees with the TSC recommendation; we recognise that ETCS Level 3 has significant benefits. We will consider how best to support its development.

Passenger and freight rail

14. The rail freight industry must not be forgotten in the deployment of signalling and traffic management technology, either by the failure to be accounted for in Network Rail's plans, or by a lack of will on the part of the industry to invest in new technology. The Department and Network Rail should continue to have discussions with the Rail Freight Group to discover ways in which ETCS cab fitment in freight can be accelerated in line with passenger rail. We welcome the Government's commitment to do this in the recently published Rail Freight Strategy.

Response: The Government agrees with the TSC recommendation. We will be ensuring that the business case and investment into digital railways takes into account benefits to the rail freight industry.

Rail staff and the Digital Railway

15. Even at this early stage, it is vital that advances in rail technology take into account the impact that changes will have on the workforce. A possible hostile reaction from the workforce or the trade unions should be countered from the outset by a strategy for staff training and development that is as intrinsic to the programme as engineering works.

Response: The Government agrees with this conclusion. The Transport Secretary has appointed a group of industry leaders to inject best practices from other industries that have successfully delivered digital transformation. This Ministerial Group will provide recommendations on how to ensure that staff and unions are part of delivering a successful programme.

Rail operating centres

16. Accelerating the speed with which signalling responsibilities are transferred to Rail Operating Centres (ROCs) presents a challenge to Network Rail. Solving any existing issues with ROCs must come before meeting the timetable of Digital Railway, even if this means other ROC transfers become delayed.

Response: The Government supports the transfer of signalling responsibilities to Rail Operating Centres. The roll out of Rail Operating Centres is a matter for Network Rail.

Timetable planning

17. Advances in traffic management technology can and should be used as an opportunity to overhaul the timetable planning process on the rail network, making it more responsive to the needs of rail operators, to enable them to provide a better service. Overhauling the timetable planning system should therefore be a long-term goal of any traffic management deployment strategy.

Response: The Government agrees with the TSC conclusion.

Control periods

18. Technology suppliers and the Rail Delivery Group have cited concerns that the Control Period funding structure has led to a stop-start approach to digital enhancements, stymieing the progress made. The Department should consider carefully whether, in line with the recommendations for large projects in the Bowe review, the Digital Railway (or elements of it) should be placed outside the control period process.

Response: The Government agrees with the TSC recommendation and will consider whether the Digital Railway (or elements of it) should be funded outside the control period process.

Private funding

19. It is possible that performance-based compensation for traffic management technology providers could improve outcomes by sharing performance risk with technology suppliers. We recommend that this possibility be considered in drawing up contracts for rail traffic management.

Response: The Government agrees with the TSC recommendation. The Department for Transport and Network Rail are working with industry to explore the suitability of alternative commercial models that can create incentives for efficient delivery and operation of digital assets.

Appendix 2: Response from Network Rail

Letter from Mark Carne, Chief Executive of Network Rail, to Louise Ellman MP, Chair of the Transport Committee

Dear Chair

I had said I was going to share the business case outputs from the Digital Railway by the end of 2016, and further to the publication of the Transport Select Committee's report on rail technology, I wanted to update you on the development of these.

The recent announcement by the Chancellor that £450 million is to be dedicated to trialling digital signalling technology on the network is very good news and we are working closely with the Department for Transport (DfT) to determine the most beneficial means of investing this funding.

David Waboso's team in the Digital Railway programme are currently preparing a series of targeted strategic outline business cases for the deployment of digital technology to address specific challenges that are impacting performance and capacity on the network. These are being developed in conjunction with DfT, Network Rail's route planners, train operating companies, and the rail supply industry. They will be completed this Spring and the financial analysis will be used to inform decisions on the next phase of deployment, and of course input to any earlier decisions following the autumn statement.

The team does have early cost data from our previous business case work and this is now being refined in conjunction with the supply industry. In particular you may be interested in the Early Contractor Involvement report we published jointly with the supply chain on 7th December 2016, which demonstrated the potential to reduce costs by between 10% and 30% if we change the way we work with the supply chain to focus on specifying the problem we need help solving, rather than prescribing the solution. <http://digitalrailway.co.uk/2016/12/07/report-supply-industry-highlightspotential-digital-technology-cost-savings/>

It is important that the targeted digital railway business cases are robust and that government, and other stakeholders, can have confidence in it. I now anticipate that by the Summer the business cases and the plans for the £450million will be well developed and I would be happy to discuss this with the committee at that time.

Yours sincerely,

Mark Carne, Chief Executive