The Scottish Ministers’ High Level Output Specification for Control Period 6
1 Legislative context

1.1 This High Level Output Specification (HLOS) fulfils the requirements of paragraph 1D(1) of Schedule 4A to the Railways Act 1993, as amended by the Railways Act 2005 by setting out to the independent regulator, the Office of Rail and Road (ORR):

- with respect to the functions and powers transferred to them under the Railways Act 2005, what the Scottish Ministers require the rail industry to achieve with regard to the rail network in Scotland during the review period covering 1 April 2019 to 31 March 2024

- as far as is possible, the public financial resources which are, or are likely to become, available to support those activities over the same review period (the Statement of Funds Available or SoFA)

1.2 This HLOS represents a formal response to the ORR’s review initiation notice of 27 March 2017 and is written on the basis that Network Rail will deliver the majority of outputs expressed in the ORR’s Final Determination for Control Period 5 (2014-2019) with some elements of the Control Period 5 (CP5) enhancements portfolio requiring delivery within Control Period 6 (2019-2024). The Scottish Ministers expect these residual elements will be delivered as a priority in Control Period 6 (CP6).

2 Background on Scotland’s railways and policy context

2.1 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 Scotland’s prosperity and quality of life, sustaining links between our communities to employment opportunities, businesses, industries, markets, services and educational and social facilities.

2.2 As specified in our published National Transport Strategy, our Key Strategic Outcomes for all transport modes, including rail, support our priorities for sustainable, inclusive growth. They are:

- improved journey times and connections

- reduced emissions

- improved quality, accessibility and affordability
2.3 These Key Strategic Outcomes are reflected in our Strategic Priorities for rail, which are:

- **improved services** – faster journey times, strengthened commuter services and effective connections between cities and regions
- **improved capacity** – optimum utilisation of network and on-train capacity through 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 operators and rail infrastructure management, and between rail and other transport modes
- **increasing inclusive economic growth**

2.4 The management, operation and governance of all railway activities in Scotland which are funded by the Scottish Government, and the regulatory framework for CP6, must be fully aligned with, and demonstrably support, the Strategic Priorities. It is important that as rail governance arrangements evolve elsewhere in Great Britain, they must not be allowed to compromise or confuse these clear Strategic Priorities in Scotland.

2.5 It follows that Network Rail must be able to demonstrate its ability to deliver in line with the Strategic Priorities for Scotland, both at Scotland route level and through the Freight and National Passenger Operations and Systems Operator functions. This requires a wide and comprehensive understanding across the organisation, particularly at senior level, on what the Strategic Priorities are, and a focus on how they can be best achieved. This should be reflected in the approach to reporting and incentive regimes for all staff who play a role in the delivery of outputs for the Scottish route.

3 Future rail enhancements in Scotland

3.1 As highlighted in the Network Rail Scotland Route Study, published in summer 2016, demand for rail is expected to grow in the coming years and our priorities and investment activities in CP6 and beyond will look to support continued growth on the network in a way which best supports Scotland’s communities and its economy.

3.2 Since 2007, there has been over £7bn invested in Scotland’s railways, with in excess of 2,300 trains operating on daily basis, carrying more passengers than ever before. There have been new fleets of modern trains introduced, new and improved services, the delivery of 76 kilometres of new railway and the opening of 14 new stations.
3.3 Investment will be needed to continue to meet the demands from the growth of rail. However, there have been significant challenges with the costs and delivery timescales of major rail projects in CP5 and the approach to project specification in CP6 will reflect lessons learnt from that. Transport Scotland has established a Major Rail Projects Portfolio Board with underpinning Programme Boards to provide additional assurance to the Scottish Ministers about the progress, management and robust and consistent governance across the entirety of major rail projects in Scotland in CP5. Network Rail should work with Transport Scotland to improve the governance processes for programme development and delivery in order to secure improved outcomes for CP6 and beyond.

3.4 These processes will be supplemented by a new approach to specifying capital rail investment and release of funds, through a Rail Enhancements & Capital Investment Strategy (the Investment Strategy). This includes major renewal projects which seek to deliver wider network benefits, such as a signalling renewal strategy, or which require significant additional investment in order to maximise an opportunity to improve rail services.

3.5 Enhancement and major renewal projects, designed to meet the projected demand for rail, will be drawn from a pipeline of potential schemes that satisfy the investment criteria set by the Scottish Ministers, and where the rail industry can fully demonstrate that the scheme has credible, efficient and deliverable technical proposals which can be delivered efficiently through the supply chain.

3.6 Decisions on commitment to funding projects will be taken by the Scottish Ministers when business cases are fully developed following industry engagement and consultation with local stakeholders. The investment hierarchy is based on the criteria below where value for money can be proven:

- the ability to derive maximum utility from the existing network through whole industry measures that can make best use of existing railway assets, fully exploiting timetable/service-based opportunities and rolling stock options
- the ability to derive maximum utility from the existing network from opportunities (such as asset renewals or timetable exercises), fully exploiting these to ensure maximum value for money
- efficient and affordable targeted investment in our infrastructure, in the right location and at the right time centred around whole industry measures to unlock additional capacity on the network
- targeted investment to help reduce inequality and increase inclusive economic growth

3.7 There is a number of projects already under development, as well as consideration of our approach to ring-fenced funds including stations (which will assist with improved accessibility), freight, and level crossing funds. Our requirements for continuing the rolling programme of electrification (including
rolling stock solutions) appropriate to the Scottish network will be developed and there will be opportunities for new projects to be considered. Further details on how this pipeline will work and full governance arrangements will be set out in the Investment Strategy to be published later in 2017.

4 Creating capacity to deliver

4.1 The Scottish Government considers that significant rail investment funds should be deployed by Network Rail in a manner that supports sustainable economic growth in Scotland, including through the creation of secure rail industry employment within Scotland. The Scottish Government is persuaded that efficient delivery is optimised by steady work-banks, avoiding peaks and troughs in activity. Steady activity allows and requires the allocation and provision of resources based in Scotland.

4.2 Network Rail must ensure that it plans and invests in its capability in Scotland to deliver the requirements of this HLOS and in accordance with other Scottish Government policies and strategies now and in the future. Network Rail should work with its industry partners, including the ScotRail Alliance, to deliver optimal, locally developed and delivered solutions for rail investment in Scotland, in particular through:

- the creation of an expert whole-rail-system project client and sponsor capability based in Scotland, to control all stages of investment project development and delivery

- dedicated resources for timetabling specific to the Scottish network, which should be familiar in detail with its geographical, market and operating characteristics, using processes and priorities fully aligned with the Strategic Priorities

- development of maintenance and renewal policies and programmes, consistent with the Strategic Priorities, with sufficient plant and staff for delivery allocated to and normally based in Scotland. It is recognised that there will be some exceptions where Network Rail is able to demonstrate a clear efficiency from shared use and a proportionate allocation of GB-wide resources

- development of an efficient electrification technical specification optimised for Scotland that, in support of the Investment Strategy, can deliver an efficient and affordable rolling programme of electrification with appropriate plant, staff and resources based in Scotland to deliver the outputs and maximise the benefits to Scotland, including through the supply chain

- where possible, creating the capacity to deliver should support wider Scottish Government policies on tackling inequality and improving employability and skills
5 Funding for cross-border schemes

5.1 Where any significant capital investment projects relate to cross-border railway lines, these will only be taken forward subject to final confirmation of a regulatory funding model that ensures a fair distribution of cost and benefits. For example, the Scottish Ministers and the Secretary of State are working together to identify High Speed Rail infrastructure enhancements for CP6 and beyond that could improve journey times, capacity, resilience and reliability on cross-border routes between England and Scotland. The Investment Strategy will contain the detail on the approach to be taken for the development and integration of projects with cross-border implications.

6 Requirements of the Scottish Ministers

6.1 The Scottish Ministers require the rail industry to work together effectively to deliver the following railway outcomes in a way which represents best value and reduces journey times across the network with clear links to the Scottish Ministers’ Strategic Priorities for rail.

Network capability/capacity

6.2 The Scottish Ministers require that the capability of the network will be operated and maintained as a minimum throughout CP6 at a level which will satisfy all of the track access rights of all passenger and freight operators in place at the date of the publication of this HLOS and any rights secured, or in course of being secured, between then and the 31 March 2019. In particular, it must be fully consistent with the service level commitments specified in the ScotRail and Caledonian Sleeper franchises.

6.3 Since the devolution of rail powers in 2005, the Scottish Government has fully funded Network Rail to establish and maintain an accurate asset database, including gauge data. The Scottish Government has also fully funded the maintenance of asset capability, including gauge clearances. The current approach to gauging processes has not been satisfactory, adding significant risk, delay and cost to the introduction of new rolling stock, the reallocation of existing rolling stock, the development of new rail freight business, and the efficient operation of charter and tourist trains. Passenger and freight train operators should be able to plan the movement of vehicles around the network without the need for expensive and time consuming bespoke gauging exercises.

6.4 Therefore, the Scottish Ministers require that, by the end of Control Period 6, all Scottish routes are maintained to be capable of accommodating the gauge of all locomotives and passenger rolling stock, including cross border services and charter operators vehicles, which have run in Scotland in CP4 and CP5 or are known to be planned to run in Scotland in CP6.
6.5 Freight gauge capability should be maintained to at least the capability in the most recently published issue of the Freight Gauge Database Map (published and maintained categories), or the Sectional Appendix, or the full suite of RT3793 forms for Scottish routes, whichever is most capable at the time of publication of this HLOS. Together, the passenger and freight specification are the Scottish Gauge Requirement.

6.6 It is recognised that the implementation of the Scottish Gauge Requirement will require a period of transition. The Scottish Ministers require that Network Rail will work with Transport Scotland and the industry to develop a gauging strategy by 31 March 2019 to achieve this Scottish Gauge Requirement with a continuous, rolling programme to cover the entire Scottish Network (except only where Network Rail has persuaded the Scottish Ministers that clearance would entail disproportionate cost) to commence no later than 1 April 2019 and to be completed by the end of CP6.

6.7 The strategy should draw on the work to define standard gauges produced by the Vehicle-Structure System Interface Committee (SIC), and include PG1, PG2 and lower sector vehicle gauge - these gauge being adapted as necessary to meet the Scottish Gauge Requirement.

6.8 Infrastructure, maintenance and renewal works should be controlled so as not to reduce or restrict the gauge. Passenger and freight operators should not be asked to pay for gauging surveys, since these should be kept up to date as part of Network Rail’s asset database, nor for rectification works for clearances that have been permitted to deteriorate.

6.9 It is recognised that platform stepping clearances are more complicated than passing clearances, and it is accepted that specific work may be needed for platform stepping distances for new stock introduction. However, new stock introductions should not be expected to pay the cost of restoring clearances and track position that has been allowed to move from clearances required for existing stock (or, after the transition period, the Scottish Gauge Requirement).

**Availability of cross-border routes**

6.10 Cross-border rail services provide vital connections for passengers, essential routes to market for freight users and contribute to regional economic development, including within Scotland. Accordingly, the Scottish Ministers require that where maintenance, renewal or enhancement activity is required on cross-border routes, including for High Speed Rail works, at least one route will be available at all times for the passage of timetabled sleeper, passenger and freight services through to and from London.

6.11 In terms of franchised operations, journey times on the route that is to be made available through to and from London should be no greater than the relevant Service Level Commitments or equivalent as specified by the Scottish Ministers or the Secretary of State for Transport at the date of publication of this HLOS.
6.12 In line with the arrangements in place for CP5, where circumstances require short-duration, minor variations to the available route, the Scottish Ministers, the public, passenger and freight operators and other customers should be advised as far in advance as is practicable.

Improving journey times

6.13 Fast and efficient rail services across Scotland and between Scotland and the rest of the UK are vital to opening up new markets and business opportunities, driving up competitiveness, ensuring connectivity, and increasing access to employment and education and are a priority for the Scottish Ministers. The Scottish Ministers require a journey time improvement output for Network Rail for CP6 to ensure tangible progress against this outcome is realised and embedded in all appropriate Network Rail processes whilst recognising the need for continuing connectivity across the network and a timetable which works for passengers.

6.14 In support of the Scottish Ministers’ strategy to improve journey times and connections and the priority they accord to this matter, the Scottish Ministers expect that the outputs of the network will maximise all appropriate opportunities to decrease average journey times (minutes per train mile) across all service groups, including cross-border operators’ journey times.

6.15 The Scottish Ministers therefore require that the outputs of the network will be maintained in such a manner as to enable the operators of the ScotRail Franchise to achieve improved journey times based on decreasing average minutes per train mile as specified in Schedule 7.2 of the ScotRail Franchise Agreement (and any subsequent variations) where Minutes per Mile targets measured across all ScotRail Sectors within CP6 are set at 1.587 (December 2019) to 1.576 (December 2024).

6.16 This will deliver demonstrable improvements to journey times across service groups measured against the published timetable on the 31 March 2019. These improvements should be delivered through good operational practices, including timetabling exercises and programmes, and should be in addition to the journey time improvements secured through any major capital works, as identified through the Investment Strategy, which are focussed primarily on journey time improvements.

6.17 In addition, the Scottish Ministers require Network Rail to develop a freight journey time metric based on average speed (mph) to be introduced at the start of CP6 to increase the average speed of freight trains by not less than 10% through good operational practices, including timetabling exercises and programmes, and through collaboration with freight operators and customers. In delivering this outcome, Network Rail should ensure that achievement is attained by acceleration of existing and new freight services. Progress against this outcome will be reviewed during CP6 on an on-going basis in order to assess its deliverability.
Performance

6.18 The Scottish Ministers require a consistently high level of performance from rail services in Scotland for the benefit of passengers and freight users in CP6 which builds on what is expected to be achieved by the end of CP5.

6.19 The Public Performance Measure (PPM) is well understood and recognised by both the industry and the travelling public and its consistent use over time and across the GB network enables both historic and geographic comparison, helping to drive efforts to improve. The Scottish Ministers consider that PPM balances performance with capacity management in a proportionate manner. Critically, the headroom built into the PPM measure enables better connectivity, for example where services can be held for late running connecting services. It also supports accessibility, where, for a number of reasons, passengers may take a little longer to board trains at stations. The Scottish Ministers remain clear that performance improvement must not be delivered at the expense of average journey times.

6.20 The Scottish Ministers therefore require that the outputs of the network will be maintained in such a manner as to enable the operators of the ScotRail Franchise to deliver a PPM target of 92.5% for every year of CP6 and the operators of the Caledonian Sleeper Franchise to meet their Right Time targets. The Scottish Ministers also require that the outputs of the network will be maintained in such a way as to recognise the performance requirements of other operators on the Scottish network.

6.21 The performance of infrastructure, and the management of major stations in Scotland contribute to the overall satisfaction of passengers, as measured through the independent Transport Focus National Rail Passenger Survey (NRPS). Therefore, and in order to ensure alignment of objectives between management of operations and infrastructure, the Scottish Ministers require that Network Rail should share, and be measured against, the same NRPS targets as are specified in the ScotRail Franchise contract, Schedule 7.2, Part 2, Para 11.

6.22 In support of the delivery of the PPM and NRPS, the Scottish Ministers also require Network Rail to work with its industry partners to develop and measure key performance indicators which as a package:

- encourages and facilitates outperformance of the PPM target, as outlined above
- reflects the impact of performance, including at intermediate stations, on current passenger experience and the attractiveness of rail services for new passengers
- reflects the economic value of services, disaggregated by Scottish service group, or line, or time period or a combination of those things
is sufficiently flexible to take account of periods of severe disruption, with a focus on working with all affected operators in those circumstances to provide the best service possible for rail users

does not add additional expenditure to the baseline costs of the Scottish operating route

6.23 The Freight Delivery Metric (FDM) measures the percentage of freight trains that arrive at their destination within 15 minutes of the scheduled time and in CP6 the Scottish Ministers require that freight trains on the Scotland route achieve an FDM of a minimum of 93% at the start of CP6 moving through staged improvements towards 94.5% at the end of CP6.

Rail freight growth target

6.24 The Scottish Government reaffirmed its commitment to supporting the rail freight sector in its rail freight strategy, Delivering the Goods, undertaking to work collaboratively with industry on a series of initiatives designed to help the sector secure new markets to replace declining traditional markets such as coal.

6.25 In support of this, the Scottish Ministers require that Network Rail clearly demonstrate throughout CP6 that it is using all levers at its disposal to make the use of rail freight attractive to business across Scotland, including simplicity of processes and a flexible approach to accommodating new rail freight traffic. The Scottish Ministers expect Network Rail to develop a plan, with the wider industry, for the start of CP6 which should facilitate the growth of new rail freight business. The plan should include both maximising the use of existing flows and the development of new business/terminal facilities.

6.26 Under this plan the Scottish Ministers would require all reasonable steps to be taken to facilitate growth of 7.5% in rail freight traffic carried on the Scotland route, of which, at least 7.5% will represent a growth in new business (i.e. new traffic flows, not previously moving by rail). Both targets should be achieved by the end of CP6 and be measured in net thousand gross tonne miles, relative to the baseline at March 2019.

A greener Scotland

6.27 Emissions’ reductions are a priority for a sustainable Scottish economy. Our Climate Change plans include proposals for new and more testing emissions reduction targets for 2020. Whilst rail is already a low contributor of total transport emissions, investment strategies must become more sustainable to provide a contribution to overall emissions reductions and to ensure enhanced network resilience from adaptation interventions.

6.28 During CP6 the Scottish Ministers require Network Rail to work with the industry to develop and deliver a metric for continuous carbon emissions’ reductions which is normalised to cover passenger and freight volumes and set
against the baseline at the 31 March 2019. A metric should also be produced for measure in CP6 which drives behaviours to reduce overall traction and non-traction energy use by the end of CP6.

6.29 The Scottish Ministers also require Network Rail to work with the rail industry to develop and apply suitable KPIs for monitoring the impact and mitigation of climate change upon network disruption and the means of measuring the benefits of adaptation interventions.

6.30 With the aim of monitoring and reducing the overall environmental impact of rail, the Scottish Ministers require the rail industry to report and build on the existing measures for the overall reduction in environmental impact.

Asset management

6.31 The Scottish Ministers require Network Rail to adopt an asset management strategy in CP6, including policies as well as operational practice, focussed on reliability, resilience, safety, sustainability, and value for money. The asset management strategy should also clearly reflect the specific needs of the network in Scotland and its users and should be fully aligned to the Scottish Ministers’ priorities.

6.32 Experience in previous Control Periods has shown that incomplete or inaccurate asset data has led to risks, delays and costs for the wider industry and funders. Asset management and investment in enhancement projects in Scotland must be underpinned by accurate asset data, including gauge information, which is consistently maintained at an A2 standard as a minimum and appropriate Network Capability statements to allow customers to make informed business decisions. Where it represents and can clearly demonstrate value for money, Network Rail’s asset management strategy should include the increased rollout of Intelligent Infrastructure Monitoring and Remote Control Monitoring of assets across the network.

6.33 Network Rail’s renewals programme represents a significant capital investment for the Scottish Ministers and as a result the Scottish Ministers would expect to review and approve, before the start of CP6, the Scotland route policies for the CP6 renewals programme, including the long-term approach to and technical strategy for signalling assets on the Scottish network. The Scottish Ministers would expect that the renewals policies for Scotland would:

- deliver a safe and resilient network
- align with the Scottish Ministers’ Strategic Priorities for rail
- integrate as part of the Investment Strategy, making best use of opportunities for coordination with major enhancement works
- facilitate demonstrably efficient delivery and value for money
• deliver stable work-banks and thus a stable resource base and supply chain in Scotland linked to the expectations of the Scottish Ministers outlined in paragraph 4.1 above

6.34 Any changes to Network Rail’s policies or programmes which will result in the deferral or cancellation of major or significant levels of renewal works will require consultation with and approval by Transport Scotland.

Stations

6.35 All stations shall be maintained to an average asset condition as in place at the 31 March 2019 and in a manner that facilitates the operator of the ScotRail franchise to fulfil its obligations under the current or any future Service Quality Incentive Regime (SQUIRE).

6.36 Customer Information Systems (CIS) at stations enable customers to make rational and informed decisions during normal network operation and also during disruptive events resulting in the reduction of overcrowding and consequently dwell time at stations, assisting normal operation and service recovery. The Scottish Ministers require Network Rail to work with the rail industry to deliver a measurable improvement to the customer experience by the end of CP6 through improved, and more consistent CIS with no reduction in the customer experience through CP6.

Depots and stabling strategy

6.37 The Scottish Ministers require that Network Rail will cooperate with the wider rail industry to develop sufficient strategic depot and stabling capability plans for at least the next 15 years, supporting the growth in passenger services predicted and the rolling stock strategies set out in Franchise Agreements and any planned variations. As part of this process, consideration should be given to current and expected gaps in servicing and stabling capability, identifying value for money options to support more efficient rolling stock operations. This strategy should be based around the appropriate exploitation of existing railway assets; using/adapting stations where possible and then the consideration of new depots.

Support for the rural economy & tourism

6.38 The Scottish Ministers require that Network Rail will maintain and deliver track access to support the reasonable requirements of charter, tourist and other special trains, ensuring that all required approvals and pathways are confirmed to operators in sufficient time so as to enable normal business planning and marketing activity to be undertaken with certainty. The Scottish Ministers would expect gauging to be covered by this requirement and, to the extent that the Scottish Gauge Requirement is not sufficient, where specific gauging exercises are required, that these are undertaken at Network Rail’s cost and in sufficient time to allow services to run as planned.
6.39 Timetabling with respect to rural services should be informed by specialist local knowledge so as to ensure integration with bus and ferry services.

6.40 Vegetation clearance on rural and scenic routes should be controlled and maintained so as to facilitate views from the train, and to prevent damage to trains (including those of charter operators), such as damage to paintwork and exterior finish.

**Railway assets**

6.41 Whilst it remains the position that no railway assets on the Scottish network should be sold or disposed of without the express approval of the Scottish Ministers, it is acknowledged that opportunities may exist to exploit the potential of the extensive Scottish commercial and operational asset base to the benefit of funders, rail users or proximal communities.

6.42 The Scottish Ministers require Network Rail to optimise the availability of redundant or underused assets, including land, for the benefit of the local community. Where Network Rail looks to relieve itself of the burden of assets by identifying a more appropriate party (or parties) that could discharge that obligation, it should first undertake a thorough assessment of the potential for railway use in the future.

6.43 Network Rail should cooperate fully with Transport Scotland and the Scottish Government to examine areas where Network Rail’s digital assets can support passengers services where digital connectivity is limited or currently missing, or where the assets can support digital coverage for remote and rural communities.

**Safety**

6.44 It remains the responsibility of the Secretary of State to specify safety requirements for the whole of the GB rail network and the Scottish Ministers will work closely with the Secretary of State to ensure that the interests of Scotland’s railways are fully reflected.

**Accessibility**

6.45 It remains the responsibility of the Secretary of State to specify accessibility requirements for the whole of the GB rail network and the Scottish Ministers will work closely with the Secretary of State to ensure that the interests of Scotland’s railways are fully reflected and will look to support accessibility initiatives through the Investment Strategy.

6.46 In accordance with their status as a public sector organisation covered by the Equality Act 2010, Network Rail should comply with all associated public sector equality duty requirements.
7 Statement of funds available

7.1 At the time of publication of this HLOS, the UK Government has advised the Scottish Ministers of its intention to change the basis of funding for Network Rail in CP6, but the first formal proposals about how these new funding arrangements will work in Scotland were not received from the UK Government until the evening before the publication deadline of 20 July 2017. This has not left time for prudent consideration and the necessary negotiations to confirm satisfactory arrangements. Therefore, it is not possible for the Scottish Ministers to publish a Statement of Funds Available at the same time as this HLOS.