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Consultation on Scotland's Rail Infrastructure Strategy from 2019



Ministerial Foreword

Scotland's railways are a national asset. They provide a vital public service to people and communities across the country and enable businesses to move goods and materials to markets.

Our railways are a key part of the implementation of Scotland's Economic Strategy, supporting a resilient and growing economy through our four priority areas of investment: **infrastructure, innovation, inclusive growth and international engagement.**

Passengers across the country want a railway that is reliable, affordable, comfortable and easy to access, and these attributes have driven our approach to rail since 2007: we have invested in new tracks, new trains, new services and new stations, whilst keeping fares down.

The success of our approach is clear, with record passenger numbers, high and stable levels of satisfaction relative to other parts of the UK, and improved levels of safety – rightly a key objective and something that we must never take for granted.

The recent refresh of our National Transport Strategy confirmed our key strategic outcomes; to improve journey times and connections, to reduce emissions and to improve the quality, accessibility and affordability of the transport network in Scotland. These aims have been embedded in the ScotRail and Caledonian Sleeper franchise contracts and will continue to drive our approach.

The success of Scotland's railways, however, generates its own challenges. The phenomenal growth in passenger numbers seen over the past ten years is expected to continue - a trend that will require innovative approaches as we look to provide the necessary additional capacity in a sustainable and affordable way.

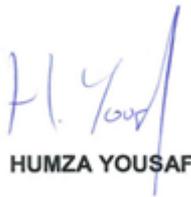
The industry's structure and funding arrangements are also changing, with Network Rail now a public body effectively owned and controlled by the UK Government. The devolved arrangements in place at present give the Scottish Government the powers to set the strategic direction and funding priorities for Scotland, however the recent cost and delivery challenges faced by Network Rail serve to strengthen the case for increased accountability and further devolution.

We welcome the additional rail powers that are being provided through the [Scotland Act](#), and we are committed to using these new powers to enable a public service operator to bid for future rail franchises.

In the meantime, we will continue to work within the boundaries of the existing legislation, setting a clear strategy for the rail industry in Scotland and providing the funding and investment that will support its delivery. This means ensuring the effective delivery of those service aspects that matter to rail users: faster journey times, increased capacity on trains and better reliability. Securing a high performing railway will continue to be a key priority, not least given the challenges with recent performance levels falling below the standards that are set by the Scottish Government and are expected by passengers. In the short term we have taken decisive action with the ScotRail Alliance expected to deliver on an Improvement Plan to address areas of poor performance across the country, returning levels of reliability back to the levels of the contracted and regulatory targets.

Longer term, this consultation paper sets out the Scottish Government's vision for rail, considers the challenges and opportunities we are facing, and makes a number of proposals that we believe can help to maximise our investment in the rail infrastructure to support the growth in demand that is predicted and to deliver services upon which customers can depend.

I welcome views on our proposed approach to rail infrastructure investment from 2019 – an approach that maintains a strong focus on supporting sustainable economic growth for all and is sufficiently flexible to allow us to adapt to the changing economic landscape and the evolving needs of rail users across Scotland.



HUMZA YOUSAF

Minister for Transport and the Islands

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1. Introduction

Under existing rail legislation, it is the responsibility of the Scottish Government to set out a **strategy for rail in Scotland**, to specify the outputs that we wish the rail industry to deliver (often expressed in terms of performance levels, and requirements in respect of capacity and journey times), and to set out the funding that will be made available to support their delivery. This process is regulated by the Office of Rail and Road (ORR) in five-year cycles (known as control periods) through their periodic review process. In May 2016, the ORR formally began the start of the 2018 periodic review (PR18)¹, a process that will ultimately determine Network Rail's infrastructure programme in Scotland over the five year period to March 2024.

As part of the PR18 process, the Scottish Government must submit its output requirements to the ORR by publishing a High Level Output Specification (HLOS) and a corresponding Statement of Funds Available (SoFA) by June 2017 (based on latest published ORR timetable).

The specification of our requirements will be informed by a range of evidence and through engagement with stakeholders. The responses to this public consultation, on the key principles and objectives that underpin our approach, will be taken into account, as will industry advice, such as the [Network Rail Scotland Route Study](#) report, the Rail Delivery Group's [Investing in the Future](#) publication, and the broader railway industry's advice on choices (which is due to be published early in 2017).

The Periodic Review comes at a time when the rail industry structures are changing, necessitating a fundamentally different approach to that taken in previous control periods. In particular, the recent reclassification of Network Rail as a central government body has changed the way the rail industry is funded and governed, with Network Rail now more accountable to the UK Government and subject to stricter financial constraints, including the introduction of more binding borrowing limits. Linked to this, the financial sustainability of the Regulatory Asset Base (RAB) funding model - where major infrastructure projects have traditionally been funded through borrowing - remains uncertain, with more direct capital grant funding of major projects likely to be required beyond 2019.

Network Rail's reclassification exposed severe weaknesses in the current industry set up, particularly around the delivery of major projects which are costing more and taking longer to deliver than we expected. A number of independent reviews, both in a Scottish and an English & Welsh context, have examined the circumstances in detail, providing numerous recommendations with a recurring theme that change is required.

Network Rail's activities in Scotland continue to be funded in full by the Scottish Government. This includes financing the costs of borrowing. Given recent delivery challenges and the increased fiscal responsibility that is expected beyond 2019, the Scottish Government will continue to pursue options for the full devolution of Network Rail to Scotland. In the absence of this we will continue to press for Network Rail to increase the depth and scale of its decentralisation programme, providing more local

¹ <http://orr.gov.uk/what-and-how-we-regulate/regulation-of-network-rail/how-we-regulate-network-rail/periodic-review-2018>

accountability and responsibility and reducing its historically large corporate headquarters in England.

In recent years the Scottish Government has committed record levels of investment to rail to support a programme of transformational improvements across the country. Going forward, investment in rail will remain a priority, but the effects of further fiscal consolidation and constraints on the RAB funding model mean that our investment will need to be smarter, focusing on maximising the capability of the existing infrastructure and rolling stock, thereby allowing resources to be made available for priority investment schemes. Our approach is evidenced in the recently announced Revolution in Rail² which will transform the delivery of inter city and regional services across Scotland through service reconfiguration and additional rolling stock, providing an additional 200 services and 20,000 seats per day.

Given the cost and programme challenges affecting the delivery of existing programme of major projects to 2019, our approach to specifying any future projects through the next HLOS will clearly need to be more flexible than that which was adopted in previous control periods. This may lead to a more direct arrangement between the Scottish Government and Network Rail for some or all enhancement projects, where decisions to commit to investment are made outside of the HLOS, and instead are made during the control period term, when assessments of business cases, risks, costs and affordability can be made with greater certainty.

This consultation aims to gather evidence that can help inform the general approach taken to specifying and funding our priorities for the railway infrastructure. **It does not represent a formal statement of policy at this stage.**

In addition, the forthcoming reviews of the National Transport Strategy and the Strategic Transport Projects Review will allow further opportunities for stakeholders to help shape our objectives and our approach to achieving those objectives through project and service delivery.

This consultation does not seek views on the day-to-day operation of services, through rail freight operations or the ScotRail or Caledonian Sleeper franchise contracts. We are also not seeking views from stakeholders on what they believe to be priority investment schemes, whether proposed upgrades to the existing infrastructure, or new routes or stations.

² <http://www.transport.gov.scot/news/%E2%80%98rail-revolution%E2%80%99-means-200-more-services-and-20000-more-seats-scots-passengers>

2. The Scottish Government's vision for Rail

Scotland's Economic Strategy sets out the Scottish Government's plans to achieve a more productive, cohesive and fairer country. Sustainable investment in our people, our assets and our infrastructure is identified as being vital to economic growth. Scotland's railways are key to the prosperity and quality of life, sustaining links between our communities to employment opportunities, businesses, industries and markets.

A recent report by Oxera³ demonstrates that the rail industry and its supply chain contribute up to £670 million to the Scottish economy each year, employ nearly 13,000 people and generate user benefits of up to £1 billion (£65 million of which is attributable to rail freight operations). The report also advises that the railway in Scotland generates savings of up to 0.5 million tonnes of CO₂ and travel time savings worth up to £241 million. Our railway also enables Scots and their guests to enjoy Scotland's rich, vibrant cultural heritage and many tourist destinations.

Our current key strategic outcomes for transport are: improved journey times; reduced emissions; and improved quality, accessibility and affordability. We will work with stakeholders in the coming years to take forward our commitment to a full review of the National Transport Strategy (NTS).

In the meantime, investing in Scotland's railway infrastructure remains a key priority of the Scottish Government. We recognise the importance of our railways as a national asset, and the economic, social, health and environmental benefits that it supports. We will keep our thinking on rail investment as closely aligned as possible with the direction of the aforementioned NTS review.

Our vision for Scotland's railways is:

A railway that supports this Government's aim for sustainable economic growth by providing services that are affordable and accessible to all;



tackling inequality

offering fast, frequent and environmentally sustainable connections for communities and businesses to our cities and regions;



improving competitiveness

and creating seamless links to other modes of transport, to allow passengers and goods to complete journeys with ease.



integrating services

³ <http://www.oxera.com/Latest-Thinking/Publications/Reports/2016/Oxera%E2%80%99s-assessment-of-the-economic-contribution-of.aspx>

Rail supports Scotland's **economic competitiveness** by:

- offering fast routes to cities and other areas of employment for commuters (which can help to reduce road congestion);
- linking cities in Scotland and the rest of Great Britain, including to London and the English 'Northern Powerhouse' region, to help make Scotland a more attractive place for businesses;
- facilitating the movement of goods, and of consumers to retailers; and,
- connecting tourists to activities and world-famous destinations.

The rail network can also help to **tackle inequality** in Scotland by providing affordable and accessible connections, particularly to our more remote areas and to vital public services, such as hospitals and educational facilities.

The Scottish Government's rail policy document, [Scotland's Railways](#), states that Scotland's rail network should provide "a safe, reliable, customer-focused service that supports our economy and delivers wider social inclusion and environmental aspirations". Since publication of the document in 2006, rail policy has continued to evolve, reflecting changes to the economic, technological, environmental and political context.

Affordability, accessibility and fast, environmentally-friendly services are long-standing aims that have guided transport policy and investment in the last decade.



In recent years, a greater emphasis has rightly been placed on the integration of transport modes, recognising that rail cannot operate in isolation. This emphasis emerged alongside the advancement of information and ticketing technologies and with recognition that, as rail cannot always offer a door-to-door solution for passengers, it is necessary to make effective connections between rail services, within Scotland and across the border, and between rail and other modes of transport.

Integration is key for rail freight too, as an end-to-end journey for freight often requires one or more legs by road to collect goods from the supplier, and then to deliver from the railway to the customer.

In 2014 Transport Focus and Transport Scotland jointly funded research⁴ into rail passengers' perceptions of integration in Scotland. Suitable rail infrastructure can support the integration of passenger services by making the transition between rail and other transport modes easier, whether through careful spatial planning, effective locations for signage, the availability of cycle and car parking close to stations, or step-free access to and from the rail platform.

The contract for the current ScotRail franchise, which commenced in April 2015, recognised that a passenger's journey is rarely station-to-station – the whole journey relies on a combination of transport modes, including walking. The contract focuses the rail operator on creating and sustaining links between rail services, and between rail and other modes. As a result, initiatives including Bike & Go⁵ and smart and integrated ticketing⁶ are being implemented, and we recognise that the availability of station car parking and connecting bus services are also key growth enablers.



Intermodal rail freight

⁴ <http://www.transportfocus.org.uk/research-publications/publications/transport-integration-in-scotland/>

⁵ <https://www.scotrail.co.uk/plan-your-journey/travel-connections/cycling/bike-go>

⁶ <https://www.scotrail.co.uk/tickets/smartcard>

In order to achieve our vision for rail, our approach to the development of rail infrastructure and services is driven by the following:

- **improved services** – faster journey times, strengthened commuter services and effective connections between cities and regions;
- **improved capacity** – greater utilisation of network and on-train capacity through investment and high levels of performance;
- **improved value** - efficiency and value for money, for the taxpayer and the fare-payer and the rail freight customer;
- **more effective integration** - between rail services, and between rail and other transport modes.

1. Do you agree with our vision and approach? Will they help us to achieve the Scottish Government's purpose of increasing sustainable and inclusive economic growth?

2. How might we make trade-offs and prioritise between different types of investments, while ensuring that our actions are aligned with our vision?

3. Making Progress

Since 2007, Scotland's railways have thrived. There are now in excess of 2,300 trains operating each day, carrying more passengers than ever before. This success has been backed by record investment, with over £7 billion supporting new fleets of modern electric trains, new and improved services, the delivery of 76 kilometres of new railway and the opening of 13 new stations.

In recent years, Network Rail and its partners have also successfully delivered the Airdrie to Bathgate link, significant improvements across the Paisley corridor, the Borders Railway, electrification of the Paisley Canal, Cumbernauld and Whifflet routes, and the transformation of Edinburgh Haymarket station.



The new station at Tweedbank, on the Borders rail route.

Our investment in the transport infrastructure, including new tracks, new stations and a transformative electrification programme, will help support the delivery of better quality rail services for passengers across the country. Capacity will increase to allow more services and longer trains, reliability levels will be improved and journey times on key services will be reduced. These outputs will be vital in supporting the substantial growth in passenger numbers in Scotland, with demand likely to exceed 100 million journeys within the next few years and the ScotRail Alliance targeting further growth.

Case Study: Borders Railway



The aim of the **Borders Railway** is to support the Scottish Government's purpose, delivering improvements in access to Edinburgh for those living in the Scottish Borders and Midlothian. The benefits of better transport connectivity will continue to spread across Midlothian and the Scottish Borders over the coming years with both areas experiencing significant economic and population growth from new and affordable housing, commercial and tourism development, a diversifying business base, and new demand for learning and skills.

Network Rail began construction of the line in October 2013 with mining remediation work in the north section of the route. Over the next two years earthworks and bridge restorations – including the 19th century Lothianbridge Viaduct – shaped the region's new landscape, culminating in track laying and driver training.

On 9 September 2015 the Borders Railway was officially opened by Her Majesty, The Queen. Successfully completed on time and on budget, this is the longest new domestic railway to be constructed in Britain for over 100 years.

The 30 miles of track and seven new stations provide a fast and efficient service connecting the communities of Midlothian and the Scottish Borders with Edinburgh and the wider Scottish rail network. The route has already proved immensely popular, with passenger numbers exceeding expectations.

Interconnectivity of rail passenger services with other transport modes is central to encouraging people to travel by public transport and ScotRail invests in **facilities, information provision and smart ticketing** to help make journeys seamless. The Borders route in particular has sheltered cycle facilities at every station and a new transport interchange hub at Galashiels (pictured above).



The recently announced Revolution in Rail⁷ will transform the delivery of rail services, with an additional 200 services each day on a variety of routes across Aberdeenshire, Tayside, Fife and Borders regions from 2018. There will also be a reduction in journey times between the cities in the north and the central belt through the introduction of fully refurbished High Speed Trains (HSTs). This will result in a better value whole-industry approach, promoted by the ScotRail Alliance, that fully exploits rolling stock and timetable opportunities, along with the capabilities of the existing network.

These projects will ensure that rail can meet the forecast growth in demand and help to deliver the Scottish Government's ambition for inclusive and sustainable economic growth. We are also supportive of a move towards a more modern railway that realises the potential of new and emerging technologies, where the business case is proven and affordability is clear. This will need to be balanced with a recognition of the requirement for expertise to maintain legacy systems, the importance of a steady skills and supply chain, and the time it takes for new technologies to mature.

⁷ <http://www.transport.gov.scot/news/%E2%80%98rail-revolution%E2%80%99-means-200-more-services-and-20000-more-seats-scots-passengers>

4. Changing Structures

This consultation takes place against the backdrop of significant changes across the rail industry; changes that will affect how the Scottish Government discharges its devolved responsibilities with regard to its strategy for rail and its articulation of that strategy within the HLOS. The current position and some potential implications are discussed below.

Reclassification and devolution

The Scottish Government has devolved powers and responsibilities for rail under the [Railways Act 2005](#), for the determination of the strategic direction and funding priorities for the railway in Scotland. The devolution of rail powers to Scotland has been a clear success, with record levels of patronage driven and supported by Scottish Government investment.

However, a number of key functions continue to remain beyond our direct control. Many of Network Rail's functions, including timetabling and the design and delivery of major railway enhancement projects, are centralised and controlled or managed remotely from its headquarters in England.

In September 2014, Network Rail was reclassified as a UK central government body, with the UK Department for Transport as its legal owner and, in governance terms, the Secretary of State for Transport its sole member (which is similar to the role of a shareholder). Reclassification also resulted in Network Rail's financing and debt being transferred to the public sector balance sheet with lending now provided direct from HM Treasury rather than sourced from private capital markets. Accordingly, and in line with their primary funding role for Network Rail activities in England and Wales, the UK Government has a greater role and influence in Network Rail's corporate and financial matters.

In order to protect the position of the Scottish Government, Transport Scotland negotiated the terms of a Memorandum of Understanding (MoU) with the UK Department for Transport. Alongside ring-fenced borrowing arrangements to March 2019, this MoU protects the integrity of our devolved responsibilities for rail in Scotland, ensuring the Scottish Government can continue to influence Network Rail's corporate and financial affairs as they relate to Scotland.

Nevertheless, there remains a clear misalignment between the Scottish Government's primary responsibility for the funding and specification of Network Rail activities in Scotland, and the level of direct control and influence around how its responsibilities are discharged.

The Scottish Government will continue to adopt a strategy that can ensure that Network Rail's management of the railway in Scotland is fully aligned with the economic and social objectives of the Scottish Government and our local, often distinct, priorities for rail.

The Scottish Government remains of the view that there are significant benefits to be gained from a fully devolved Network Rail in Scotland: strengthened transparency,

accountability and control of all the necessary levers that can ensure the delivery of high quality rail services attuned to local customer needs.

Network Rail set out its [Transformation Plan](#) in July this year, in response to the [Shaw Report](#) recommendation for greater devolution of its decision-making. The plan shows how Network Rail will adopt an approach that will help build better and more effective relationships with funders and customers. While this falls short of full devolution, the Scottish Government will continue to support Network Rail's approach, and we look forward to working with Network Rail to increase the depth and pace of further decentralisation of its core activities to Scotland, including the planning and delivery of major enhancement projects.

Funding

Maintaining Network Rail's capability to deliver a financially sustainable, efficient and affordable investment programme will be a key focus in our considerations for the next specification.

Whilst the Scottish Government retains responsibility for the specification of key outputs and requirements, much of Network Rail's activity and associated funding for each control period is set independently by the ORR in line with agreed licence conditions and the need to ensure the safe and reliable delivery of railway services. The core funding requirement to safely operate, maintain and renew the railway infrastructure in Scotland will continue to be met by the Scottish Government in line with our responsibilities. We will look to Network Rail and the ORR to ensure that our financial support remains efficient and affordable and in line with that which is set out in our Statement of Funds Available, which is published alongside the HLOS.

Network Rail's borrowing limits are set by the UK Government. These limits are currently set separately for Network Rail's activities in Scotland and in England & Wales, protecting the integrity of the devolution settlement. The financing costs from any borrowing by Network Rail for activities in Scotland continue to be met in full by the Scottish Government.

Reclassification has strengthened financial accountabilities across the rail industry but it has also exposed weaknesses in the way in which major projects have been managed and delivered by Network Rail, predominantly in England & Wales (as identified by the findings of the [Bowe Review](#)). In Scotland, too, we have not been immune to cost increases and programme delays.

Network Rail is no longer able to utilise a regulatory overspend framework set by the ORR for capital cost increases, nor to have these finances placed off the public sector balance sheet. Accordingly, along with likely broader issues around the absolute value and rate of growth in Network Rail's debt, the availability of borrowing to finance new rail investment projects is likely to reduce, potentially meaning an increase in direct capital funding. This will mean that future rail infrastructure investment in Scotland will now compete more directly with other public spending priorities, such as health and education, requiring greater levels of prioritisation between those investments that are essential and those that are desirable.

Delivering major rail projects

In Scotland, in previous control periods, Network Rail has had a successful record of delivering projects on time and within (or close to) agreed budgets, examples of which are the Airdrie to Bathgate rail link and the Paisley Corridor improvements. In the current control period, the Borders Railway was the first major successful deliverable, whilst the new Edinburgh Gateway station remains on track to open for passengers in December this year.

However, recent performance has been mixed, with cost rises and programme delays affecting some key projects that Network Rail is currently responsible for delivering. As indicated by our recent review⁸ of Network Rail's work programme, there have been a number of contributory factors, including weaknesses across its development processes and internal governance arrangements.

It is clear that the way rail enhancement projects are specified, managed, contracted and delivered has to change, particularly given the constraints on future funding that are reasonably anticipated.

Work remains on-going between the Scottish and UK Governments, Network Rail and the ORR to agree the treatment of enhancement projects within the periodic review process. A number of options are being considered but there remains general agreement on the need for a more flexible approach that can better reflect a long-term investment strategy that looks beyond individual control periods. Further details on our emerging, preferred model are set out in section 5.

⁸ <http://www.transport.gov.scot/report/review-rail-major-projects-portfolio-9454>

5. Sustainable Infrastructure Investment

Effective rail links continue to play an essential role in creating sustainable economic growth. The Scottish Government will continue to support major investment in our railways, as we have done since 2007, to deliver a safe, reliable and modern infrastructure, driving substantial improvements in capacity and reliability, as well as providing a boost to the economy.

We will seek the best possible outcomes for passengers at the most efficient cost. Accordingly, our investment strategy will reflect the investment hierarchy that was set out in the the [Strategic Transport Projects Review](#) (STPR). This is based around the priorities of:

- **Maintaining and safely operating** the existing railway infrastructure, in a way that is fully integrated with franchise agreements and rolling stock;
- Promoting **whole-industry measures** that can help make better use of existing railway assets, fully exploiting timetable and rolling stock options before considering infrastructure solutions;
- Making **efficient and affordable targeted improvements** to expand and improve the capacity and capability of the rail network to support the growth in demand that is projected.

Supporting a safe, reliable, high-performing railway

The Scottish Government's proposed rail investment strategy beyond 2019 will be built around the core principle of improving the rail user's experience through improving reliability, reducing crowding, and cutting journey times in line with our aims (articulated at section 2) for improved services, improved capacity, improved value and more effective modal integration. The final specification of performance, capacity, capability, journey time outputs and expected outcomes will impact on the requirements for Network Rail to operate, maintain and renew the existing rail network – the core of its activities as an effective infrastructure manager.



The manner by which Network Rail manages its assets is linked strongly to the performance and safety of the railway and is largely influenced by the conditions set

by the ORR through its license conditions. The Scottish Government will continue to work with Network Rail to ensure its asset management plans support the principles and objectives set out above. Specifically, these include the following key themes:

- **Reliability: maintaining a robust, resilient and reliable network** that supports the delivery of existing rail services and those that are planned to be introduced, including during periods of adverse weather;
- **Safety: sustaining existing safety performance**, exploiting opportunities to improve safety at level crossings, and improving legislative compliance;
- **Sustainability: sustaining asset conditions for long-term success**, improving whole-life value for money, and helping to improve the financial sustainability of the railway;
- **Customer experience**; efficiently supporting the growth in passenger and freight demand that is forecast, ensuring an integrated approach to delivery and improving station environments.

Following the impact of flooding at the Lamington viaduct last winter, we will work with Network Rail to improve its resilience to address the weather challenges that we often face in Scotland. This is likely to include additional mitigation works for bridges and other structures at risk of scour, and other targeted improvements to reduce the effects of flooding and help to keep services moving.

A flexible, pipeline approach to major projects

As outlined earlier, much has changed in the rail industry since we published our last HLOS in June 2012, including: the reclassification of Network Rail and changes in the way they are funded; challenges in delivering projects against agreed costs and delivery milestones; changing roles and responsibilities, including those of the regulator; and a desire for greater decentralisation in Network Rail's HQ functions, with the transfer of decision making and control away from its historically large corporate centre, particularly in respect of the development and delivery of major projects. It is clear that there is now a need to consider alternative approaches to the specification of enhancements projects by Government.

In July, Transport Scotland commissioned an independent review of the corporate governance structures supporting Network Rail's delivery of the major rail enhancement programme in Scotland during Control Period 5. This review was in response to our concern over increasing cost estimates and heightened risks of not meeting previously committed delivery milestones. The findings of this independent review were published in October⁹ with all recommendations accepted by the Scottish Government and Network Rail.

⁹ <http://www.transport.gov.scot/report/review-rail-major-projects-portfolio-9454>

INDEPENDENT REVIEW OF MAJOR RAIL PROJECTS IN SCOTLAND

The independent review exposed fundamental weaknesses in Network Rail's project governance, controls and performance reporting, as well as weak and inconsistent cost forecasting and significantly higher costs to comply with national standards. Many of the issues identified are consistent with the challenges impacting Network Rail's delivery of major rail projects across GB.

All of the recommendations identified by the review have been accepted by the Scottish Government and Network Rail, with a number of immediate steps already taken to improve project controls and governance processes across the rail portfolio in Scotland. However, the findings of the review make clear that a fundamental change in approach to the development, design and delivery of major rail projects is required to ensure these same issues are not repeated in future rail investment periods.

The way in which enhancement projects are specified in Scotland remains a matter for the Scottish Government. We recognise the need to continue to invest to enhance the infrastructure to ensure that our railways can continue to thrive, and indeed Network Rail's *'Scotland Route Study'* and the more recent RDG *'Investing in the Future'* documents helpfully set out some of the investment choices available.

However, our investment must remain aligned to our strategic priorities. Our approach must be efficient and affordable, with risks to delivery mitigated or minimised. It is also vital that the right governance arrangements are put in place for the delivery of enhancement projects, ensuring that Network Rail in Scotland has all the levers available to discharge its responsibilities to full effect, and indeed that they can be fully accountable to the Scottish Government.

To support this, we are proposing a flexible but robust process to govern the development, design and delivery of enhancement projects. Rather than commit to a list of projects at varying stages of development, we will move to a 'pipeline' approach. This means that a decision to commit to a specific enhancement project will be taken when the business case is clear and both price and affordability are certain. We will also require confirmation of the availability of suitable capabilities and resources in rail industry supply chains to deliver the project. Additional flexibility around the choice of development, design and contracting models to be applied to individual projects will also help to improve value for money, making best use of available industry resources through a broader consideration of the models for delivery that have previously been successful.

This flexible, 'pipeline' approach would apply to all potential rail projects, including those being promoted by third parties – local authorities, Regional Transport Partnerships (RTPs) and other developers. We will, of course, continue to support promoters as they look to develop their proposals and produce associated business cases for consideration.

The challenge of funding future projects was set out in section 4 and the likely constraints on future borrowing, together with on-going pressure on existing Scottish Government budgets, inevitably means a need for a clear prioritisation of investment priorities.

The safe operation, maintenance and renewal of the existing core network is our primary objective. Beyond this, and once all reasonable service-based opportunities have been exhausted (e.g. changes to timetables, lengthening trains and/or revising stopping patterns), we propose a tiered approach to new infrastructure investment, aligned with STPR hierarchy. In the context of making 'efficient and affordable targeted improvements' to rail, we propose to consider four categories of investment:

- **Category 1:** Any enhancement projects that require to be carried over from the CP5 programme for completion in CP6.
- **Category 2:** Enhancement projects considered essential to maintain a safe, high performing railway. Such projects, linked efficiently with planned renewals works, would be expected to provide increased capacity, improved journey times and/or improved performance at key locations where such outcomes are currently constrained.
- **Category 3:** Enhancement projects to support social and economic objectives, including potential new routes, alignments and stations.
- **Category 4:** Enhancement projects to increase capacity on key cross-border routes, with joint funding arrangements, and appropriate future-proofing for long term ambitions including integration with High Speed Rail.

The Scottish Government will also consider the merits of retaining ring-fenced funds, such as those that were successfully introduced for CP5. These included the Scottish Stations Fund, the Strategic Freight Fund, the Strategic Network Improvement Fund, the Level Crossing Closure Fund, and the Rail Freight Innovation Fund. The move to a more flexible approach to investment may, however, reduce the need for the separate specification and administration of individual funds, with investment opportunities being considered instead on a case by case basis against other enhancement projects.

Delivering a Scottish strategic freight network

The Scottish Government's rail freight strategy, [Delivering the Goods](#), was published earlier this year. The strategy sets out our vision for a competitive, sustainable rail freight sector, which plays an increasing role in supporting Scotland's economic growth by providing a safer, greener and more efficient way of transporting products and materials within Scotland and accessing UK-wide and international markets.

We remain committed to our freight strategy and will continue to support its implementation with key partners in the next control period, through the development and operation of a Scottish Strategic Freight Network with stronger, better-aligned incentives across the industry to support the recovery of rail freight in Scotland following the loss of core coal markets.

Third party funding

Constraints on future funding have also increased calls for private and other sources of investment to support the delivery of rail enhancement projects from CP6. In England and Wales there has been a suggestion from Sir Peter Hendy, Network Rail Chairman, that securing significant, third party funding will be one of the main factors that will help to prioritise projects for delivery. Ultimately, for any investment south of the border, that will remain a matter for the UK Government. In Scotland, we are not proposing to include such a strict requirement in our decision-making criteria and opportunities for third party funding will be considered on a case by case basis. We would, however, welcome views on potential additional sources of funding that could be used to support delivery, and help to reduce the tension between the need for continuing investment in our rail infrastructure and the anticipated constraints on rail funding in future.

3. Do you support the move to a more flexible 'pipeline' approach to scheme delivery, that does not force us to make early decisions on a detailed specification prior to the commencement of the five-year regulatory control period, without receipt of a robust business case?

4. What are your views on the retention or removal of individual ring-fenced funds?

5. What alternative sources of funding could be used to help deliver the rail investment programme?

6. Climate Change and Sustainability

Emissions reduction has to be a priority for a genuinely sustainable Scottish economy. This winter, the Scottish Government will publish our Climate Change Plan and an accompanying Energy Strategy, outlining our intention to reduce Scottish emissions by **80%** between 1990 and 2050. This represents a bold statement of this Government's intent for the coming decades. In addition, in 2017 we will outline proposals for a Climate Change Bill, including proposals for a new and more testing emissions reduction target for 2020.

We need to take action across all sectors of Scottish society, including transport, if we are to meet our emission reduction targets. The transport choices that we each make every day have a significant bearing on the environment, through the impact of greenhouse gases and air pollution. It is the role of Government to facilitate travel options in a manner that is responsible and recognizes the impact of individual choice.



Saltcoats Seawall Project

Our rail network supports and connects communities and enables people to go about their daily lives. It can also help people and businesses make more sustainable choices about how they travel and move goods. The forthcoming Climate Change Plan will set out how we are meeting our climate change targets – including the contribution that rail can make to reducing transport emissions.

The Climate Change Plan will set out how the Scottish Government will continue to promote strategies to:

- reduce overall demand for transport
- facilitate modal shift to more sustainable forms
- decarbonize vehicles (including train rolling stock)
- make the transport network as efficient as possible

Our investment strategy must help the railway in Scotland become more sustainable. While rail's share of total transport emissions is low, we know there is room to improve. Our investment in electrified rail lines and new rolling stock technologies, together with ScotRail's own obligations improve energy efficiency, will continue to facilitate the move to a more sustainable, lower emission railway in Scotland.

The environmental benefits of rail freight will also continue to drive the implementation of our rail freight strategy, with rail freight services estimated to offer a 76% reduction in CO₂ emissions, compared with equivalent road transit.

Likewise, while annual rail passenger numbers move closer to 100 million, rail accounts for just 1.4% of Scottish transport emissions (which is less than 1% of Scotland's total emissions levels).

The rail network, in general, has the capacity to accommodate a greater transport mode share, particularly on off-peak services. Best use of this capacity, paired with enhancements to integration between rail and other modes of transport, could provide more attractive and sustainable end-to-end public transport journeys.

Our investment strategy must recognise the changing climate and ensure that our railway infrastructure is resilient to the increasing levels and frequencies of weather impacts. We have seen the effects of flooding and storms over the past few years and the resultant network disruption.

The rail industry has to take steps to be more adaptable. It has to address impacts and take advantage of potential opportunities, such as increased tourism due to warmer summers. Accordingly, we expect climate change adaptation to be a key part of project planning and a consideration in routine maintenance.

6. Do you agree with our approach to emissions reductions and climate change adaptation? What else should be considered?

7. Deciding what our Railway should deliver

The shape and content of the HLOS remains a matter for the Scottish Government to determine. This could include a detailed set of requirements or a higher level statement of principles to be achieved, with more flexibility around delivery. In terms of an overall output framework for the next control period, some outputs will be set by the Scottish Government through the HLOS, some may be set by the ORR, including around asset sustainability, whilst others are likely to be agreed directly between Network Rail and its customers (primarily passenger and freight operating companies).

The setting of a final output framework is vital. Alongside a broader framework of targets and key performance indicators that are crucial to the services that passengers experience on a daily basis, it determines Network Rail's funding requirements and it will be used by the regulator to monitor and enforce Network Rail's performance in Scotland. A challenging but achievable and affordable output framework, complementing the delivery of broader targets and obligations contained within the ScotRail and Caledonian Sleeper franchise contracts, will therefore be our objective.

The current set of regulatory outputs specified by the Scottish Government focuses on incremental improvements across three areas:

- rail performance and reliability
- service journey time reductions
- increased rail network capacity and capability (e.g. supporting more or longer rail services, including through specified enhancement projects)

These three areas are explored in more detail in the paragraphs below.

Performance

The punctuality of services remains a main driver of passenger satisfaction. The number of passenger trains that arrive on time in Scotland has improved over the past 10 years and freight performs well. Generally, Scotland continues to perform well compared with operating routes south of the border.

Despite these successes, actual passenger performance levels have recently fallen below the targets set by the Scottish Government, and below the standards expected by passengers. Performance remains a key focus of the ScotRail Alliance, with robust Performance Improvement Plans demanded by the Scottish Government to examine the root causes of recent poorer performance and take all necessary steps to increase levels of reliability back to at least the standards set and expected through contracted and regulatory targets, thereby improving the quality of services provided for passengers.

As part of our investment strategy beyond 2019 we are also keen to explore options for how these performance targets are set.

The standard measure of train punctuality used across the rail industry is known as PPM (the “Public Performance Measure”) which in Scotland measures numbers of trains arriving at their terminating station within five minutes of their scheduled arrival time. PPM has been the industry standard measurement of performance for some time and is commonly used across Europe.

The current regulatory PPM target for Scotland is 92%, rising to 92.5% by 2018/19. Both Network Rail and ScotRail are strongly incentivised to work together to achieve these targets through the ScotRail Alliance.

The retention of a standard PPM target in Scotland will continue given the targets included in current franchise contracts. Retention will also allow appropriate historical and geographical comparisons of performance to be made.

However, there is also a broad consensus emerging, backed by views from passengers, on the need to consider alternative measures to PPM and this is supported by the Scottish Government. We will work with stakeholders across the industry to develop and test a number of alternative or complementary options. Such measures may better reflect the number of passengers travelling (rather than the number of trains as measured by PPM), or performance in terms of delays relative to the published timetable (i.e. in delay minutes, or equivalent), or performance at all stations (rather than just at the station at the service’s termination).

A combination of revised measures could help identify additional outputs and targets that may better reflect the impact of delays on passengers.



Journey times and connectivity

Savings in journey times are a major benefit arising from investment in the rail infrastructure, benefitting individuals, businesses, and the economy as a whole. Improving journey times will therefore remain a key part of our investment strategy, ensuring rail is able to compete with alternative modes of transport such as the car.

In addition to infrastructure improvements, the Scottish Government will continue to explore opportunities for service-based initiatives, such as variations to rolling stock and/or timetable structures, to improve journey times.

These may include the provision of additional services and/or changes to calling patterns, whilst protecting connectivity levels. Indeed, this is a key feature of the Revolution in Rail timetable variation that will be introduced from 2018.

To support the delivery of these initiatives, the Scottish Government will also review the incentives driving Network Rail to improve journey times and connectivity, particularly given perceived trade-offs with performance levels.

We recognise too the importance of connectivity - the rail network does not operate in isolation, it is part of a network of transport services and so it is crucial that both journey times and performance levels are optimal to allow passengers to make connections from hubs and intermediate stations to, for example, cross-border rail, lifeline ferry or rural bus services.

Capacity

As identified by the ORR, the provision of adequate capacity to operate passenger and freight services is a key responsibility of Network Rail. Over the past 10 years Network Rail has supported significant increases in the number of services being provided in Scotland each day, whilst maintaining overall levels of reliability.

With growth expected to continue, we will work with the ORR to develop new measures or metrics for capacity that further strengthen Network Rail's incentives; encouraging it to better understand the capacity available on the network and, where possible, to improve the allocation and use of that capacity in a manner that balances the needs of passengers and freight customers.

Our planned approach to improving capacity, including potential changes to the delivery of major enhancement projects, has been set out in section 5. Our approach to new technology, including plans for a digital modernisation of the railways in Scotland, is set out in section 8.

7. Do you agree with the proposed approach to specifying performance outputs?

8. How should performance be balanced against the wider priorities for reduced journey times and the full utilisation of existing and new capacity?

8. Safety, Innovation and new Technologies

Safety

Railway safety remains reserved to the UK Government and so UK Ministers are responsible for the specification of general safety requirements for the whole of the rail network in Great Britain.

The Scottish Government is clear that the continued safe operation of the railway in Scotland is of the utmost importance and our investment plans will reflect the need to continuously improve the strong safety record for both railway workers and customers.

In the current investment period, the Scottish Government has made available an additional £10 million, over and above the baseline funding requirement for level crossing safety in Scotland, to support Network Rail in its work with local authorities and other stakeholders to facilitate the closure of level crossings in Scotland. This policy is one that we continue to support but we note the challenges and objections that have restricted its implementation. We would welcome further information from stakeholders on this matter and advice on the steps that can be taken to simplify the process and achieve the desired outcomes of improved safety and railway efficiency.



Innovation and new technologies

Innovation is one of the four central pillars of 'Scotland's Economic Strategy' and the main driver of long term productivity growth.

The Scottish Government is keen to support industry innovation, to improve the efficiency, resilience and quality of passenger-facing services. Innovation was addressed as a key lever in our rail freight strategy, and applies equally to rail passenger services. We are working with industry to implement smart and integrated ticketing technology, and the ScotRail franchise contract secures a commitment to further initiatives, such as new technology to count passengers, which will help to manage demand.

We are working with industry partners across Great Britain to support the development of proposals for a modernised railway, including the introduction of new electronic signalling solutions, such as the European Rail Traffic Management System (ERTMS) which could provide significant improvements on the capacity available across the network.

In support of Scottish Government objectives to improve the sustainability of our transport system, we are examining the use of Independently Powered Electric Multiple Units (IPEMU), where electric overhead wires currently do not exist, to reduce the Scottish rail network's reliance on diesel-powered rolling stock and to provide a more affordable alternative to full network electrification.

Budgets are limited and priorities are competing, and so while we support the principle of a modern, technologically-advanced railway, we seek to ensure that any such proposals have a sound business case, demonstrate excellent value for money and are aligned with the Scottish Government's aims and priorities.

9. Do you have a view on our approach to safety? How can the closure of level crossings be better supported?

10. Do you support the proposed approach to innovation and new technologies?

11. Do you have any other views as to how innovation could be better supported through the HLOS process and Network Rail's broader management of the rail infrastructure?

9. Responding to this Consultation

We are inviting responses to this consultation by Friday 24th February 2017.

Please respond to this consultation using the Scottish Government's consultation platform, Citizen Space. You can view and respond to this consultation online at <https://consult.scotland.gov.uk/rail-policy/rail-infrastructure-strategy-from-2019>. You can save and return to your responses while the consultation is still open. Please ensure that consultation responses are submitted before the closing date.

If you are unable to respond online, please complete the Respondent Information Form (see "Handling your response" below) to:

Rail Infrastructure Strategy
Rail Directorate
Transport Scotland
7th Floor
Buchanan House
58 Port Dundas Street
Glasgow G4 0HF

Handling your response

If you respond using Citizen Space (<https://consult.scotland.gov.uk/rail-policy/rail-infrastructure-strategy-from-2019>), you will be directed to the Respondent Information Form. Please indicate how you wish your response to be handled, and in particular, whether you are happy for your response to be published.

If you are unable to respond via Citizen Space, please complete and return the Respondent Information Form included in this document. If you ask for your response not to be published, we will regard it as confidential, and we will treat it accordingly.

All respondents should be aware that the Scottish Government is subject to the provisions of the Freedom of Information (Scotland) Act 2002, and would therefore have to consider any request for information made to it under the Act including responses made to this consultation exercise.

Next steps in the process

Where respondents have given permission for their response to be made public, and after we have checked that they contain no potentially defamatory material, responses will be made available to the public at <https://consult.scotland.gov.uk/rail-policy/rail-infrastructure-strategy-from-2019>. If you use Citizen Space to respond, you will receive a copy of your response via email.

Following the closing date, all responses will be analysed and considered along with any other available evidence to help us. Responses will be published where we have been given permission to do so.

Comments and complaints

If you have any comments about how this consultation exercise has been conducted, please send them to Laura McCaig at:

Rail.Infrastructure.Strategy@transport.gov.scot.

Scottish Government consultation process

Consultation is an essential part of the policy making process. It gives us the opportunity to consider your opinion and expertise on a proposed area of work.

You can find all our consultations online: <http://consult.scotland.gov.uk/>. Each consultation details the issues under consideration, as well as a way for you to give us your views, either online, by email or by post.

Consultation may involve seeking views in a number of different ways, such as public meetings, focus groups, or other online methods such as Dialogue (<http://ideas.scotland.gov.uk>)

Responses will be analysed and used as part of the decision making process, along with a range of other available information and evidence. We will publish a report of this analysis for every consultation. Depending on the nature of the consultation the response may:

- Indicate the need for policy development or review
- Inform the development of a particular policy
- Help decisions to be made between alternative policy proposals
- Be used to finalise legislation before it is implemented

While details of particular circumstances described in a response to a consultation exercise may usefully inform the policy process, consultation exercises cannot address individual concerns and comments, which should be directed to the relevant public body.

RESPONDENT INFORMATION FORM

Consultation on Transport Scotland's Rail Infrastructure Strategy from 2019

Please note this form **must** be returned with your response.

Are you responding as an individual or an organisation?

- Individual
- Organisation

Full name or organisation's name

Phone number

Address

Postcode

Email

The Scottish Government would like your permission to publish your consultation response. Please indicate your publishing preference:

- Publish response with name
- Publish response only (anonymous)
- Do not publish response

We will share your response internally with other Scottish Government policy teams who may be addressing the issues you discuss. They may wish to contact you again in the future, but we require your permission to do so. Are you content for Scottish Government officials to contact you again in relation to this consultation exercise?

- Yes
- No

CONSULTATION QUESTIONS

1. Do you agree with our vision and approach? Will they help us to achieve the Scottish Government's purpose of increasing sustainable and inclusive economic growth?

Yes/No

Please explain your answer and provide any relevant evidence.

2. How might we make trade-offs and prioritise between different types of investments, while ensuring that our actions are aligned with our vision?

Note that this question refers to the types of trade-offs that may be required (e.g. where improvements to journey times may impact on levels of connectivity, or vice versa) rather than actual names/locations of schemes promoted or supported by stakeholders.

Comments:

3. Do you support the move to a more flexible 'pipeline' approach to scheme delivery, that does not force us to make early decisions on a detailed specification prior to the commencement of the five-year regulatory control period, without receipt of a robust business case?

Yes/No

Please explain your answer and provide any relevant evidence.

4. What are your views on the retention or removal of individual ring-fenced funds?

Comments:

5. What alternative sources of funding could be used to help deliver the rail investment programme?

Comments:

6. Do you agree with our approach to emissions reductions and climate change adaptation? What else should be considered?

Comments:

7. Do you agree with the proposed approach to specifying performance outputs?

Yes/No

Please explain your answer and provide any relevant evidence.

8. How should performance be balanced against the wider priorities for reduced journey times and the full utilisation of existing and new capacity?

Comments:

9. Do you have a view on our approach to safety? How can the closure of level crossings be better supported?

Comments:

10. Do you support our approach to innovation and new technologies?

Yes/No

Please explain your answer and provide any relevant evidence.

11. Do you have any other views on how innovation could be better supported through the HLOS process and Network Rail's broader management of the rail infrastructure?

Comments:

List of acronyms

CP	Control Period <ul style="list-style-type: none">Control Period 5 (CP5) commenced in 2014 and runs until 2019.Control Period 6 (CP6) will run from 2019-2024.
DfT	Department for Transport
EGIP	Edinburgh to Glasgow Improvements Programme
ERTMS	European Rail Traffic Management System (train signalling)
HLOS	High Level Output Specification
HSTs	High Speed Trains
IPEMU	Independently Powered Electric Multiple Unit (battery powered train)
MoU	Memorandum of Understanding
NR	Network Rail
NTS	National Transport Strategy
ORR	Office of Rail and Road
PPM	Public Performance Measure
PR	Periodic Review
RAB	Regulatory Asset Base
RDG	Rail Delivery Group
RTPs	Regional Transport Partnerships
SoFA	Statement of Funds Available
STAG	Strategic Transport Appraisal Guidance
STPR	Strategic Transport Projects Review
TS	Transport Scotland



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