Freight & National Passenger Operators Route Strategic Plan

March 2019 as part of RF11

1. Foreword and summary

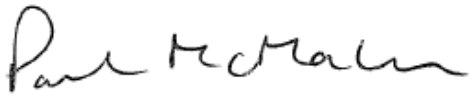
This Freight & National Passenger Operators (FNPO) Route Strategic Plan (RSP) for Control Period 6 sets out our five-year plan for CP6, from 1 April 2019 to 31 March 2024. Our plan is centred on a range of objectives that support our freight and national passenger customers' businesses. In particular the plan sets out the first stage of a longer-term vision to facilitate significant rail freight growth over the next fifteen years. Our RSP has been developed with the active collaboration of, and input from, our customers and stakeholders and seeks to deliver what they have told us they want.

FNPO was established in 2016, and in April 2017, as part of Network Rail's Transformation Programme, we implemented the new FNPO organisational structure to strengthen focus and links with our diverse range of customers and stakeholders as well as Network Rail's Routes and the System Operator (SO). We have a central role to support and promote our customers' interests as the Network Rail devolution process develops.

FNPO, is different to the other Routes: as we do not directly manage assets or control train operations, but deliver these, working with and through the geographic Routes, System Operator and other parts of Network Rail. Our RSP reflects this unique role and we have structured this plan to be consistent and aligned with other RSPs.

In CP6, FNPO will have its own revenue requirement. This will provide greater transparency on the costs associated with our customers' use of the network and support us to work with the geographical Routes and the System Operator to establish new internal relationships. These will more clearly define customer inputs and specifications and will result in an opportunity to jointly review outputs, costs and outcomes to drive infrastructure cost efficiency, value-for-money and alignment to customer requirements. It also gives an opportunity to create different funding models for the network enhancements and developments necessary to drive continued rail freight growth. In other words, we will function more fully as an independent route business.

I am really grateful for the support and input provided by our customers and stakeholders in developing this RSP. The plans and objectives in this document will continue to develop and form our Delivery Plan as we head into CP6 and continually engage with our customers and stakeholders.



Paul McMahon
Managing Director, Freight & National Passenger Operators
February 2019

Route Overview

FNPO is different: Our customers operate nationally across multiple routes and our customer base is uniquely varied, with freight operating companies (FOCs), CrossCountry, Caledonian Sleeper, charter operators and aspirant open access passenger operators, who together operate c1000 trains per day. Our stakeholder base is equally varied. Our external stakeholders range from train and freight operators, through industry third parties (such as ports, shippers and manufacturers) to Governments, the regulator and other public bodies. Our internal stakeholders include all the geographic routes and the System Operator.

FNPO does not physically manage infrastructure or train operations. We deliver performance and other outputs for our customers in conjunction with and through the geographical routes, the System Operator and other Network Rail functions.

Passenger and freight volumes across the network are forecast to grow in CP6. The freight forecasts provided by MDS Transmodal for this plan suggest that freight moved could increase from 2016/17 to 2023/24 by up to 50% depending on market headwinds and assuming unconstrained network capacity. For planning purposes, assuming existing funded capacity and capability, we are estimating growth of 15.6% over the 7-year time horizon.

The rail freight strategies of both the UK and Scottish Governments both support additional rail freight growth and modal switching from road to deliver benefits including easing road congestion, reducing pollution and generating productivity and financial benefits for the economy.

Vision and Purpose

Our vision is to:

Exceed the expectations of our customers and stakeholders across the rail network in providing a safe, reliable, affordable and growing railway.

Our purpose is to:

Deliver growth and provide excellent service for our customers and stakeholders, through improving safety and performance, and enhancing capacity and capability, at an efficient cost.

Our vision goes beyond the boundaries of CP6, especially for freight. Growth levels as forecast by MDS Transmodal, and desired by the Governments' rail freight strategies, can be achieved – but only if an appropriate framework and infrastructure is put in place.

FNPO is in a unique and pivotal position in the rail freight sector to provide leadership and advocacy for the sector, not least because of Network Rail's ownership of the national network and substantial property portfolio. This RSP sets out Network Rail FNPO's vision and plan to lead the development of a framework for rail freight growth and in particular to:

– Provide for stable and sustainable access charges for CP6

– Support the development and delivery of new services being developed and offered by FOCs, such that new end-customers will be attracted to rail and help existing end-users expand

– Put in place relationships and governance arrangements with the System Operator and the geographic routes to support the framework and its objectives

– Support the vision set out in the DfT's rail freight strategy for the continued growth of rail freight, in order to help relieve pressures on the road network

– Lead the production of the industry plan required by the Scottish Government but – as applicable – applying the key principles to the whole of the UK

In addition, we also see a need to develop a 15-year plan to deliver volume growth and modal shift from road, setting out clearly:

– The likely benefits streams and beneficiaries

– The infrastructure changes needed

– The changes in culture and behaviour that will be needed

– The likely scale of costs and how they might be funded

– How our customers link into and can benefit from Digital Railway

2. Route objectives

This plan is predicated on the key assumptions laid out in Appendix B and will be impacted as these assumptions change

Long Term Scorecard

Safety	Definitions		18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	Achievability
Work related absence	The number of FNPO Route absences where the cause is classified as work related (e.g. work related stress).	WORSE THAN TARGET	40	40	40	40	40	40	40	40	
		TARGET	20	20	20	20	20	20	20	20	
		BETTER THAN TARGET	0	0	0	0	0	0	0	0	
Derailments	Derailment of commercial freight services on NR network infrastructure caused by NR.	WORSE THAN TARGET	13	12	11	10	9	8	7	7	
		TARGET	10	9	8	7	6	5	4	4	
		BETTER THAN TARGET	7	6	5	4	3	2	1	1	
Operator Lost Time Incidents on NR infrastructure	FOC/TOC customer reported lost time injuries occurring on NR infrastructure	WORSE THAN TARGET	16	15	14	13	12	11	10	10	
		TARGET	12	11	10	9	8	7	6	6	
		BETTER THAN TARGET	8	7	6	5	4	3	2	2	

Train Performance Measures	Definitions		18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	Achievability
Freight Delivery Measure (FDM) – National	Regulatory measure of Network Rail's ability to deliver freight trains to destination within 15 mins of booked time	WORSE THAN TARGET	92.5%	92.5%	92.5%	92.5%	92.5%	92.5%	92.5%	92.5%	
		TARGET	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	
		BETTER THAN TARGET	94.5%	94.5%	94.5%	94.5%	94.5%	94.5%	94.5%	94.5%	
Freight Delivery Measure (FDM) – Scotland	Regulatory measure of Network Rail's ability to deliver freight trains to destination within 15 mins of booked time in Scotland	WORSE THAN TARGET	N/A	93.5%	93.5%	93.5%	93.5%	93.5%	93.5%	93.5%	
		TARGET	N/A	94.5%	94.5%	94.5%	94.5%	94.5%	94.5%	94.5%	
		BETTER THAN TARGET	N/A	95.0%	95.0	95.0%	95.0%	95.0%	95.0%	95.0%	
FOC on TOC (DM/ 100 train km)	The portion of delay to Passenger operators caused by commercial freight services (normalised)	WORSE THAN TARGET	1.25	1.24	1.23	1.22	1.22	1.22	1.22	1.22	
		TARGET	1.18	1.17	1.16	1.15	1.15	1.15	1.15	1.15	
		BETTER THAN TARGET	1.16	1.15	1.14	1.13	1.13	1.13	1.13	1.13	
CrossCountry – PPM	XC PPM delivery (time to 10)	WORSE THAN TARGET	89.2	88.0%	88.3%	88.6%	88.9%	89.2%	89.2%	89.2%	
		TARGET	90.0	88.8%	89.1%	89.4%	89.7%	90.0%	90.0%	90.0%	
		BETTER THAN TARGET	90.8	89.6%	89.9%	90.2%	90.5%	90.8%	90.8%	90.8%	
CrossCountry – Cancellations	% of all passenger train journeys that are cancelled	WORSE THAN TARGET	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	
		TARGET	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	
		BETTER THAN TARGET	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	
CrossCountry – Time to 3 minutes	% of all train that arrive at all stations on time to 3 minutes	WORSE THAN TARGET	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	
		TARGET	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	
		BETTER THAN TARGET	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	
CrossCountry – Time to 15 minutes	% of all train that arrive at all stations on time to 15 minutes	WORSE THAN TARGET	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	
		TARGET	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	
		BETTER THAN TARGET	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	
Caledonian Sleeper – Right Time	% of all passenger train journeys that arrive on time.	WORSE THAN TARGET	75%	75%	75%	75%	75%	75%	75%	75%	
		TARGET	80%	80%	80%	80%	80%	80%	80%	80%	
		BETTER THAN TARGET	85%	85%	85%	85%	85%	85%	85%	85%	

Locally Driven Customer Measures	Definitions		18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	Achievability
Net tonne miles moved – Freight (billions)	Net tonne miles moved – Freight (Great Britain)	WORSE THAN TARGET	9.4	9.4	9.6	10.0	10.7	11.8	11.8	11.8	
		TARGET	10.4	10.4	10.6	11.2	11.9	13.1	13.1	13.1	
		BETTER THAN TARGET	11.4	11.4	11.7	12.3	13.1	14.5	14.5	14.5	
Average speed-Freight - delivery against agreed milestones	% achievement of agreed milestones	WORSE THAN TARGET	N/A	80%	80%	80%	80%	80%	80%	80%	
		TARGET	N/A	90%	90%	90%	90%	90%	90%	90%	
		BETTER THAN TARGET	N/A	100%	100%	100%	100%	100%	100%	100%	
Freight service plan reviews- delivery against agreed milestones	% achievement of agreed milestones	WORSE THAN TARGET	80%	80%	80%	80%	80%	80%	80%	80%	
		TARGET	90%	90%	90%	90%	90%	90%	90%	90%	
		BETTER THAN TARGET	100%	100%	100%	100%	100%	100%	100%	100%	
Strategic capacity - Freight*	'The % of the gap between the number of required paths and the number of actual paths, that is filled each timetable period	WORSE THAN TARGET	5%	5%	5%	5%	5%	5%	5%	5%	
		TARGET	10%	10%	10%	10%	10%	10%	10%	10%	
		BETTER THAN TARGET	15%	15%	15%	15%	15%	15%	15%	15%	
Scottish freight growth on baseline	Scottish freight growth against an agreed baseline	WORSE THAN TARGET	N/A	1.0%	2.5%	3.5%	5.5%	7.0%	7.0%	7.0%	
		TARGET	N/A	1.5%	3.0%	4.5%	6.0%	7.5%	7.5%	7.5%	
		BETTER THAN TARGET	N/A	3.5%	5.0%	6.5%	8.0%	9.5%	9.5%	9.5%	
Scottish new freight traffic share	Scottish new freight traffic share	WORSE THAN TARGET	N/A	1.0%	2.5%	3.5%	5.5%	7.0%	7.0%	7.0%	
		TARGET	N/A	1.5%	3.0%	4.5%	6.0%	7.5%	7.5%	7.5%	
		BETTER THAN TARGET	N/A	3.5%	5.0%	6.5%	8.0%	9.5%	9.5%	9.5%	
Average speed improvement on baseline (Freight, Scotland)*	Average speed improvement on baseline - (Freight, Scotland)	WORSE THAN TARGET	N/A	0.0%	2.0%	3.0%	4.0%	5.0%	5.0%	5.0%	
		TARGET	N/A	1.8%	3.0%	6.0%	8.0%	10.0%	10.0%	10.0%	
		BETTER THAN TARGET	N/A	3.0%	6.0%	9.0%	12.0%	15.0%	15.0%	15.0%	

CrossCountry – Roll up of on time performance at the key XC locations	Measure rolling up the on time performance at the following key XC locations - Birmingham New Street, Bristol Parkway, Edinburgh, Peterborough, York, Sheffield, Cardiff and Reading (from Basingstoke)	WORSE THAN TARGET	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	
		TARGET	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	
		BETTER THAN TARGET	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	
CrossCountry – % of Cat 3 & 4 Studies initiated out of total required	% of Category 3 & 4 Studies needed for XC affected possessions initiated out of total required	WORSE THAN TARGET	70%	70%	70%	70%	70%	70%	70%	70%	
		TARGET	80%	80%	80%	80%	80%	80%	80%	80%	
		BETTER THAN TARGET	90%	90%	90%	90%	90%	90%	90%	90%	
Charter planning compliance	Roll up of Charters 'Planning and Delivery' metrics	WORSE THAN TARGET	0%	0%	0%	0%	0%	0%	0%	0%	
		TARGET	50%	50%	50%	50%	50%	50%	50%	50%	
		BETTER THAN TARGET	100%	100%	100%	100%	100%	100%	100%	100%	
Freight End User (FEU) satisfaction	Quarterly customer satisfaction survey with freight end users	WORSE THAN TARGET	68%	69%	70%	71%	72%	73%	73%	73%	
		TARGET	73%	74%	75%	76%	77%	78%	78%	78%	
		BETTER THAN TARGET	78%	79%	80%	81%	82%	83%	83%	83%	

Investment & Asset Management	Definitions		18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	Achievability
CP6 SFN schemes - Current year GRIP 6 completion vs baseline	Measures against a baseline SFN plan and tracks the number of schemes completed to GRIP 6	WORSE THAN TARGET	80%	80%	80%	80%	80%	80%	80%	80%	
		TARGET	90%	90%	90%	90%	90%	90%	90%	90%	
		BETTER THAN TARGET	100%	100%	100%	100%	100%	100%	100%	100%	
Freight asset reliability*	.Service affecting failures to assets on the defined geography of the Strategic Freight Network.	WORSE THAN TARGET	N/A	1.00%	1.60%	1.80%	1.40%	1.30%	1.30%	1.30%	
		TARGET	N/A	0.90%	1.50%	1.70%	1.30%	1.20%	1.20%	1.20%	
		BETTER THAN TARGET	N/A	0.70%	1.30%	1.50%	1.10%	1.00%	1.00%	1.00%	

Financial Performance	Definition		18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/28	Achievability
Financial Performance Measure (FPM) excl enhancements	Measures how we are performing against our Income, Opex and Renewals budget.	WORSE THAN TARGET	-£10m	-£10m	-£10m	-£10m	-£10m	-£10m	-£10m	-£10m	
		TARGET	0	£0	£0	£0	£0	£0	£0	£0	
		BETTER THAN TARGET	+£10m	+£10m	+£10m	+£10m	+£10m	+£10m	+£10m	+£10m	
Lost funding (£m)	Value of lost funding as a result of underspends on capital and operating expenditure budgets	WORSE THAN TARGET	N/A	-10%	-10%	-10%	-10%	-10%	-10%	-10%	
		TARGET	N/A	£0	£0	£0	£0	£0	£0	£0	
		BETTER THAN TARGET	N/A	+10%	+10%	+10%	+10%	+10%	+10%	+10%	

People			18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	Achievability
Your Voice Action Plans - delivery against milestones	% achievement of agreed milestones	WORSE THAN TARGET	80%	80%	80%	80%	80%	80%	80%	80%	
		TARGET	90%	90%	90%	90%	90%	90%	90%	90%	
		BETTER THAN TARGET	100%	100%	100%	100%	100%	100%	100%	100%	

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Achievability definitions (applies to "target" value)	
RED	Very challenging, likely to require substantial organisational and cultural change to achieve and/or highly dependent on third party involvement
AMBER	Challenging, likely to require moderate organisational and cultural change to achieve and/or dependent on third party involvement
GREEN	Achievable, builds on existing organisational and cultural capabilities and little or no dependency on third parties for delivery

Scorecards

In 2016/17, Network Rail established route scorecards, which included specific agreed customer KPIs. Since then, we have developed with each of our customer specific scorecards for each of customer that underpin the Route scorecards. These customer scorecards cover a range of measures including safety, performance, business development, commercial, train planning and project delivery. Each customer scorecard is bespoke to that particular customer, and the customer has the choice whether to "roll up" all of that scorecard, or just certain measures from it, to the FNPO Route scorecard. We believe that Route and Customer scorecards are an important and powerful addition to our customer focused approach. The scorecards are designed to incentivise Network Rail to focus on what is really important to the customer and by extension, the passenger and freight end-users.

Delivering excellent service and successful outcomes can only be achieved by working in close and positive collaboration with all of our customers and stakeholders. Customer scorecards are at the heart of our collaborative relationships. The key objectives we plan to achieve in CP6 are set out in our long-term Route Scorecard and are summarised on this and the following pages.

– **Safety**
  We will continue the positive engagement and collaboration with our customers and stakeholders to drive safety improvement, started during 2017/18. We are driving this greater collaboration with the freight sector through the National Freight Safety Group (NFSG) and its associated steering and working groups. Following the signing of the rail freight safety charter agreed between all FOCs and Network Rail, NFSG is the vehicle which highlights and acts on the five key areas for safety improvement. We see this and a joint industry safety scorecard as the basis for further collaboration and safety improvement during CP6. We are also continuing to develop a programme of safety improvements to infrastructure and conditions which targets freight derailments (reducing from 10 in 2018/19 to 5 by 2023/24), reducing lost time incidents and improving availability of consistent Safe Systems of Work for freight sites.

  We will also increase our focus on reducing hazards and injuries to our FNPO customer workforce on Network Rail's infrastructure. This is a measure that we introduced on our scorecard in 2017 and we want to continue a focus on this so that our customers' staff are as safe as possible whilst working on our infrastructure. To deliver this, the ORR CP6 settlement has allocated £22m over the control period, which is detailed in section 7.

– **Train performance**
  We will retain the Freight Delivery Metric (FDM) as the key regulatory measure for freight performance. FDM measures the number of trains on time (to 15 minutes) in relation to Network Rail caused delays. Our CP6 objective is 94.0%, recognising the decline of coal traffic (which saw better performance) and that anticipated traffic growth will predominantly be on the busier parts of the network.

The concept of corridors is critically important to both our passenger and freight customers, where the end to end journey is of greater significance in many cases, than the performance on individual geographic routes. For freight customers we will continue to develop the Strategic Freight Corridor's (SFCs) for managing performance to support future rail freight growth. Average speed is a key aspect of freight performance and FOCs and freight end-users are keen to see the average speed of freight services on the network increase from c25mph, in order to provide for better asset utilisation, lower cost and improved freight-end customer service. We will develop appropriate plans and metrics for this. As average passenger train speeds are increasing due to the many Journey Time Improvement (JTI) schemes, it is vital that average freight speeds also increase at least to maintain efficient network usage.

We have worked closely with Route Business Scotland and Transport Scotland to develop a growth plan which addresses the Scottish High Level Output Specification (HLOS) freight performance and average speed metrics.

For passenger operators, we continue to discuss with DfT the performance targets and assumptions for CrossCountry though recognising that the Rail Review cancelled the refranchise process and a Direct Award was made, commencing October 2019. The Caledonian Sleeper franchise runs for 15 years (2015 – 2030), spanning CP6, and we will continue to work with them to deliver their franchise performance commitment, which stepped up from 75% to 80% right time arrival from April 2018.

Charter performance will be targeted at continuing high levels consistent with their operations on the rail network.

– **Achieving rail freight growth**
  Our planning and scoping work to date indicates that around £2bn will be needed over a 15-year horizon to fund the infrastructure necessary to underpin step changes in rail freight growth. We will work with the UK and Scottish governments and with prospective third-party investors to develop and establish funding mechanisms for this investment, going into CP6. Investing in the network to support modal shift and the growth of rail freight has considerable socio-economic and environmental benefits. The Benefit Cost Ratios for freight enhancement schemes are very strong typically in the range of 4:1 to 8:1. We will work with Route Business Scotland, Transport Scotland and the wider sector in Scotland to deliver Transport Scotland's HLOS rail freight growth target.

– **Capacity and capability**
  Maintaining the published operational capability of the network is critical for our customers, particularly freight and charters. We will work with the geographical routes to develop and set out clear statements of freight capacity and capability.

  Given the freight growth forecast in CP6 we will work with the System Operator to plan how capacity can be made available to accommodate this. A proportion will be through the continued drive to optimise use of the existing network. However, on certain routes in order to deliver a step-change in growth, enhancements to network infrastructure will be required.

We will work with both the UK and Scottish Governments to make the case for continued funding to develop the Strategic Freight Network to build on the successes (and tangible benefits) of the CP4 and CP5 Strategic Freight Network funds.
In the longer term, the freight capacity and capability requirements necessary to achieve continued freight growth will form a key element of the 15-year Freight Plan with the anticipated focus being on five key strategic corridors:

- Felixstowe to the Midlands/North/Scotland
- Solent to the Midlands/North/Scotland
- Cross London
- Northern Ports and Trans Pennine capacity
- Development of additional Nodal Yards (to support train regulation and capacity management)

We will work with the SO to develop the outline thinking on freight capacity and capability enhancement set out in the Freight Network Study.
For national passenger operators, we will work with our customers and geographical routes to identify plans to improve reliability, journey times and look to remove bottlenecks.

- **Access and Train planning**

Building on the annual scorecards we have developed with customers and reflecting the criticality of train planning and minimal levels of disruption for them, we anticipate including access planning and train planning objectives.

The planning and timing of engineering possessions on the rail network is critical for national passenger and freight operators and their customers, and one of their main areas of concern about the impact of route devolution. Ensuring assumptions, plans and delivery are coordinated across the national network, and fully take account of all operator's business needs, is critical.

Freight is particularly sensitive to engineering access on midweek nights, as some 65% of services operate overnight. This is partly a requirement of market demand and partly a response to the need to avoid passenger services on busy routes during the day.

Co-ordination across routes to allow effective corridor operation, the availability of diversionary routes with the necessary capacity and capability and the forward planning of major possessions are key as both passenger and freight trains can be more readily diverted if access and diversions are appropriately planned.

There have been good examples of collaborative working which we intend to build on:

- Over time the provision and availability of diversionary routes (e.g Southampton to Didcot) has improved; and
- Aligning engineering access with customer needs – e.g. on the Oxford corridor when work was scheduled for the same time as the BMW Mini plant's annual shutdown

The System Operator (SO) function will continue to support the Access Planning process and both FNPO and the System Operator will support route consideration of whole industry needs and value in engineering access planning and decisions. A national framework is being developed for the planning and prioritisation of engineering work and this will provide clear accountabilities between the System Operator, FNPO and the geographic routes. Transparency of the approach to, and how, engineering access plans and decisions have been made will be critical to developing greater customer and stakeholder confidence in the process.

A key element of the rail freight "framework for growth" will be how increasing traffic volumes are handled when engineering access is needed. The provision of suitable gauge cleared diversionary capacity is a central element of the Strategic Freight Network concept and critical to offering customers in sensitive markets such as retail the 24/7 product they require.

FOCs support Network Rail with the provision to Supply Chain Operations of engineering trains for the maintenance and renewal of the network. These need to be fully planned to ensure efficient deployment of often scarce plant resource, as well as operational robustness and effective FOC resourcing in respect of locomotives, crews and wagons.

– **Access charges & performance regime**

We have worked closely with ORR and freight operators throughout the periodic review, having proposed that freight track access charges remain stable beyond the end of CP5 and across CP6. This is important to provide sustainability and affordability for the freight sector and confidence for end-users to support the continued growth in key markets. We will continue to work with the industry to make improvements to the regulatory contractual framework where appropriate.

– **Customer satisfaction**

We will monitor our business performance and customer satisfaction using Scorecards, but recognise there are also wider strategic objectives that are more qualitative and subjective. Measures will be agreed each year with our customers. We want to align more closely the KPIs on our scorecards with our customers' own objectives to enable closer, more coordinated and productive working. We seek to reduce the number of measures going forward, focusing on straightforward and relevant set of priorities.

In delivering these outcomes we will need to continue to develop our processes, our people, our customer service approach and to deliver efficiently, within the funding levels that will be agreed for CP6. This plan outlines these areas and further engagement and development of these areas is necessary.

– **Finance**

FNPO has its own revenue requirement which provides greater transparency on the costs associated with our customers' use of the network. As well as directly incurred and traffic related costs, all Network Rail ("common") costs are being allocated to customers as part of the revenue requirements for all routes. We are presenting freight costs with / without all the allocated costs to avoid misleading interpretations of the actual costs that freight operations impose on the network.

The greater transparency on costs will allow us to work with the geographical routes and the System Operator to establish new internal relationships. We will manage these internal relationships in a structured way. The aim is to more clearly define customer inputs and specifications and will result in an opportunity to jointly review outputs, costs and outcomes to drive infrastructure cost reduction, efficiency, value-for-money and alignment to customer requirements. It also gives an opportunity to create different funding models for the network enhancements and developments necessary to drive continued rail freight growth both in CP6 and subsequent control periods leveraging or otherwise recognising the value and income from the freight property estate. In this way, FNPO will be able to function more fully as an independent route business.

3. Safety

3.1. Safety objectives

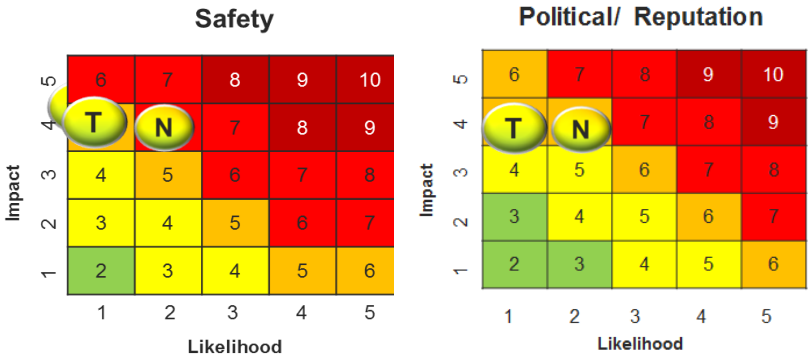
Safety	Definitions		18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	Achievability
Work related absence	The number of FNPO Route absences where the cause is classified as work related (e.g. work related stress).	WORSE THAN TARGET	40	40	40	40	40	40	40	40	
		TARGET	20	20	20	20	20	20	20	20	
		BETTER THAN TARGET	0	0	0	0	0	0	0	0	
Derailments	Derailment of commercial freight services on NR network infrastructure caused by NR.	WORSE THAN TARGET	13	12	11	10	9	8	7	7	
		TARGET	10	9	8	7	6	5	4	4	
		BETTER THAN TARGET	7	6	5	4	3	2	1	1	
Operator Lost Time Incidents on NR infrastructure	FOC/TOC customer reported lost time injuries occurring on NR infrastructure	WORSE THAN TARGET	16	15	14	13	12	11	10	10	
		TARGET	12	11	10	9	8	7	6	6	
		BETTER THAN TARGET	8	7	6	5	4	3	2	2	

Key stakeholder priorities	Response
Reduction in Derailments	Commitment to work collaboratively with FOCs through Cross Industry Freight Derailment Working Group. Top 5 priorities at National Freight Safety Group (NFSG) includes derailments. Focus on sidings and connections for hand point replacements as part of FNPO Safety Improvement Programme.
Improved Security at Freight sites	Joint work with NFSG on visibility of trespass risk at private sites. FNPO represented on Trespass Risk Group with freight customers. Joint assessment work proposed in CP6 with adjacent property holders.
Greater understanding of Fatigue (particularly in a 24hr freight environment)	Commitment to work collaboratively with FOCs through NFSG. One of Top 5 priorities at NFSG is freight fatigue.
Reduced LTIs to customers staff	Commitment to hold regular Joint Safety Tours with Freight Operators at sites with extensive use of walking routes on network. Focus on walking routes and other improvements linked to improving LTI as part of FNPO Safety Improvement Programme.
Reduction in risk associated with SPADs	Commitment to work collaboratively with FOCs through NFSG. One of Top 5 priorities at NFSG is Freight Fatigue, a key influencer on SPADs. FNPO is represented at whole industry SPAD improvement group with RSSB and FOCs.
Reduced Road Risk	Commitment to work collaboratively with FOCs through NFSG sharing Network Rail experience with road driving risk and safety stand down. One of Top 5 priorities at NFSG is Road Risk.
Common Safe Systems of Work	Common Safe Systems of Work (SSOW) shared between FOCs is one of Top 5 priorities at NFSG. Commitment to work collaboratively with FOCs through NFSG to support common format, storage and access solution within SSOW's
Wagon condition risk	Working with FOCs to understand factors behind locked wheels and handbrakes being left on. Supplementary Wheel Impact Load Detector (WILD) instructions for offset loads and other risks being reviewed.
Passenger platform interface	Work required to understand passenger flows during major events and its impact on safety interface.

3.2. Safety activity prioritisation and risk outcome

No.	Key objective drivers (constraints, risks and opportunities)	What we plan to do	Owner	Timescale (start/ finish)
1	R: Safety risk to staff when walking in network yards and sidings infrastructure	Progress improvements to conditions in network yards and sidings to reduce Lost Time Incidents for our customers	Head of Network Management	Delivery of FSIP Programme from April 2019 onwards.
2	R: Safety and security risk from unauthorised third-party access to yards and sidings	Identify highest risk sites for unauthorised access in network yards and sidings. Assess site risks and agree improvement initiatives to reduce risk	Head of Network Management	Develop action plan with adjacent industry parties from June 2019
3	R: Derailment risk and incidents on yard and siding infrastructure	Investigate enhanced infrastructure solutions in yards and sidings that better support fail safe operations. Create a prioritised CP6 programme for investment in yards and sidings, subject to funding	Head of Network Management	Delivery of FSIP Programme from May 2019 onwards.
4	R: Safety risk to Train Drivers safety when using authorised walking routes for train crew relief purposes	Define train drivers walking routes used. Instigate regular 'Go Look See' checks on drivers walking routes to identify hazards and reduce Lost Time Incidents for our customers	Head of Network Management	Document driver walk routes in Y1 CP6. Delivery of FSIP Programme from July 2019 through CP6.

5	O: FOC LTI and Hazard Reporting on NR infrastructure process	Build improved consistency with all customers for reporting FOC staff accidents, hazard identification and resolution. This follows the processes trialled with Freightliner during 2017 and being offered to all FOCs. Support with Joint Safety Tours.	Head of Network Management	Share at regular L1 Safety Meetings through CP6
6	O: SPAD Improvement Strategy	Work with NFSG and RSSB to use available SPAD precursor research to understand and develop plan to reduce the number of SPADs. Work with FOCs to create a forum to review SPAD incidents, share learning and best practice to add depth to industry SPAD improvement plans	Head of Network Management	Annual plan to be agreed with FOCs from April 2019
7	O: Train Loading and Wheel/Rail interfaces	Build understanding within the freight sector of asset management issues especially between fixed rail infrastructure and rolling stock. Focus of Cross Industry Freight Derailment Implementation Group – support action plan for improved bulk and container loading and wheel impact equipment use.	Head of Network Management	On-going long term workstream
8	O: Industry Joint Safety Tours	Extension of Joint Safety Tours initiative started during CP5 to target 30 key sites per annum during CP6 agreed with freight customers for Safety Tours. Offer similar to Cross Country for CP6 (offer made in L2 meeting)	Head of Network Management	Safety Tours schedule agreed annually Jan - March each year of CP6
9	O: Improved Safety Critical Communications	Work with Freight Industry to review existing communications protocols and agree improvements in line with Communications Review Group	Head of Network Management	Review outputs of CRG by September 2019.
10.	R: Passenger Platform interface	Discuss with national passenger operators about the problem locations and consider how best to tackle these places	Head of Network Management	Agree a plan by October 2019



Throughout CP6, we will reduce the likelihood of a safety incident occurring on Network Rail managed infrastructure by implementing a number of initiatives benefiting workforce and passenger & public safety, including improvements to walk routes in yards and sidings and as well improvements to the safety and security of our sites. The FNPO Safety Improvement Programme (FSIP) is a key part of this. This will mitigate the risk to allow us to achieve target risk profile.

3.3. Safety strategy

3.3.1. Specific Safety Improvement Schemes

The FNPO team have prepared several initiatives working with our customers designed to improve our customers experience using the network and to improve the safety scorecard metrics. Improvements to walking routes and yard safety (for example) are linked to reducing LTIs amongst drivers and ground staff, investment in improvements to hand points are intended to reduce derailment risk and greater use of technology such as Wheel Impact Load Detection (WILD) is intended to contribute to reducing mainline derailment risk.

These initiatives will use the £22m FNPO Safety Improvement Programme (FSIP) confirmed in the 31st October 2018 ORR Final Determination. FNPO are establishing the mechanisms for managing and allocating this programme in CP6 to enable our customers to influence the priorities for investment whilst maintaining an overall programme of works.

3.4. Occupational Health & Wellbeing strategy

FNPO adheres to the existing Network Rail Occupational Health & Wellbeing policies and will continue to adapt in line with further developments during CP6.

3.5. Security strategy

FNPO adheres to the Network Rail Security protocols and will work with our customers during CP6 to establish opportunities for greater safety collaboration to improve security and use risk assessment to highlight sites for potential further investment to prevent trespass. FNPO is also represented alongside customers and RSSB on the Trespass Risk Group.

4. Train performance

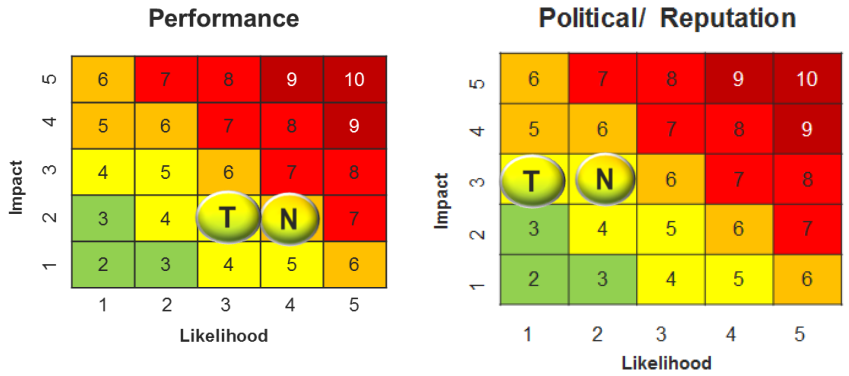
4.1. Train performance objectives

Train Performance Measures	Definitions		18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	Achievability
Freight Delivery Measure (FDM) – National	Regulatory measure of Network Rail's ability to deliver freight trains to destination within 15 mins of booked time	WORSE THAN TARGET	92.5%	92.5%	92.5%	92.5%	92.5%	92.5%	92.5%	92.5%	
		TARGET	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%	
		BETTER THAN TARGET	94.5%	94.5%	94.5%	94.5%	94.5%	94.5%	94.5%	94.5%	
Freight Delivery Measure (FDM) – Scotland	Regulatory measure of Network Rail's ability to deliver freight trains to destination within 15 mins of booked time in Scotland	WORSE THAN TARGET	N/A	93.5%	93.5%	93.5%	93.5%	93.5%	93.5%	93.5%	
		TARGET	N/A	94.5%	94.5%	94.5%	94.5%	94.5%	94.5%	94.5%	
		BETTER THAN TARGET	N/A	95.0%	95.0	95.0%	95.0%	95.0%	95.0%	95.0%	
FOC on TOC (DM/ 100 train km)	The portion of delay to Passenger operators caused by commercial freight services (normalised)	WORSE THAN TARGET	1.25	1.24	1.23	1.22	1.22	1.22	1.22	1.22	
		TARGET	1.18	1.17	1.16	1.15	1.15	1.15	1.15	1.15	
		BETTER THAN TARGET	1.16	1.15	1.14	1.13	1.13	1.13	1.13	1.13	
CrossCountry – PPM	XC PPM delivery (time to 10)	WORSE THAN TARGET		88.0%	88.3%	88.6%	88.9%	89.2%	89.2%	89.2%	
		TARGET		88.8%	89.1%	89.4%	89.7%	90.0%	90.0%	90.0%	
		BETTER THAN TARGET		89.6%	89.9%	90.2%	90.5%	90.8%	90.8%	90.8%	
CrossCountry – Cancellations	% of all passenger train journeys that are cancelled	WORSE THAN TARGET	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	
		TARGET	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	
		BETTER THAN TARGET	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	
CrossCountry – Time to 3 minutes	% of all train that arrive at all stations on time to 3 minutes	WORSE THAN TARGET	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	
		TARGET	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	
		BETTER THAN TARGET	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	
CrossCountry – Time to 15 minutes	% of all train that arrive at all stations on time to 15 minutes	WORSE THAN TARGET	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	
		TARGET	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	
		BETTER THAN TARGET	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	
Caledonian Sleeper – Right Time	% of all passenger train journeys that arrive on time.	WORSE THAN TARGET	75%	75%	75%	75%	75%	75%	75%	75%	
		TARGET	80%	80%	80%	80%	80%	80%	80%	80%	
		BETTER THAN TARGET	85%	85%	85%	85%	85%	85%	85%	85%	

Key stakeholder priorities	Response
Delivery of Freight trains within fifteen minutes of plans	Arrival of freight trains within fifteen minutes of plan is a key requirement for our customers. To support achievement of these we focus on the key drivers of performance.
Delivery of Right Time performance at the key stations as defined in the geographic route scorecards	CrossCountry is a long distance operator working across 7 of the 8 network rail Routes. As such their priorities vary depending on local issues. Detail of these is contained in Appendix C.
Caledonian Sleeper right time arrivals	We recognise that Right Time is the key performance measure for Caledonian Sleeper and not PPM. Our plans reflect this and supported by the FNPO Freight Service Delivery Manager (FSDM).

4.2. Train performance activity prioritisation and risk outcome

No.	Key objective drivers (constraints, risks and opportunities)	What we plan to do	Owner	Timescale (start/ finish)
1	R: Anticipated CP6 growth for passenger and freight may represents a risk for performance.	Realistic but stretching performance targets to be put in place for CP6, including TOC on FOC to be included as a key metric.	Head of Performance	Drafted and agreed by April 2019
2	O: Work closer with geographic routes in delivering reliable and consistent freight performance.	R-FDM will continue to be a performance metric with routes. Put in place a joint performance strategy governance structure where we work with routes and FOCs to understand priorities.	Head of Performance	Strategies & governance in place by June 2019.
3	C: Right time departures is constrained by the importance placed on it in specific commodities and flows.	Right time departures target put in place at a level that recognises this conflict. Performance improvement initiatives to be prioritised.	Head of Performance	To be delivered annually through until 2024
4	O: Work more collaboratively with FOCs to improve holistic industry performance – delivering A2F to 87% by 2024	Carry out a review of the joint performance improvement strategies with the FOCs, to identify key priorities.	Head of Performance	Annually through CP6



During CP6 we are predicting an increase in average speed and an increase in passenger growth. We will aim to mitigate the risk of increasing average speed through taking a requirements based approach to improving average speed. We aim to mitigate the risk of increased passenger numbers by having TOC on FOC as a key metric.

4.3. Operational Performance strategy

Freight

Arrival of freight trains within fifteen minutes of plan is a key requirement for our customers. To support achievement of these we focus on the key drivers of performance. We do this by:

- Working with FOCs and Freight End Users (FEUs) to deliver improvements in right time departures. Statistics show that if a train leaves on time it will arrive at destination within 15 minutes 98% of the time
- Targeting improvement in NR performance. FDM, which solely measures NR causes lateness, remains our regulatory measure. We work closely with Routes to understand causes of delay – and whether there are plans in place to rectify
- Focussing on improving timetabling delay. WTT and STP related delay has increased over the last year – and is a key cause of delay
- Using FNPO Freight Service Delivery Managers (FSDMs) to manage on the day delay as well as provide additional attention to near missing headcodes
- Focussing on weather resilience and planning for autumn
- Developing communications to make sure key stakeholders understand the importance of freight on the rail network

In order to deliver this, we have a governance framework in place – meeting and challenging both Routes and FOCs on a regular basis. In the first year of CP6 we will also relaunch an industry forum to help prevent a decline in freight performance.

A new customer-focussed performance framework was introduced during CP5 with two primary metrics:

– Freight Delivery Metric (FDM) - measuring Network Rail's ability to provide a reliable infrastructure and train paths by measuring whether a commercial freight train has arrived at destination within fifteen minutes due to Network Rail reasons
– Arrivals to Fifteen (A2F) – measuring whether a commercial freight train has arrived at destination within fifteen minutes. This metric reflects the ability of Network Rail and freight operators to deliver a train to destination within the required timescale

These changes drove two key strategic performance initiatives:

Managing freight performance by Strategic Freight Corridors (SFCs) which allowed stakeholders of trains on specific flows to look at the holistic (usually cross-route) journey, understand problems, and put in place performance improvement initiatives. Examples include:

– The introduction of a control room at Felixstowe to improve overall performance on the Felixstowe to Midlands/Northwest freight corridor
– Initiatives at Acton to improve the performance from Somerset to London and the South East
– The introduction of a terminal plan at Daventry, which enabled changes to the occupancy plan
– Improvements to the right time performance of the Immingham Iron Ore flows
– Review and improvement to the train plan at Southampton to improve reliability

In the table below, R-FDM gives us a strong understanding of where we need to focus geographically in order to deliver FDM to 94%.

	Anglia	LNE	LNW	Scotland	South East	Wales	Wessex	Western
Lower	91.5%	94.4%	93.1%	93.5%	87.5%	94.3%	94.4%	92.6%
Expected	92.4%	94.8%	94.1%	94.5%	89.3%	95.1%	95.3%	93.1%
Upper	93.6%	95.2%	94.6%	95.0%	90.2%	95.5%	95.7%	93.7%

Through CP6 we will work closely with each route to understand their performance improvement schemes, how these schemes impact FDM and any gaps. Where these gaps occur performance improvement plans will be put in place. The detailed delivery plans will be contained within our FOC and Route performance strategies.

	Anglia	LNE	LNW	Scotland	South East	Wales	Wessex	Western
Floor	90.8%	93.9%	92.7%	92.5%	85.4%	93.5%	93.1%	92.1%

CrossCountry
CrossCountry is a long-distance operator working across 7 of the 8 network rail Routes. As such their priorities vary depending on local issues. The detail of these is contained in Appendix C. To summarise the key cross-Route priorities these are:

- Recovering PPM to the expected level as defined in the FNPO scorecard.
- Delivery of Right Time performance at the key stations as defined in the geographic route scorecards
- Improved service recovery plans
- Changes to regulation policies to align with CP6 performance metrics
- Continual improvement in asset reliability
- Autumn preparedness and weather resilience
- Management of trespass and suicide

We are aware of these priorities – and work closely with the operator and geographic routes in order to drive performance improvement around the CrossCountry priorities. We have a clear governance process in place where we engage both parties in performance planning activity.

Caledonian Sleeper
We recognise that Right Time is the key performance measure for Caledonian Sleeper and not PPM. We will use FSDMs to carry out 'pre-flight checks' and carry out relevant on route interventions in order to maximise the number of trains arriving right time at destination. We also hold regular quarterly performance reviews with the operator to make sure that our delivery of performance for them aligns with their requirements.

4.4. Capacity and timetabling strategy

The FNPO approach to capacity and capability planning and funding is, wherever possible, for FNPO to work with the System Operator, Routes, customers and freight-end users to provide additional incremental capacity as efficiently as possible, obviating the need for significant capital expenditure, by:

– Developing and using Strategic Capacity & Strategic Freight Capacity
– Flexing existing train paths and reviewing train plans
– Supporting Service Plan Reviews to enable normalisation of longer and heavier services

The enhancement of the capability of existing rail freight services not only enables a more efficient and competitive rail freight sector (more payload for a given traction & traincrew resource), it can also reduce the need for investment in network capacity by making more efficient use of existing paths.

The Capacity Management Review Group (CMRG), is formed of FOC representatives, including timetable practitioners, who understand the detail of access contracts and rights, as well as Network Rail individuals who produce strategic paths, which go into the Strategic Capacity Statement.

Considering passenger and freight requirements jointly remains the preferred approach to larger scale capacity development and FNPO will work with the System Operator to identify and develop such proposals to ensure realisation of the full potential benefits.

Where optimised use of the current network cannot support further traffic development the case for enhancement will be made, freight related enhancement on the network comprises four main categories:

– Schemes planned, authorised and funded by the Strategic Freight Network ring-fenced fund and historically only progressed when endorsed by the SFN Steering Group
– Specific freight-only freight-focussed schemes planned, authorised and funded by routes or other programmes within Network Rail
– Freight schemes planned, authorised and funded either in whole or in part by other parties, including the Scottish Government and third parties such as ports
– Network enhancements which contain either direct or indirect freight benefits – e.g. re-signalling or electrification programmes

FNPO will be relentlessly focused on driving the best use of any enhancement funding; informing the scope of enhancements, driving out cost by design and maintaining oversight of efficient delivery.

5. Locally driven measures

5.1. Locally driven objectives

Locally Driven Customer Measures	Definitions		18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	Achievability
Net tonne miles moved – Freight (billions)	Net tonne miles moved – Freight (Great Britain)	WORSE THAN TARGET	9.4	9.4	9.6	10.0	10.7	11.8	11.8	11.8	
		TARGET	10.4	10.4	10.6	11.2	11.9	13.1	13.1	13.1	
		BETTER THAN TARGET	11.4	11.4	11.7	12.3	13.1	14.5	14.5	14.5	
Average speed- Freight - delivery against agreed milestones	% achievement of agreed milestones	WORSE THAN TARGET	N/A	80%	80%	80%	80%	80%	80%	80%	
		TARGET	N/A	90%	90%	90%	90%	90%	90%	90%	
		BETTER THAN TARGET	N/A	100%	100%	100%	100%	100%	100%	100%	
Freight service plan reviews- delivery against agreed milestones	% achievement of agreed milestones	WORSE THAN TARGET	80%	80%	80%	80%	80%	80%	80%	80%	
		TARGET	90%	90%	90%	90%	90%	90%	90%	90%	
		BETTER THAN TARGET	100%	100%	100%	100%	100%	100%	100%	100%	
Strategic capacity - Freight*	'The % of the gap between the number of required paths and the number of actual paths, that is filled each timetable period	WORSE THAN TARGET	5%	5%	5%	5%	5%	5%	5%	5%	
		TARGET	10%	10%	10%	10%	10%	10%	10%	10%	
		BETTER THAN TARGET	15%	15%	15%	15%	15%	15%	15%	15%	
Scottish freight growth on baseline	Scottish freight growth against an agreed baseline	WORSE THAN TARGET	N/A	1.0%	2.5%	3.5%	5.5%	7.0%	7.0%	7.0%	
		TARGET	N/A	1.5%	3.0%	4.5%	6.0%	7.5%	7.5%	7.5%	
		BETTER THAN TARGET	N/A	3.5%	5.0%	6.5%	8.0%	9.5%	9.5%	9.5%	
Scottish new freight traffic share	Scottish new freight traffic share	WORSE THAN TARGET	N/A	1.0%	2.5%	3.5%	5.5%	7.0%	7.0%	7.0%	
		TARGET	N/A	1.5%	3.0%	4.5%	6.0%	7.5%	7.5%	7.5%	
		BETTER THAN TARGET	N/A	3.5%	5.0%	6.5%	8.0%	9.5%	9.5%	9.5%	
Average speed improvement on baseline (Freight, Scotland)	Average speed improvement on baseline - (Freight, Scotland)	WORSE THAN TARGET	N/A	0.0%	2.0%	3.0%	4.0%	5.0%	5.0%	5.0%	
		TARGET	N/A	1.8%	3.0%	6.0%	8.0%	10.0%	10.0%	10.0%	
		BETTER THAN TARGET	N/A	3.0%	6.0%	9.0%	12.0%	15.0%	15.0%	15.0%	

CrossCountry – Roll up of on time performance at the key XC locations	Measure rolling up the on time performance at the following key XC locations - Birmingham New Street, Bristol Parkway, Edinburgh, Peterborough, York, Sheffield, Cardiff and Reading (from Basingstoke)	WORSE THAN TARGET	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	
		TARGET	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	
		BETTER THAN TARGET	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	
CrossCountry – % of Cat 3 & 4 Studies initiated out of total required	% of Category 3 & 4 Studies needed for XC affected possessions initiated out of total required	WORSE THAN TARGET	70%	70%	70%	70%	70%	70%	70%	70%	
		TARGET	80%	80%	80%	80%	80%	80%	80%	80%	
		BETTER THAN TARGET	90%	90%	90%	90%	90%	90%	90%	90%	
Charter planning compliance	Roll up of Charters 'Planning and Delivery' metrics	WORSE THAN TARGET	0%	0%	0%	0%	0%	0%	0%	0%	
		TARGET	50%	50%	50%	50%	50%	50%	50%	50%	
		BETTER THAN TARGET	100%	100%	100%	100%	100%	100%	100%	100%	
Freight End User (FEU) satisfaction	Quarterly customer satisfaction survey with freight end users	WORSE THAN TARGET	68%	69%	70%	71%	72%	73%	73%	73%	
		TARGET	73%	74%	75%	76%	77%	78%	78%	78%	
		BETTER THAN TARGET	78%	79%	80%	81%	82%	83%	83%	83%	

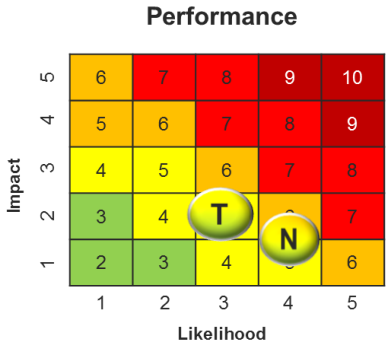
Key stakeholder priorities	Response
Protecting freight capacity	It is recognised that the mechanisms for protecting strategic freight capacity are not robust enough. Commitment to work with SO, customers, ORR and DfT to consider changes to the Network Code to provide better protection
Improving average speed/velocity of rail freight services	There are workstreams either set up (Scotland) or in development (England & Wales) to consider how the speed of freight services can be improved. This will require collaboration between stakeholders and Network Rail to find solutions to help improve the average speed of services
Loads Books and associated tables and dependencies reviewed and updated	Commitment to review and update the Loads Books in CP6. This includes the tables and dependency documents that support these publications
Increase rail freight growth	Work with freight operators and stakeholders to support freight growth for the sector. In Scotland, Network Rail is developing a Growth Plan that forms part of Transport Scotland HLOS requirements, elsewhere in the UK Network Rail will work with the sector to support opportunities and FNPO will develop growth plans for England & Wales to support scorecards metrics over the control period
Controlled Emission Toilets (CET)	We will continue the dialogue with the charter sector to find the most appropriate way to manage this issue and find a workable solution for the rail industry
Charter Trains Strategic Capacity	FNPO will discuss and develop a Strategic Capacity catalogue of paths for Charter Services

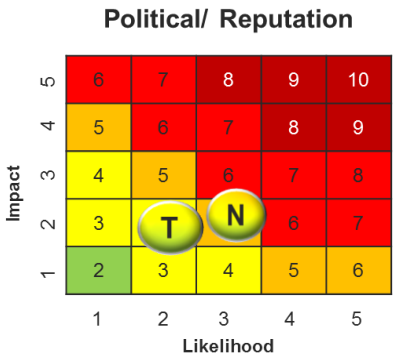
5.2. Locally driven objectives activity prioritisation and risk outcome

No.	Key objective drivers (constraints, risks and opportunities)	What we plan to do	Owner	Timescale (start/ finish)
1	O: More robust end to end process for national operators & planning access	Undertake a review working with both internal access planning teams and national operators to identify how the processes and arrangements with planning access can be improved for cross route operations	Head of Strategic Capability	Start April 2019, conclude October 2019
2	R: Geographic Routes developing Access Plans/Strategies in isolation	Through the work of the FNPO Capability & Planning Manager, develop relationships with all routes to ensure an understanding and alignment with FNPO customers is known and taken account of.	Head of Strategic Capability	Started April 2018 and will review July 2019
3	O: Reduction in Disputes between geographic routes and FNPO customers	Categorise freight and national passenger operator services on key lines of route to give visibility to Access Planning teams to help improve the dialogue, access proposals and reduce disputes	Head of Strategic Capability	Review August 2019
4	O: Increasing average speeds of freight train services	We will take an intelligent, requirements based approach to improving average speed. For example, targeting improvements based on a commodity – with a greater emphasis on the need for intermodal services to travel quicker	Head of Strategic Capability	Action plan and milestones to be agreed by April 2019
5	R: Access Optimisation	As Network Rail explores ways of being more efficient, access optimisation is likely to be required. This could offer opportunities for wider industry cost reduction, but is also a challenge for national operators	Head of Strategic Capability	Review by April 2020
6	R: Capacity studies not being completed	Work with train planning and access planning to identify where operators will require more detailed evidence of available capacity on diversionary routes and allocating this work to an appropriate Network Rail team at an earlier stage in the Engineering Access Statement process	Head of Strategic Capability	Review starts April 2019 and periodic feedback
7	R: Late changes to major projects	Previous major projects have made late changes to previously agreed access plans. The Capability & Planning Manager will work with project teams to improve their understanding of the problems this can cause for FNPO customers. Developing processes that enable better tracking of late change access proposals	Head of Strategic Capability	Review and feedback by December 2019
8	O: Access Frameworks	There is an opportunity to revisit the access frameworks developed by Industry Access Planning (IAP) and by working with FNPO operators to update and improve these documents and where they can add value to the access planning process.	Head of Strategic Capability	Review and feedback by December 2019
9	O: Strategic Capacity receiving a timetable offer in the same way an operator does	From the December 2017 Working Timetable, a bid and an offer will be undertaken for Strategic Capacity. This process will continue through CP6	Head of Strategic Capability	On-going through the next 7 years
10	R: Strategic Capacity paths for freight use are not protected 100%	Continue discussions with DfT and the wider rail freight industry to ensure a mechanism is in place to protect Strategic Capacity for freight use in a robust manner	Head of Strategic Capability	Strategy to tackle by May 2019

11	O: Newly developed Strategic Freight Capacity paths for operator use	New paths to be developed on the key routes highlighted in the Strategy for Strategic Freight Capacity document based on the gap between existing freight paths and future requirement.	Head of Strategic Capability	On-going through the next 7 years
12	O: End to end review of gauging process within the rail industry	FNPO will participate in an end to end process review of how we undertake and manage gauge and capability on the UK Rail Network. It is a complex process, with a number of parties involved both internal to Network Rail and external through TOC and FOC customers.	Head of Strategic Capability	Initial review by June 2019 and proposals by December 2019
13	O: Review and update of freight related publications and loads data	Undertake a review and update of RT3973 forms, Freight Loads Book, Specially Authorised Loads and Heavy Axle Weight permissions. These are key publications for freight customers and we will work with colleagues in the routes for asset information	Head of Strategic Capability	Issue plan for review by April 2019
14	O: Develop and deliver an interactive digital map showing rail network capability	Aligned to the review and update of gauge & capability and the freight related publications, development of a digital map that enables the user to click on a line of route and see what details on RA, axle weight information, capability of the network and permitted wagon/container combinations	Head of Strategic Capability	Deliver by April 2021
15	O: Section Running Times (SRT's)	Work with SO and stakeholders to fill the gaps and develop new SRTs for freight traffic. Identify the priorities from freight operators, including timing loads	Head of Strategic Capability	Complete review and deliver by April 2021
16	O / R - Track Access Contract	Establish a suitable contract that serves the purpose of Caledonian Sleepers' business and affords Network Rail the opportunity to undertake work at Euston and on the WCML for HS2	Head of Customer Relationship Management & Freight Policy (HoCRMFP)	In place by September 2019
17	O - Introduction of Mark V rolling stock	Opportunity to further improve performance and service offering with the introduction of Mark V coaching stock	HoCRMFP	Ongoing
18	O - New Traffic	Develop business opportunity for more paths to the Far North of Scotland	HoCRMFP	March 2020
19	O - Last Mile Initiative	Further understand and deliver improvements in preventing 1-2 minute losses caused on approach to destination	HoCRMFP & Routes	Ongoing
20	O Establish a catalogue of Strategic Capacity for Charters	Establish a full catalogue of strategic capacity by December 2020	Charters CRE	March 2020
21	O Work with ORR to review and support an appropriate regulatory regime for charters	Develop options for the contractual protection of charter paths, as well as the limitation of 'go anywhere' rights to bid Establishment of agreed options for an appropriate regulatory regime	Charters CRE Charters CRE	March 2020 March 2022
22	R Ability to develop a robust plan for the fitment of retention tanks to charter rolling stock	Cost estimates have been generated for the fitment of retention toilet tanks to charter heritage fleet with Charter TOCs. The costs associated with fitment of retention tanks to charter rolling stock is currently estimated at £12.6m. FNPO will lead the industry team to establish Network Change to eradicate the release of effluent onto NR infrastructure.	Charters CRE	August 2019

23	R Ability to develop a robust plan for the fitment of ETCS to charters fleet	Agree plan with ETCS project for the funding and fitment of ETCS to charter fleet	Head of Strategic Capability	March 2024
24	O Establish Joint Performance Strategies with Charter Operators	Agree and implement the detail of a performance strategy with each Charter TOC	Charters CRE	June 2019
25	O Establish a Joint Safety Plan with Charter Operators	Agree and implement the detail of a Joint Safety Plan with each Charter TOC, to include for example fire risk protocols, on train discipline, SPAD reduction plans	Charters CRE	July 2019





Summary of risk outcome:
There is a risk that current capacity and capability constraints of the Network, is impacting train service performance and future business development opportunities, due to limitations in existing processes and funding availability. We have strengthened our team, by creating a new Strategic Capability team who will work closely with all stakeholders, SO and Route to identify process improvements that will mitigate the risk to allow us to achieve target risk profile

6. Sustainability & asset management capability

6.1. Sustainability objectives

Key stakeholder priorities	Response
Rail network weather resilience	FNPO is currently developing its strategy on Sustainability and considering how it resources the activities required. Details by June 2019. Annual reviews are undertaken by the routes on weather resilience and this should form the basis of the strategy
Traction and energy use	FNPO is currently developing its strategy on Sustainability and considering how it resources the activities required. Details by June 2019
Air Quality and the environmental impacts of rail	FNPO is currently developing its strategy on Sustainability and considering how it resources the activities required. Details by July 2019

6.2. Sustainability

No.	Key objective drivers (constraints, risks and opportunities)	What we plan to do	Owner	Timescale (start/ finish)
1	O: Waste minimisation	Undertake an annual review on how FNPO can reduce waste across the team	Head of Strategic Capability	Annually through to 2024
2	O: Energy and carbon efficiency	Work closely with our customers to understand how they are developing initiatives to become more efficient with energy and carbon. Add agenda item as part of Level 1 meetings	Head of Strategic Capability	Annual overview
3	O: Increase socio-economic benefits	Develop key messages on the socio-economic benefits of rail working closely with customers and stakeholders	Head of Strategic Capability	Develop by July 2019
4	R: Air Quality	This is a key issue for Governments in England & Wales and Scotland, for air quality limits and emissions reductions. FNPO will work with customers and stakeholders to understand how the sector is tackling this and build on its already low contributor to emissions	Head of Strategic Capability	April 2020
5	R: Weather resilience	Work with geographic routes, customers and stakeholders to understand more on the impact of weather on the network and FNPO customers operations	Head of Performance	Annual review
6	R: Managing environmental and community risk	Review and work with the Network Rail central team to develop the strategy	Head of Strategic Capability	October 2020

6.3. Sustainable Development strategy

Network Rail needs to meet industry good business practice in managing sustainability and work to improve its environmental and social impacts.

In July 2017, the Scottish High Level Output Specification (HLOS) stated that it required 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. It went on to confirm, that a metric needs to be produced for measurement in CP6 which drives behaviours to reduce overall traction and non-traction energy use by the end of CP6.The aim is to monitor and reduce the overall environmental impact of rail. In addition, Transport Scotland requires Network Rail to work with the rail industry to develop KPIs for monitoring the impact and mitigation of climate change upon network disruption.

During CP6, FNPO will work very closely both internally and with customers and stakeholders to develop strategies and plans to manage sustainable development. This will cover key areas such as air quality, weather resilience and promoting and helping to develop initiatives on the wider socio-economic and environmental benefits of rail. FNPO adheres to the existing Sustainable Development strategy and will continue to adapt in line with further developments during CP6.

7. Financial performance

7.1. Financial performance objectives

Financial Performance		18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	Achievability
Financial Performance Measure (FPM) excl enhancements	WORSE THAN TARGET	-£10m	TBC	TBC	TBC	TBC	TBC	TBC	TBC	
	TARGET	£0m	£0	£0	£0	£0	£0	£0	£0	
	BETTER THAN TARGET	+£10m	TBC	TBC	TBC	TBC	TBC	TBC	TBC	
Lost funding (£m)	WORSE THAN TARGET	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	
	TARGET	£0m	£0m	£0m	£0m	£0m	£0m	£0m	£0m	
	BETTER THAN TARGET	10%	10%	10%	10%	10%	10%	10%	10%	

Key stakeholder priorities	Response
Safety	A £22m (1718 prices) FNPO Safety Improvement Programme has been funded through CP6. This will allow us to work closely with FOCs, NPO's, end users to identify schemes to improve safety on Network Rail infrastructure.
Traffic Growth	The Business development team performs market research and customer engagement to identify opportunities both for Network Rail investment and 3rd Party investment, improving the conditions required for growth.

7.2. Financial performance activity prioritisation

No.	Key objective drivers (constraints, risks and opportunities)	What we plan to do	Owner	Timescale (start/ finish)
1	**C:** Network Capacity constraints Freight traffic growth. **O:** Successful investment and delivery can result on material improvements in freight traffic	Identify schemes that increase the number of terminals and railheads in strategic locations. Work with the SFN steering group and DfT to identify future enhancement funding that will benefit freight Customer teams complete service plan reviews with freight operators to trial longer and heavier trains, increasing tonnage moved without the need for extra network capacity.	Head of Business Development Head of Customer Relationship & Freight Policy	Ongoing through CP6 Ongoing through CP6
2	**R:** Recent downward trend of train performance adversely affects our customers business, and results in Network Rail incurring schedule 8 costs.	FNPO Performance team agrees performance plans with our customers to collectively improve performance. Analysis is also performed to challenge routes on under-performance with the intention of influencing improvement. Achievable performance trajectories were agreed for CP6 with our customers to better manage expectations and reduce the Network Rail financial risk.	Head of Performance	Ongoing through CP6
3	**R:** Lack of access rights means many key freight flows are at risk of being lost with timetable changes.	The customer teams encourage operators to apply for access rights as a matter of priority to protect current flows and work with customers to secure through the industry processes	Head of Customer Relationship & Freight Policy	Ongoing through CP6

7.3. Financial sustainability strategy

FNPO does not manage assets, our role is to influence in the following areas to assist Network Rail's asset sustainability;

- **Safety** – through the FNPO Safety Improvement Programme (FSIP), enhancements could be made to infrastructure in collaboration with the local asset teams. This will be done with agreement that the FSIP will fund the works, and the local team will fund the ongoing maintenance. Enhancing the infrastructure will assist in improved maintenance, either through reduced cost or time requirements. Existing maintenance in yards and sidings that NR is obliged to carry out will not be funded through the FSIP, only any enhancements to improve safety and the FSIP governance will detail what is in and outside of the scope to use this programme

- **Operations** – FNPO has Route Freight teams located in Routes Businesses. The teams influence on behalf of our customers/ stakeholders identifying asset related issues. The actions taken will continue to inform asset management of the infrastructure that is key to our customers.

- **Performance –** the FNPO performance team performs analysis on performance trends, facilitates performance plans with our customers and challenges routes on underperformance to increase the likelihood of providing a sustainable level of performance and therefore finance.

- **Scorecards** – FNPO has requested geographic routes include specific freight measures to ensure that the whole business is incentivised to provide Rail Freight with the opportunity to grow, and provide acceptable performance levels.

7.4. Network Rail management connection income

Network Rail manages maintains and develops Britain's national rail infrastructure. Facility owners of freight or passenger facilities such as terminals, ports, sidings, depots, in order to use the rail network need a physical connection in place with Network Rail, consequently followed by the connection contract. Connection contracts set out the rights and obligations between two parties in respect of the ongoing maintenance, repair and renewal of connecting infrastructure and come under the access provisions in the Railways Act 1993, any such agreements need to be approved by Office of Rail and Road (ORR).

The Model Connection Contract (MCC) is an ORR approved template, which has been developed on the same basis as the provisions in the model track access contracts, already produced and adopted for freight and passenger train operations.The costs of maintaining, repairing and renewing connection infrastructure generally have both fixed and variable elements. That means, that some of the costs are present regardless of the level of traffic while other costs vary with the number of services operating over the connection.

We are currently undertaking work to review the current cost model, with the aim of updating the charging regime to align it with the asset lifecycle activities and unit rates used by the asset management teams. This will give great transparency of costs to our customers. This work is ongoing and we plan to engage and consult with customers during 2019, with a view to implementing any changes in CP6.

8. Activities & expenditure

8.1. Cost and volume summary

This plan is predicated on the key assumptions laid out in Appendix B and will be impacted as these assumptions change

Cost summary

RENEWALS COSTS (post headwinds and efficiencies in cash prices)

	Unit of Measure	Funded by	CP5 (£m)	CP6 (£m)						CP7 (£m)	
			18/19	19/20	20/21	21/22	22/23	23/24	CP6	24/25	25/26
Other	£m	Renewals	-	2.7	5.7	5.8	6.0	4.7	24.9	0	0
Total Renewals	**£m**	**Renewals**	**0**	**2.7**	**5.7**	**5.8**	**6.0**	**4.7**	**24.9**	**0**	**0**
Digital Railway		DR Programme	6.9	15.5	50.6	55.4	74.1	73.4	269.1	56.5	50.9
Total Renewals + Digital Railway	**£m**	**All**	**6.9**	**18.6**	**56.3**	**61.2**	**80.2**	**78.1**	**294.0**	**56.5**	**50.9**

Note that Digital railway costs are funded via a Grant offer from the DFT and are not part of network rails final determination.

OPEX COSTS (post headwinds and efficiencies in cash prices)

	CP5 (£m)	CP6 (£m)						CP7 (£m)	
	18/19	19/20	20/21	21/22	22/23	23/24	CP6	24/25	25/26
Operations	5.5	5.9	6.2	6.1	6.3	6.6	**31.2**	**6.5**	**6.7**
Total Controllable Costs	5.5	5.9	6.2	6.1	6.3	6.6	**31.2**	**6.5**	**6.7**
Non-Controllable Costs*		0.15	0.16	0.16	0.17	0.17	0.82	0.18	0.18
Headcount									
Permanent	74	75	75	71	71	71	**73**	**72**	**72**
Agency									

** Network Rail will be joining the railway ombudsman. The estimated costs of for the scheme are currently included in the FNPO plan (as FNPO led on ombudsman engagement) and is pending transfer to a more suitable cost centre in Network Rail ahead of the start of CP6.*

8.2. Digital Railway strategy

The delivery model for the DR Freight Cab Fitment Programme saw FNPO become the Client in May 2018. The wider freight engagement with the Digital Railway Programme is handled centrally through the Freight Stakeholder Group, which has alignment with:

– The changing nature of the DR programme and the need to ensure proper freight engagement in the development of Traffic Management, ATO, C-DAS as well as ETCS
– The role of the geographic routes and Route Project Boards
– The FNPO's "Client" role
– The new Digital Railway Governance Framework

Due to the "go anywhere" nature of freight, the ETCS Freight Programme is a key enabler prior to any broader ETCS infrastructure deployment. As such the ETCS Freight Programme has been established, under the principles of Network Change, to prepare the FOCs to transition to ETCS businesses. The FOCs have been involved from the inception of the programme to ensure their end requirements are met. The programme is essentially in two parts:

– First in Class (FiC) vehicles to prove the design and integration of the ETCS onboard equipment to the vehicle and ensure the associated approvals are complete and the design, material supply and instructions are ready for fleet roll out - this part is more a design and development environment
– Fleet fitment rolls out the proven design to the fleet – this part is more of a 'production' environment

In support of the proposed infrastructure ETCS deployments, the current programme schedules the FiC from 2018 to 2022 with the fleet activity commencing 2022 to 2028. Should the infrastructure ETCS deployment plan demand a different vehicle delivery profile this will be change controlled into the ETCS Freight Programme. Associated with the vehicle fitments, the necessary business change activities within the FOCs also form part of the ETCS Freight Programme such as staff training and process and procedural updates.

The programme is structured around 3 main agreements:

Freight Commercial Agreements (FCAs) between Network Rail and each FOC to set out the activities the FOCs will undertake to support their fitment programmes, the compensation framework and the maturity criteria by which responsibility for the on-board equipment transfers to the FOCs Supply Agreement for the provision of up to 21 ETCS FiC projects upto 2022 and fleet fitment of up to 745 vehicles between 2022 and 2028. IP Signalling has led the procurement of a turnkey contract to make the supplier responsible for delivery of a working solution, with approvals as far as they are legally and efficiently able.

Support Agreements which are tripartite between Network Rail, the ETCS supplier and the FOCs for the maintenance of the on-board equipment for 10 years (up to 25 years by exercising options). Responsibility for maintenance costs will transfer to the FOCs when the agreed criteria for system reliability and stability are satisfied.

The FCAs were signed in December 2017 as were the supply and support agreements which had been the subject of a tender competition. The initial FiC works which are funded by the DfT through a Grant Offer and will deliver 3 FiC fitments and 6 completed designs. This (and the funding requested in the table above) will allow the FiCs to be completed, and the fleet fitment to commence, and the associated FOC business change to be undertaken, with the expectation of further funding for fitment in CP7 to complete the project in 2028.

The ETCS (Heritage) fund allows the development of solutions to fit historic vehicles with digital on-board equipment so that current network access rights held by Charter and Heritage Operators are maintained. Work completed to date in conjunction with the Charter and Heritage community has shown that the application of ETCS to such vehicles is feasible and an outline programme spanning CP6 and CP7 has been developed to undertake a fitment programme which is reflected in this submission.

8.3. Telecoms strategy

FNPO is aware of and will adhere to, the Network Rail Telecoms Short Form Strategy where appropriate, through the activities of our team on behalf of national operators.

9. Delivery strategy

FNPO is currently working on the delivery plan and the strategy to support this. Further details will be included in further iterations of this RSP and the detail discussed with stakeholders of FNPO

10. Headwinds and efficiency

1819 Prices	CP6 (£m)					
	19/20	20/21	21/22	22/23	23/24	CP6 Total
At Current Cost level	5.9	6.2	6.1	6.3	6.6	**31.2**
Headw inds	-	0.1	0.1	0.1	0.2	**0.4**
Efficiencty	-	-	0.3	0.3	0.3	**0.9**
Post efficient spend	5.9	6.0	6.4	6.3	6.5	**31.1**

Headwinds are associated with the increasing complexity of the rail freight market with the structural market change from coal towards intermodal and construction.

Efficiencies are to be achieved through FNPO's commitment to continuous improvement, where we expect to be able to reduce overall head count requirements through reallocation of job roles during natural staff turnover.

The FNPO team also continues to work with industry and internal stakeholders to identify methods to reduce whole industry cost.

11. Risk and uncertainty in the plan

	Unit of Measure	CP5 (£m)	CP6 (£m)					CP7 (£m)	
		18/19	19/20	20/21	21/22	22/23	23/24	CP6	24/25	25/26
Risk (DD Route held)	£m	-	00	0.2	0.2	0.2	0.3	**1.0**	0.3	0.3

This section sets out our estimate of the degree of financial uncertainty within our plan.

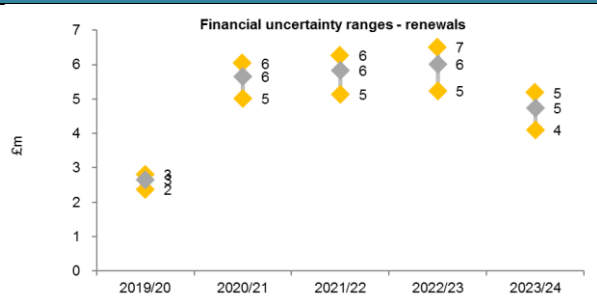
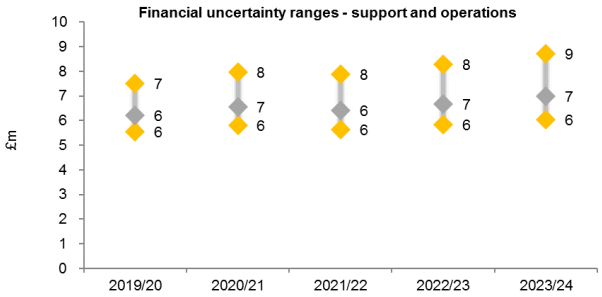
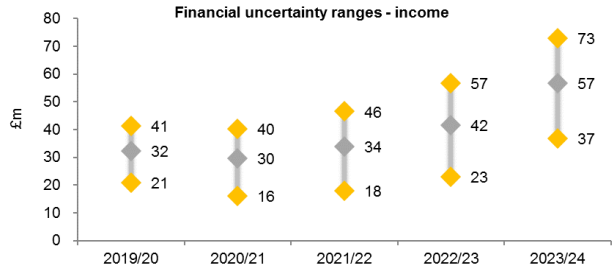
Pre-efficient costs in our plan are based on 'current rates' but include any additional scope needed to deliver the outputs in the plan. We have used CP5 exit rates for support forecasts. Drivers of rate increases (headwinds/inefficiencies), or rate reductions (efficiencies/tailwinds), where there is a reasonable expectation they will occur, have been identified separately from the core CP6 plan.

The combination of our core CP6 plan, headwinds/tailwinds and efficiencies/inefficiencies is our 'submission' and represents the 'most likely outcome' for CP6. However, it excludes any funding for financial risk that sits in our plan.

Whilst it is difficult to precisely estimate the likelihood of delivering our plan in CP6, it seems reasonable to suggest that, overall, there is a 45% to 55% likelihood of the outputs in the plan being delivered for the forecast cost in our CP6 plan (i.e. our plan is set at around P50). This means that approximately half of the time, we will be able to deliver our plan for the forecast cost. However, financial uncertainty varies between expenditure categories. For example, we consider that there is significantly more uncertainty in our renewals plan than in the support, operations and maintenance plans in CP6. Our analysis also shows that there is significantly more financial uncertainty in later years of the control.

Figure 11.1, below (page 40), presents our estimate of the overall range of financial uncertainty across our income and expenditure for CP6. It also identifies the main drivers of the uncertainty ranges. The information in this table is based on route analysis of the financial uncertainty in support and operations, maintenance and renewals costs, and income. The spot values in Figure 11.1 include headwinds/tailwinds and efficiencies/inefficiencies. The financial uncertainty ranges represent our assessment of the outturn income and expenditure that could occur in 95% of scenarios in CP6.

Figure 11.1: CP6 financial uncertainty ranges

Area	Potential range (low – spot – high)	Summary of key drivers of the uncertainty range	% of range	
		Driver of range	Lower %	Upper %
Renewals		Under-delivery of safety programme due to project slippage	-10%	0%
		Over-spends due to unforeseen costs	0%	5%
Support and operations		Staff turnover and absence (e.g. maternity, illness) uncertainty	-10%	10%
		Ad-hoc consulting work requirements in relation to Freight traffic growth.	-0%	10%
Income		Freight traffic demand uncertainty and possible capacity constraints.	-13%	10%
		Schedule 4 uncertainty relating to access plans.	-25%	10%
		Performance uncertainty may affect schedule 8	-3%	2%

12. CP6 regulatory framework

This section sets out our latest forecast of expenditure and income for CP6, and also how our forecasts compare to the assumptions ORR made in calculating our CP6 route funding settlement. Consistent with ORR's PR18 final determination, the tables in this section include route-incurred, and allocated, expenditure and income.

CP6 expenditure forecast

In Table 12.1, below, we provide our latest CP6 forecast of expenditure. The forecast, below, will act as the baseline against which ORR measures financial performance in CP6.

Table 12.1: CP6 expenditure forecast

£m in cash prices	19/20	20/21	21/22	22/23	23/24	Total	Other*	CP6
Support	0	0	0	0	0	**0**	4	**4**
Operations	6	6	6	6	7	**32**	0	**32**
Maintenance	0	0	0	0	0	**0**	0	**0**
Renewals	3	5	6	6	5	**24**	0	**24**
Schedule 4 & 8	21	24	26	27	23	**121**	0	**121**
EC4T, industry costs and rates	0	0	0	0	0	**0**	60	**60**
System Operator						**0**	40	**40**
GPF: route	0	0	0	0	0	**1**	0	**1**
GPF: contingent asset management	0	0	0	0	0	**0**	0	**0**
GPF: centrally-held						**0**	0	**0**
Total costs	**30**	**36**	**38**	**39**	**35**	**178**	**104**	**282**

**Other represents the route allocation of national function costs.*

In calculating the route funding settlement for CP6, ORR made assumptions about our costs. Table 12.2, below, compares our CP6 business plan expenditure forecasts with ORR's PR18 final determination assumptions.

Table 12.2: Business Plan vs. Final Determination expenditure assumptions

£m in cash prices	CP6 Business Plan			Final Determination			Variance		
	Route	Other*	CP6	Route	Other*	CP6	Route	Other*	CP6
Support	0	4	**4**	0	0	**0**	0	(4)	**(4)**
Operations	32	0	**32**	31	0	**31**	(0)	0	**(0)**
Maintenance	0	0	**0**	0	0	**0**	0	(0)	**(0)**
Renewals	24	0	**24**	25	0	**25**	1	(0)	**1**
Schedule 4 & 8	121	0	**121**	105	0	**105**	(16)	0	**(16)**
EC4T, industry costs and rates	0	60	**60**	0	58	**58**	0	(3)	**(3)**
System Operator	0	40	**40**	0	47	**47**	0	7	**7**
GPF: route	1	0	**1**	1	0	**1**	0	0	**0**
GPF: contingent asset management	0	0	**0**	0	0	**0**	0	0	**0**
GPF: centrally-held	0	0	**0**	0	1	**1**	0	1	**1**
Total costs	**178**	**104**	**282**	**162**	**106**	**269**	**(15)**	**2**	**(13)**

***Please note**: ORR's PR18 final determination did not separately identify the costs allocated to routes from route-incurred costs. However, the table, above, identifies allocated costs based on underlying information from ORR's analysis.*

Variances to the final determination include;

Inclusion of Freight schedule 8 costs with our expectation that the Freight operators will outperform their benchmarks. All other variances are due to updates in allocation methodologies from other functions.

CP6 income forecast

The expenditure in Table 12.1 needs to be paid for. In Table 12.3, below, we provide our latest CP6 income forecast. Our charging income forecast

reflects our latest forecast of CP6 traffic levels and is consistent with final CP6 price lists.

Table 12.3: CP6 income forecast

£m in cash prices	19/20	20/21	21/22	22/23	23/24	Route	Other*	CP6
Variable charges (VUC, EAUC)	(69)	(72)	(79)	(88)	(100)	**(408)**	0	**(408)**
Stations LTC	0	0	0	0	0	**0**	0	**0**
EC4T	0	0	0	0	0	**0**	(51)	**(51)**
Schedule 4 ACS	(57)	(53)	(66)	(66)	(57)	**(298)**	298	**0**
FTAC	(54)	(50)	(51)	(54)	(52)	**(262)**	262	**0**
Network Grant (SOMR)	0	0	0	0	0	**0**	(5,130)	**(5,130)**
Income from FNPO	0	0	0	0	0	**0**	5,353	**5,353**
Other single till income	0	0	0	0	0	**0**	0	**0**
Income within scope of PR18	**(180)**	**(176)**	**(196)**	**(208)**	**(209)**	**(968)**	**733**	**(236)**

***Please note**: Government grants for corporation tax, financing costs, BT Police costs and enhancements were not agreed as part of ORR's final determination so we have not included them in our forecast of income for completeness.*

**Other represents the route allocation of national function income.*

In calculating the route funding settlement for CP6, ORR made assumptions about the amount of income we will receive from charges and other income. Table 12.4, below, compares our CP6 business plan income forecasts with ORR's PR18 final determination assumptions.

Table 12.4: Business Plan vs. Final Determination income assumptions

£m in cash prices	CP6 Business Plan			Final Determination			Variance		
	Route	Other*	CP6	Route	Other*	CP6	Route	Other*	CP6
Variable charges (VUC, EAUC)	(408)	0	**(408)**	(414)	(0)	**(414)**	(6)	(0)	**(6)**
Stations LTC	0	0	**0**	0	0	**0**	0	0	**0**
EC4T	0	(51)	**(51)**	0	(53)	**(53)**	0	(3)	**(3)**
Schedule 4 ACS	(298)	298	**0**	0	0	**0**	298	(298)	**0**
FTAC	(262)	262	**0**	0	0	**0**	262	(262)	**0**
Network Grant (SOMR)	0	(5,130)	**(5,130)**	0	(5,132)	**(5,132)**	0	(2)	**(2)**
Income from FNPO	0	5,353	**5,353**	0	5,353	**5,353**	0	0	**0**
Other single till income	0	0	**0**	(22)	0	**(22)**	(22)	0	**(22)**
Income within scope of PR18	**(968)**	**733**	**(236)**	**(436)**	**168**	**(269)**	**532**	**(565)**	**(33)**

There are no material changes to the final determination in this table.

CP6 fully allocated costs (FNPO and geographic routes)

Table 12.5 builds on Table 12.1 by showing FNPO fully allocated costs, which reflects the way that we presented the forecast revenue requirement in our SBP. The net revenue requirement is the amount of income that we need to recover from customers and funders in CP6 to deliver the outputs in our route plan.

The FNPO fully allocated costs includes FNPO costs, including amounts paid to geographic routes, reflecting that the use of route infrastructure by Freight and National Passenger operators. We show both avoidable and minimal network costs allocated to freight operators, and those allocated to national passenger and charter operators.

Table 12.5: FNPO revenue requirement

£m in cash prices	19/20	20/21	21/22	22/23	23/24	Total	Other*	CP6
Support	0	0	0	0	0	**0**	4	**4**
Operations	6	6	6	6	7	**32**	0	**32**
Maintenance	0	0	0	0	0	**0**	0	**0**
Renewals	3	5	6	6	5	**24**	0	**24**
Schedule 4 & 8	21	24	26	27	23	**121**	0	**121**
EC4T, industry costs and rates	0	0	0	0	0	**0**	60	**60**
System Operator	0	0	0	0	0	**0**	40	**40**
GPF: route	0	0	0	0	0	**1**	0	**1**
GPF: contingent asset management	0	0	0	0	0	**0**	0	**0**
GPF: centrally-held	0	0	0	0	0	**0**	0	**0**
Net revenue requirement before allocation of route costs	**30**	**36**	**38**	**39**	**35**	**178**	**104**	**282**
Freight avoidable costs (including variable costs)	302	343	358	378	351	**1,733**	**0**	**1,733**
NPO and Charter avoidable costs (including variable costs)	185	195	203	203	184	**970**	**0**	**970**
Minimal network geographic route costs allocated to Freight	324	362	380	394	375	**1,835**	**0**	**1,835**
Minimal network geographic route costs allocated to NPO and Charter	151	164	165	171	163	**815**	**0**	**815**
Net revenue requirement inc. fully allocated route costs to FNPO	**993**	**1,100**	**1,145**	**1,185**	**1,108**	**5,531**	**104**	**5,635**

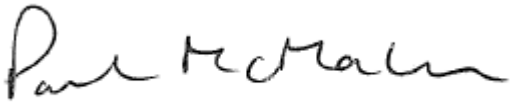
13. Sign-off

This document and accompanying templates are owned by the Managing Director Freight & National Passenger Operators (FNPO)

Submission of this document indicates confirmation that:

- **all appropriate level 1 assurance activities have been undertaken;**
- **the MD FNPO is satisfied with the quality, currency and appropriateness of the content of this document as well as the cost, volume and activity projections to which it refers;**
- **the signatories are satisfied that the plan has been assessed as deliverable, subject to the assumptions articulated in Appendix B.**

Authorised by:



Paul McMahon
Managing Director, FNPO 01 March 2019

Simon Harding
Financial Controller, FNPO 01 March 2019

Appendix A Stakeholder Engagement

1. Scope and Methods of Engagement

a. *Who are our stakeholders*?

Our approach to stakeholder engagement reflects the fact that FNPO is different. Our customer and stakeholder base is uniquely varied ranging from freight operators, through industry third parties (such as ports and shippers and manufacturers) to Governments, the regulator and other public bodies. Our internal stakeholders include the geographic routes and System Operator.

Engaging with our stakeholders is an essential part of the day to day business of the FNPO team. It provides us with valuable insights that help us to better understand our customers business needs and helps us to manage their expectations.

Our engagement with our stakeholders to date has enabled us to produce a far-reaching and ambitious plan. Our collaborative approach to planning will need to be taken forward in order to finalise our delivery plan. As we set out in the RSP, transparency, honesty and positive engagement has been, and will continue to be our approach. Throughout the process we have refined and adapted our engagement approach based on feedback from our customers.

b. *How have we engaged with our stakeholders*?

We have engaged extensively in the development of our RSP and will continue this through to the subsequent delivery plan. We are grateful for the support and positive input our customers and stakeholders have provided. During the early development of the plan, the width and breadth of our stakeholder base meant that a number of workshops were needed to cover our passenger and freight customers and stakeholders, so we could establish / review views and priorities. We held six CP6 customer focused events, with over 60 different customers, end users and stakeholders represented. This approach has enable us to draw out a set of clear stakeholder priorities.

In the latter stages of the plan we have focused on providing meaningful engagement for our key stakeholders through bi-lateral meetings. We recognise that some of our stakeholders have not felt that they have been as fully engaged through the PR18 process. We aim to address this with the planned engagement around the final determination and delivery plan, potentially with smaller more focused groups, looking at core areas relevant to the range of stakeholders.

External Stakeholders	Internal Stakeholders
Customer engagement processes including regular meetings covering safety, performance, commercial and wider strategic and business development issues	Network Rail governance and reporting structure
Cross-Industry Groups, e.g. RDG Freight Group, Freight Joint Board, Freight Network Study Board	Organisational alignment with Route Freight teams physically based in the geographic routes and in a matrix arrangement. Freight Service Delivery Managers are based in the National Operations Centre
The roll out of Route Supervisory Boards are awaiting the 100 day and rail reviews	FNPO will establish an internal “Level 1" quarterly review process between FNPO, the System Operator and each geographic route
Network Rail Customer & Freight End User Satisfaction Survey and FNPO team quarterly “pulse check”	
CP6 Stakeholder engagement forums	

2. Outcomes of engagement

   a. *What are our stakeholder requirements*?

   The table below articulates a number of areas that our stakeholders highlighted as requirements/priorities for FNPO to develop its thinking and focus on. These were derived from both the workshops and feedback directly from stakeholders as part of the engagement we have undertaken throughout the PR18 process.

Stakeholder Priorities	
Safety	Maintaining a safe rail network
Performance	Deliver train service performance that meets customer expectations and regulatory targets
Cross-route challenges	Access, best practice sharing, consistency and joined-up planning and delivery
Efficiency/value for money	Network Rail needs to be more efficient and provide value for money
Growth	Developing and growing passenger and freight services
Geographic Routes and System Operator (SO)	How FNPO will interact and work with the Routes and System Operator and the governance around this
Capacity	The need to increase and protect capacity
Capability	Maintain and improve the capability of the network including diversionary routes
Journey Time Improvements	Developing journey time improvements for passenger and freight services

b. *How have we prioritised stakeholder needs*?

We have reviewed the stakeholder priorities and considered how these can be organised, developed and prioritised. Many are issues that require a number of different parties to collaborate to solve and this includes stakeholders from different groups, DfT, Transport Scotland, ORR and different parts of Network Rail.

These priorities will form the basis for a range of different meetings and the structure of how we do business, to align our activities with those priorities our stakeholders see as crucial. Further clarity on this will be discussed and agreed with stakeholders as part of the strategy we are developing for CP6.

Must

FNPO must keep listening and working with our stakeholders as enter and go through CP6. We know that our stakeholders have indicated that their key concern is that further devolution will dilute their voice within Network Rail's organisational structure. Other key areas for them are:

– Track access charges
– New traffic
– Relationships and governance arrangements with System Operator and Geographic routes
– Supporting growth and modal shift from road
– Scotland Growth Plan

This RSP has started to address the stakeholder priorities and will continue the process of the on-going engagement and delivery of many of these priorities. FNPO stakeholder priorities will undoubtedly change over the next few years and we will be flexible in adapting to these changes.

Should

FNPO should look to develop and discuss priorities that while not immediately critical to a majority of stakeholders, may have a dependency on the completion of the 'must do' activities. We should align our FNPO stakeholder strategy and priorities with the SO stakeholder strategy to ensure continuity between the two, as a number of our stakeholder priorities and key requirements are linked.

Could

These are requirements that may benefit fewer stakeholders and could be developed and included through CP6 if value for money solutions are available.

Won't

FNPO won't develop priorities and requirements which are unachievable in CP6 or which represent least value to our stakeholders in CP6. These may be reconsidered in future control periods or highlighted as important to be carried across into CP7.

c. *How do stakeholder priorities link to our short and long-term route objectives*?

In the short term we have linked a number of the priorities to the customer scorecard (short term) process, which is carried out with FNPO customers and have formed a number of our objectives in the RSP. Each of the key themes highlighted on the previous pages have been and will continue to be discussed and developed, as part of the scorecard process and for the purposes of developing our RSP.

3. Ongoing engagement

Stakeholders received a communication in December 2018 detailing the work to date and setting out the steps post final determination. This took the form of a detailed email. Early in 2019, tailored forums will be organised with different groups of stakeholders. As with the early development of the plan the forums will be split between national passenger operators and freight operators/freight end-users. As part of regular meeting cycle, we will use this opportunity to brief stakeholders on a rolling basis. We will follow-up with further face to face engagement where required and if required series of forums ahead of the publication of the delivery plan.

We are continuing to develop our engagement strategy with our stakeholders. We have established key outcomes into CP6 that are detailed below.

– We will form a steering group to co-ordinate and align our stakeholder engagement on the route. The strategy will be owned by the CP6 lead and led by the senior communications manager.
– We will document out stakeholder engagement and map our activity with stakeholders
– We will carry out an annual assessment of our stakeholder engagement and produce a report. As a result of continuous feedback and assessment we will refresh our stakeholder strategy annually to improve the effectiveness of our approach.

Method of engagement	Purpose	Stakeholders	Date	Expected outcome
Email update to all stakeholders	Update stakeholders after RF8. Option to arrange 1:2:1 meetings	All	COMPLETED November 2018	Stakeholders are aware of the updated RSP, next steps and an opportunity to provide feedback on key priorities
Freight and freight end-user forums	To discuss the stakeholder priorities and feed into the RF11 delivery plan	FOCs, FEUs,	COMPLETED January 2019	Discuss, understand and refine the priorities ahead of the delivery plan and outline what the draft looks like
National Passenger Operators/Charters forum	To discuss the stakeholder priorities and feed into the RF11 delivery plan	National Passenger Operators & Charters	COMPLETED January 2019	Discuss, understand and refine the priorities ahead of the delivery plan and outline what the draft looks like
1:2:1 meetings where required	In line with the strategy	All	On-going	Continued stakeholder engagement and dialogue
Continued engagement through CP6 (different methods)	In line with the strategy	All	On-going	Continued stakeholder engagement and dialogue
Regular on-going dialogue	Use existing forums and meeting structure	All	On-going	RSPG, Level 1/2 meetings as detailed to update on an ad hoc basis

Appendix B Key assumptions

Ref no.	Topic (e.g. access, deliverability, climate etc.)	Assumption	Areas impacted (e.g. all opex, track renewals, all spend etc.)
1	Safety	• c £22m FNPO safety improvement programme being identified and available • Collaboration with FOCs	• Safety targets in particular derailments, SPAD's and Customer Staff LTI's
2	Performance (FNPO)	• Collaborative working between Network Rail and Customers (Freight & Passengers) to deliver agreed joint performance strategies. • Material increases in Intermodal and construction traffic. • Performance levels set out in schedule 8 benchmarking will be achieved	• FNPO Performance targets • FPM - Schedule 8 payments • Customer and Freight End User Satisfaction
3	Asset Management	• Geographical Route support of freight network optimisation programme – paused and will be reviewed early in CP6	• Safety targets • Performance targets • Freight traffic growth • Customer and Freight End User Satisfaction
4	Capability	• Routes will maintain route capability e.g. linespeed, route availability	• Freight traffic growth • Capacity and capability to deliver improved average speed • Customer and Freight End User Satisfaction
5	Capacity	• Support from System Operator to optimise and develop timetable	• FPM • Freight traffic growth • Customer and Freight End User Satisfaction

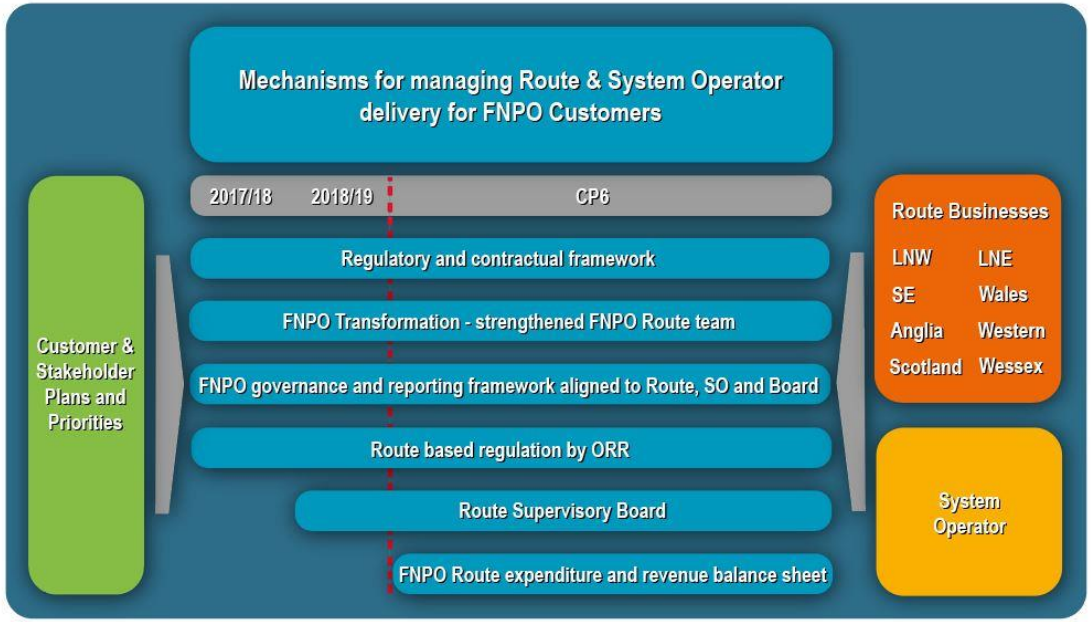
Ref no.	Topic (e.g. access, deliverability, climate etc.)	Assumption	Areas impacted (e.g. all opex, track renewals, all spend etc.)
6	Rail freight growth	• Secure affordable sustainable access charges for Freight sector • DfT/TS support for funding freight enhancements. • Forecasts are based on conditions that do not favour either road or rail, and are therefore subject to change based on government policy. • Forecasts are based on medium market growth. • Forecasts and underlying assumptions will be reviewed in early 2019 against government policy and economic activity and forecasts.	• Net tonne mile targets • Service Plan Review • Capacity and capability to deliver improved average speed • Customer and Freight End User Satisfaction • Track access income forecasts
7	Business development	• DfT/ ORR support for phased funding that supports freight sector 15 year, c£2bn strategic freight network development plan. • Support for innovative funding/financing arrangement to support growth and socio-economic value capture.	• Net tonne Mile • Service Plan Review • Capacity and capability to deliver improved average speed • Customer and Freight End User Satisfaction • FPM
8	Digital Railway	• Non-capital expenditure will be incurred as a direct result of the digital railway schemes noted in section 7.	• Operating expenditure • Schedule 8
9	HS2 materials by rail	• HS2 will move much of its materials in and out by rail. Assumptions for this have been included in the plan, but risk adjusted for prudence as a result of the uncertainty that exists around the delivery timescales of the project.	• Freight Income

Appendix C Route context

FNPO is different: Our customer base is uniquely varied, with freight operating companies (FOCs), CrossCountry, Caledonian SIeeper, charter operators and aspirant open access passenger operators, who together operate c1000 trains per day. Our stakeholder base is equally varied. Our external stakeholders range from train and freight operators, through industry third parties (such as ports, shippers and manufacturers) to Governments, the regulator and other public bodies. Our internal stakeholders include all the geographic routes and the System Operator. FNPO does not physically manage infrastructure or train operations. We deliver performance and other outputs for our customers in conjunction with and through the geographical routes, the System Operator and other Network Rail functions.

Route Delivery for FNPO Customers

As Network Rail continues to transform, devolving greater accountability and responsibility to Route Businesses, FNPO will continue to work collaboratively with each geographical route to ensure continued delivery to our customers. The mechanisms already in place to give our customer the necessary assurance include the following:



– **Regulatory and contractual framework to ensure fair treatment of all customers operating on the rail network**

Network Licence, Condition 1 requires that Network Rail meets the reasonable requirements of its customers in respect of managing the network. ORR can, and does, highlight issues and puts them on the "regulatory escalator" in respect of individual Routes as well as the company as a whole.

Each operator has a Track Access Contract which sets out the rights and obligations, including making reference to the Network Code (and Railway Operational Code) which is the common set of rules that apply to all TOCs and FOCs to run their trains on Network Rail infrastructure.

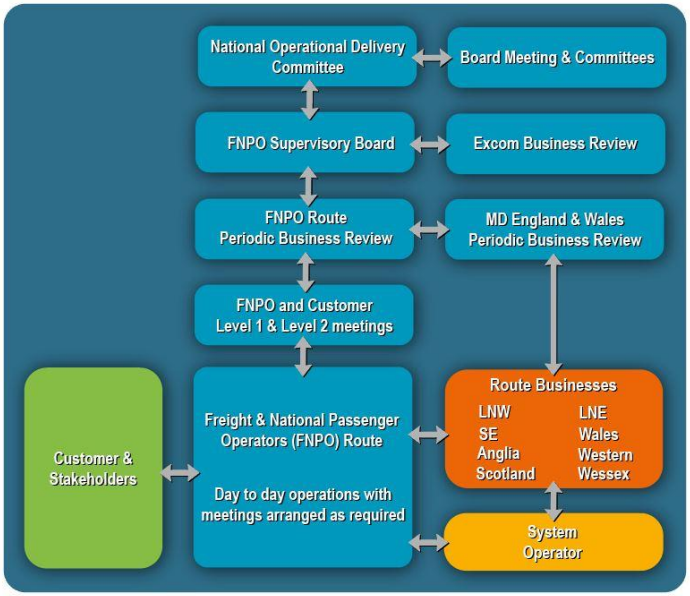
– **Route Supervisory Boards**

Network Rail had been piloting a Route Supervisory Board for Western Route, which includes TOC and passenger representation. Some of the other routes have established Supervisory Boards, but further roll-out is on hold pending the internal Network Rail 100-day review and potentially the Williams Rail Review. Further details will be updated in future versions of this plan.

– **FNPO governance and reporting structure aligned to geographical routes**

FNPO is subject to the same governance within Network Rail as geographical routes. Executive Committee and Board reporting packs include FNPO reports alongside Routes. The FNPO scorecards have equivalent status as Route scorecards and are a key part of the Network Rail reporting/governance framework.

The key meeting structure and associated escalation process is summarised below:



– **Strengthened FNPO Route team building stronger links with geographical routes and customers**

We have implemented the FNPO organisational structure to strengthen our customer focus and governance of the Routes and SO. Senior Route Freight Managers and Lead/Route Freight Managers are physically based in the Routes and work closely with geographical Route colleagues in a matrix arrangement.

Freight Service Delivery Managers work closely with route controls on real-time freight train performance and regulation – in particular in relation to service recovery following perturbation.

For CP6, further governance processes will be put in place:

– **FNPO Route expenditure and revenue balance sheet supporting great transparency and control**

FNPO will have its own revenue requirement, similar to the eight geographical routes and the system operator. This will provide greater transparency on all income and costs associated with our customers' use of the network; provide a basis for FNPO to better work with geographical routes to ensure that expenditure supports FNPO customer outputs; and will allow FNPO to function more fully as an independent route business.

Geographical Route summaries (see Appendix B). These set out how each Route and FNPO will work together to deliver the Route Strategic Plan. It outlines existing FNPO activity, and then describes the impact of the plans and aspirations of FNPO customers to grow and develop their businesses. It summarises what Network Rail needs to do to deliver these strategies and how, in doing so, efficiencies can be identified and realised.

– **Route based regulation by ORR**

Over the last year ORR have started to meet twice a year with each route (RMD and Exec team) to understand progress and issues. This provides both a basis for its existing regulation and how this will be progressed in CP6.

System Operator Delivery for FNPO Customers

The role of the System Operator (SO) and its engagement with FNPO customers is crucial to our business performance. With FNPO being the principal point of contact with national operators, accountable for the delivery of their performance and other outputs and working closely with the geographic routes, an effective SO function will help FNPO and its customers deliver both freight and passengers, safely and efficiently. The SO has established teams to align to each Route, including FNPO. These teams encompass network strategy & planning and capacity planning.

The relationship between FNPO and SO will be carried out at different levels of the organisation, with Managing Director, FNPO Executive and other key roles, having in some cases, day to day interaction with SO. The Head of Strategic Capability post will maintain alignment between the two functions. In addition, FNPO will work closely with SO to understand better how we can help collectively focus on the freight and national operators priorities in the short and medium term into CP6.

The SO brings the needs of different parties together to ensure that the enhancements to the network are planned and capacity is allocated effectively. This is divested through different parts of SO and these are:

– **Network Strategy and Planning**

The Long-Term Planning Process (LTPP) is led by teams under the Strategy & Planning Directors in SO. This part of SO seeks the views of stakeholders and the roles within these teams align with devolved funders and other customers. There is a direct alignment with FNPO, as a Head of Strategic Planning links directly with FNPO. This role will work closely with FNPO to understand, influence and inform the LTPP and other strategic planning matters relating to national operators.

– **Capacity Planning**

The SO organisation is structured to provide a strategic focus for planning activities, capability and capacity analysis, the working timetable (WTT) development process, including the delivery of industry steering groups to support timetable change, management of the timetable planning rules and delivery of permanent alteration for operator requirements. Capacity Planning also leads on the weekly adjustment of the timetable for engineering works, short term operator requirements and the network wide leadership for Access Planning. SO will set the policy for the way Network Rail manages Access Planning. Capacity Planning will support the delivery of the Access Planning process and provide a national framework in which to plan and prioritise engineering work. The delivery of many of the Capacity Planning activities is influenced by European Legislation. A focus area for the European Commission has been the harmonisation of timetabling and engineering access planning activities across Europe. The scope of any legislation changes may adjust the process and systems used by Capacity Planning in this area during CP6.

– **Programmes and Policy**

This team provides a central resource to undertake a range of central (non-geographic) cross-functional activities and also provides support to the geographically based teams in specific disciplines. The SO team has portfolio and programme management, client portfolio services, analysis and forecasting as some of the key roles and responsibilities within this part of SO.

– **HS2**

The scale and complexity of HS2 requires both SO and FNPO to be heavily involved at different levels. FNPO and its customers need to understand the full impact of HS2 on the day to day freight operations, before, during construction and after delivery of HS2. FNPO will work with HS2 Ltd and our customers to ensure national operators are considered throughout the whole lifespan of the HS2 project. FNPO interest includes the impact on the performance and network capacity available to our customers, particularly, freight following the opening of the first section of HS2 planned for 2026.

Freight

Route Strategic Plan

Freight

The role of rail freight

The freight and logistics sector is critically important to the competitiveness and growth of the UK economy with rail freight playing an important role within many sectors of the economy. The transportation of bulk goods remains a key strength while the burgeoning consumer goods market has driven significant growth in intermodal rail freight and modal shift from road.

Rail transported 17.8 billion tonne kilometres of freight in 2016/17, equating to 12% of freight surface transport. Rail's market share has grown 50% from 8% to 12% since 1998. Examples of how rail freight supports the UK economy include:

– 40% of construction sector traffic into London moves by rail
– Between 30-40% of the containers that arrive or depart from the key deep-sea ports of Felixstowe, London Gateway and Southampton travel by rail
– Rail now has a 10% market share of finished automotive export traffic
– Rail freight provides considerable benefits through reduced CO2 emissions, road congestion and safety. Each tonne transported by rail rather than by road cuts CO2 emissions by 76%
– Rail freight delivers some £1.6bn per annum of economic benefit
–

Nature and dynamics of rail freight

The UK freight market is fiercely competitive, both with road (which remains the price and service benchmark for most categories of rail freight) and within rail, with the five main Freight Operating Companies (FOC's) competing across the UK in all markets.

Each year the FOCs transport goods worth over £30bn – from groceries which keep UK supermarkets stocked, fuel to generate electricity, steel and cement, to high-value export goods such as whiskies and cars. The key rail freight market sectors and their relative scale are summarised in the following table.

The market itself continues to undergo fundamental change, with the rail freight sector simultaneously managing sustained growth in sectors such as intermodal and construction whilst continuing to manage the reduction in coal volumes since 2014/15.

An example of the changing nature of rail freight is that in recent years most of the major supermarkets have started to utilise rail for trunk haul movements of goods from their national distribution centres to regional centres and even to store. The service and reliability standards required by the UK's major retailers have become the standard for rail freight to achieve and exceed.

Market Sector	%	Rail Freight Activity
Intermodal	40	Movement of containers from ports and between inland terminals
Construction	25	Movement of aggregates, cement and spoil for the Construction industry
Metals	8	Movement semi-finished steel between works and finished steel to consuming manufacturing or fabricating industries.
Coal	7	Movement to power stations for electricity generation and steel works for steel production
Oil & Petroleum	6	Movement of oil, petroleum and diesel to distribution terminals
International	3	Movements via the Channel Tunnel
Other (includes biomass)	10	e.g. Movements of biomass, cars, military equipment, spent nuclear fuel

Source - ORR Freight Rail Usage – 2017/18 Q4 - June 2018

Rail freight's use of the network is also changing, reflecting the new economic geography of the UK and the increasing importance of the retail sector. Rail freight is increasingly focussed on serving major cities and areas of population rather than traditional "heavy industrial" areas. This means increasing activity south and east of an imaginary "line" from the Humber to Liverpool, and means that rail freight services increasingly share key (and often constrained) infrastructure with intensive passenger services, which themselves are forecast to grow strongly over the next decade.

Benefits of rail freight

Rail freight is increasingly recognised by the UK and Scottish Governments, customers and society in general as an economically attractive and environmentally efficient form of transport.

– **Environmental:**

The 2016 DfT Rail Freight Strategy made clear the value Government sets on the role rail freight can play in achieving objectives such as the Fifth Carbon Budget, which aims to see a 57% reduction in emissions by 2032, As HGVs are responsible for some 17% of total UK transport emissions, the potential is clear.

There may also be opportunities to further de-carbonise rail freight as only a small percentage of rail freight (around 5 per cent) is currently powered by electric traction. Increased use of electric traction for freight will be crucially dependent on the extent of electrification of the rail network.

– **Economic:**

Analysis by KPMG in 2015 estimated the benefits of rail freight to the UK economy at £1.6bn per year, including productivity gains for UK businesses, reduced road congestion and environmental benefits. Each tonne of freight transported by rail reduces carbon emissions by 7 per cent compared to road, and each freight train removes between 43 and 76 HGVs from the roads.

Freight related rail infrastructure enhancements facilitate significant socio-economic and environmental benefits. As illustrated by the Benefit Cost Ratios (BCRs) calculated using DfT's WebTAG transport appraisal methodology, the following table sets out a representative sample of freight related network enhancement schemes currently being delivered via the ring-fenced Strategic Freight Network (SFN) fund and their respective BCRs. Against a threshold BCR of c1.7, the strong "value for money" of freight enhancement schemes compared to other rail schemes is clear.

Freight related network enhancement schemes

Scheme Title	Output	BCR
Southampton – WCML freight train lengthening	Enabling operation of 775m trains	1.7
ECML North	Loading gauge enhancement	7.2
ECML South	Loading gauge enhancement	6.2
Buxton to Peak Forest	Enable operation of 2600t trains	4.0
Yorkshire Terminals Gauge Clearance (Route 1)	Loading gauge enhancement to Selby, Wakefield and Leeds terminals	>4
Oxford 3 Minute Headways	Capacity enhancement	4.1
F2N2: Felixstowe Branch	Capacity enhancement	>4
Northern Ports & Trans Pennine Capacity	Port of Liverpool related capacity enhancement	>4
GWML Gauge Enhancement sites	Loading gauge enhancement.	2.7
Doncaster Immingham W12 Gauge	Loading gauge enhancement	>4

Government strategies

The importance of rail freight's role for the UK is reflected in the recent strategies set out by the Scottish Government in 2015 ("Delivering the Goods – Scotland's rail freight strategy") and the UK Government in 2016[1]

Both strategies are very clear that changing pattern of consumption (e.g. as driven by the rise of internet shopping and next-day / same-day deliveries) present challenges for the traditional operating model of rail freight and set out clearly that "the rail freight industry will need to innovate and respond to these challenges". These challenges are being actively addressed by the sector.

The DfT's strategy sets out both the economic and environmental benefits and the increasing contribution rail freight could make to the UK. Crucially, the strategy recognises the importance of a stable public policy framework. The 2016 strategy sees the UK Government's main contributions being:

– Helping to foster the necessary innovation and skills

– Ensuring suitable network capacity and capability is available, through means such as digitalisation, better use of existing capacity and enhancements

– Supporting a stable and affordable track access charging regime

– Ensuring the benefits of rail freight are more widely understood

Transport Scotland's strategy places rail freight in the overarching Scottish National Freight Strategy as well as the wider Scottish Economic and National Transport strategies. Whilst designed to support the Scottish economy and competitiveness, and to address environmental benefits and rural accessibility, the strategy also seeks to address the market issues following the decline of the coal sector.

[1] "Rail Freight Strategy – Moving Britain Ahead" – September 2016.

Freight growth forecasts

As summarised in the table below, since 2013 there have been four main rail freight market studies addressing growth potential for the sector:

Review	Date	Author	Purpose	Comment
Freight Market Study	October 2013	MDS Transmodal	Support the rail industry Long Term Planning Process including Route Studies and Freight Network Study.	3% growth pa until 2043; Intermodal 5% growth pa; 1% pa Construction growth understated; Based on assumptions re price of oil/drivers wages and, crucially, unconstrained capacity.
DfT Rail Freight Strategy	September 2016	Arup	Understand volume growth potential, constraints and potential for carbon emissions reduction.	Different methodology than MDS
Transport Scotland Rail Freight Strategy	March 2016	Industry	Detailed commodity studies	Published and work in progress
FNPO Route Strategic Plan	December 2017	MDS Transmodal	Update the 2013 Freight Market Study forecasts	Improved construction sector assessment methodology, revised network capacity constraint sensitivity analysis.

Although the various studies had different purposes and different methodologies, the results are broadly consistent in terms of direction, varying mainly on the trajectory and timing of growth; common themes throughout being:

- **Growth in intermodal**

Import and export of containerised goods through the major ports, between UK strategic rail freight interchanges/terminals and through the Channel Tunnel. Although these sub sectors of the intermodal have market differences, for forecasting purposes they have sufficient similarity once on the rail network to be treated together. There is a common view that further intermodal growth is likely, achievable and desirable – there is less consensus on the form that growth will take, the rate of growth for each segment and the nature and scale of constraints, and how to address these.

– **Growth in Construction, especially bulk aggregates**

The Freight Market Study anticipated growth of c1% pa in this sector whereas since 2012 volumes have grown by over 3.5% per annum.

This is significant given the importance of London, the South East and East Anglia for aggregates traffic meaning that fast growing rail freight volumes need to use the same rail infrastructure as passenger operators who are addressing similar levels of growth.

Freight market study – 2017 forecast

As part of our assurance work to ensure our CP6 forecast aligns with the freight sectors outlook, MDS have undertaken a market study. The methodology adopted is broadly consistent with that previously employed with the 2013 Freight Market Study forecasting, the major exception being that constraints have now been applied to modelled traffic growth.

The 2013 Freight Market Study projected significant potential rail freight growth between 2011 and 2043. However, there have been various exogenous developments since 2013 that were not foreseen in the Freight Market Study forecast, such as:-

– Government energy and environmental policy changes led to a far sharper decline of ESI coal than previously assumed

– there were lower fuel and wage price levels which are more beneficial for road transport compared to rail and removed one of the main incentives for non-rail users (especially in the retail sector) to consider)

– the extent of rail served warehouse construction has been less than expected

– capacity constraints on the network have persisted, which has constrained the rate of growth of certain traffic flows

The combined effect has been significantly lower overall traffic growth than expected; although Construction traffic has been one market segment that has gone against this trend, seeing growth far in excess of the assumptions in 2013.

MDS Transmodal has based its analysis on four scenarios for 2023/24 growth compared to the 2016/17 base, to reflect the inherent uncertainty in forecasting rail freight traffic and the dependency on factors outside of the control of the freight operating companies or Network Rail.

The scenarios are:

A2: factors which favour rail relative to road, with low market growth;

B2: factors which favour rail relative to road, with high market growth;

C2: factors which disfavour rail relative to road, with low market growth;

D2: factors which disfavour rail relative to road, with high market growth.

The approach used by MDS Transmodel is generally the same as it used in its previous work to produce the forecasts that were used by Network Rail in our 2013 Freight Market Study. There is one major exception being that MDS Transmodal has now applied capacity constraints to modelled traffic growth in the new forecasts whereas the 2013 modelling was based on unconstrained growth. This has given two additional scenarios:

A3: factors which favour rail relative to road, with low and constrained market growth. As per scenario A2 but with network constraints;

B3: factors which favour rail relative to road, with high and constrained market growth. As per scenario B2 but with network constraints.

The table below summarises the results for freight lifted in 2023/24 for the four unconstrained (A2 – D2) and two constrained scenarios (A3 and B3).

Million tonnes	**2016/17**	**A2**	**A3**	**B2**	**B3**	**C2**	**D2**
Total freight	85.8	104.6	101.5	128.2	119.7	78.4	97.1
Change on base	-	22%	18%	49%	40%	(9%)	13%

Freight lifted in 2023/24 (million tonnes)

We consider that MDS Transmodal has produced a robust analysis and that setting out the analysis in terms of separate scenarios for future traffic levels is appropriate given the inherent uncertainty in forecasting rail freight growth. We recognise that other scenarios could of course be described but we consider the scenarios modelled by MDS Transmodal appropriate, given the uncertainty of UK and Scottish government policies out to 2023/24, the wider macro-economic environment, and the specifics of the rail freight market.

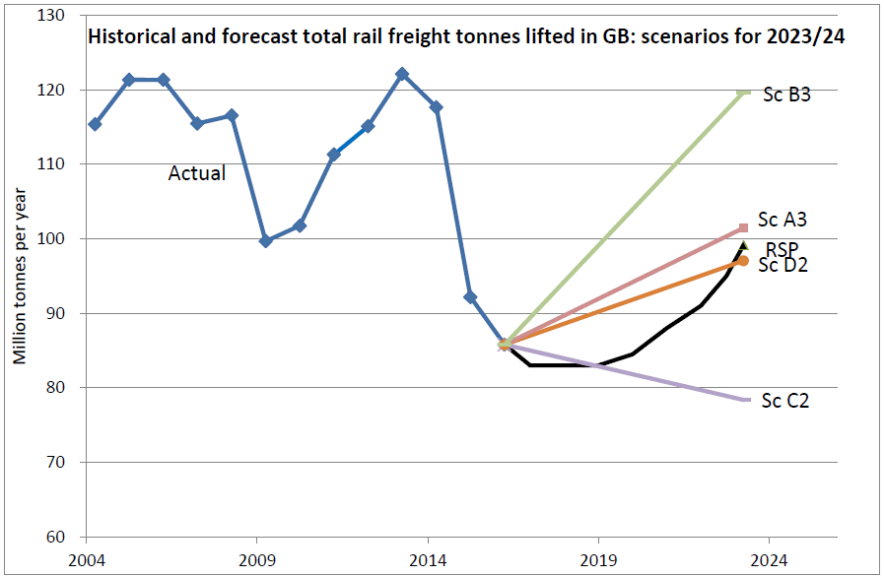
Traffic forecasts employed in our CP6 plan

For the purposes of this RSP we need to adopt a single traffic forecast from which we may derive the baseline income levels and so too inform our asset management plans and maintenance costs at more granular level across our Routes.

Our current view is that whilst there remain a number of key uncertainties there will be a broadly benign rail policy environment for CP6. In particular, both the UK and the Scottish governments have clearly expressed their support for rail freight, its benefits and continued growth. Moreover, our CP6 plan includes proposals for stable and sustainable track access charges and other initiatives to support rail freight growth. Funding to support freight enhancements in CP6 is very important, albeit any investment would most likely only support growth in the latter part of CP6 and into CP7.

Notably our forecasts recognise the timeframe associated with completion of those network capacity enhancements that will unlock forecast growth in rail freight volumes on certain key corridors. For instance; whilst the CP5/early CP6 Trimley Loop scheme enables +10tpd over the Felixstowe Branch, until the completion of capacity works further along the corridor at Haughley Junction, Soham and Ely, only a fraction of this traffic frequency uplift can be realised.

Finally, given some of the uncertainties around the UK's economic growth prospects, in part due to Brexit, and that ORR, DfT and Transport Scotland have not yet confirmed the position on freight track access charges or other elements of possible support, we are not able to finalise our CP6 forecast. For the purposes of this version of the CP6 plan, as shown in the graph below, we are assuming the average of the two pro-rail constrained scenarios (A3 and B3) and the two pro-road scenarios (C2 and D2). This is equal to 15.6% total growth in freight lifted between 2016/17 and 2023/24. It is equivalent to 2.1% growth per annum.



Capacity constraints

Forecasting unconstrained growth as part of our CP6 planning is not appropriate. As part of their scenario analysis MDS Transmodal has assumed capacity constraints on a number of key nodes around the network. This has had the effect of reducing the forecast growth in the two 'pro-rail' scenarios by 3% and 7%, for the low growth and high growth scenarios respectively.

Applying capacity constraints very accurately would be a complex exercise, requiring extensive analysis of the network, future passenger demand, network enhancements, timetabling optimisation options and possible alternative routing possibilities. In this study, a comparatively high-level approach has been undertaken, by limiting the number of freight paths at key points on the network facing capacity constraints. Ahead of further work and finalisation of our CP6 forecast we will undertake further consideration of how capacity constraints are applied in the forecasting.

What is notable, based on the lost growth from the pro-rail scenarios, is that there are corresponding lost economic benefits from modal shift. Using approximate values of mode shift benefits (reflecting the environmental and social costs of HGV journeys) gives a lost value of up to £89 million per annum. Using WebTAG assumptions, this reveals lost mode shift benefits of between £1.7bn and £4.7bn (depending on chosen constrained growth scenario). This provides further justification for the case for freight network enhancements set out elsewhere in this plan.

We intend to update and finalise our forecasting during 2018 as part of our response to ORR's draft determination. This will provide us with the opportunity to undertake a wider consultation on the current MDS Transmodal study and the assumptions used. In addition, when we update the forecast we expect to have further clarity on key CP6 policy parameters and other exogenous factors which will allow us to set out a CP6 forecast with more confidence.

Rail freight - a framework for growth

The rail freight strategies of the UK and Scottish Governments, supported by both our traffic forecast for CP6 and wider sector opinion, suggests that there are:

– *Immediate* opportunities for rail freight volume growth, particularly across the intermodal, construction and automotive sectors
– *Longer term* opportunities in emerging new markets such as retail logistics, express freight and urban logistics

FNPO considers that rail freight growth levels as envisaged by MDS Transmodal, and desired by the Governments' rail freight strategies, can be achieved – but only if an appropriate framework is put in place to develop infrastructure capability and capacity, and to fairly charge for access to it. Such a framework would then serve to create the operating conditions for an economically sustainable rail freight sector and so a rail freight offer that is both attractive to potential end-users and provides the maximum socio-economic gain at lowest cost to funders.

FNPO proposes to lead the development of such a framework for rail freight growth that will variously:

– Underpin continued high levels of safe and reliable operational freight performance on the network
– Respect the open, fair and competitive freight market
– Require as stable a public policy framework as possible, including sustainable charges for access to the network
– Ensure that private sector investors retain the confidence to invest – over £2bn has already been invested in privately held rail freight assets
– Make the case for public sector investment in necessary network infrastructure
– Create conditions for further third-party investment in the network and terminals
– Facilitate freight end-users and FOCs driving efficiencies in their businesses
– Ensure industry processes and procedures are easy to understand.
– Give confidence that freight will be treated fairly in NR's devolved organisational structure
– Facilitate and support advocacy of the benefits of rail freight

The provision of services to rail freight end-users can involve numerous industry parties who necessarily work together in an integrated manner. For each end-user this will include Network Rail and at least one (and often more than one) FOC - and potentially rolling stock providers, rolling stock maintainers, product suppliers, terminal operators, property developers, 3PLs and providers of specialist services such as un/loading and product handling.

The lead party in each instance may differ, but Network Rail remains the only constant owing to the need to access, and use, the national rail network. In addition, Network Rail:

– Owns the majority of the property sites adjacent to, and in many cases connected to, the national network potentially suitable for freight use
– Possesses a unique combination of rail operational and property development knowledge
– Has in-house capability to design and deliver infrastructure works to facilitate new / enhanced railhead facilities
– Has responsibility for the long term strategic planning of the national network to provide for future freight related capacity and capability
– Has an established facilitation and advisory position across the rail freight sector, with unrivalled access to market information

This places Network Rail and FNPO in a unique and pivotal position in the rail freight supply chain and means that within such a framework focused on sector growth, Network Rail is ideally placed to provide leadership and advocacy for the sector.

CP6 – initial focus and plan

In line with our framework for growth agenda and in support of the sector in delivery of their aspirations, CP6 will see the continuation of preparatory work already underway wherein FNPO are working collaboratively with customers and key stakeholders to*:*

– Facilitate an acceptable access charging solution for CP6
– This will be achieved by working with ORR, DfT, Transport Scotland, FOCs and others to demonstrate the benefits of, and risks to, rail freight volumes to allow an acceptable series of trade-offs that will provide for stable and sustainable track access charging levels
– Put in place relationships with the System Operator and the eight geographic routes to support the framework and its objectives
– This will be achieved through the use of scorecards and establishment of an internal “Level 1" quarterly process between FNPO, the System Operator and each geographic route
– Work with the NR geographic routes to:
  - Ensure freight inputs (e.g. forecasts and specifications) are considered
  - Ensure each route has an appropriate regime for the management and maintenance of freight only infrastructure and yards & sidings
  - Review freight performance to ensure the train plan is robust and to ensure customer requirements and targets are being achieved
  - Review other outputs (e.g. number of Temporary Speed Restrictions) and freight costs

Lead the production of the industry plan required by the Scottish Government

The intention of the Scottish Government is to help drive rail freight growth into new market segments following the decline in Scottish coal production and use. The key focus of the plan will be on what is needed to persuade customers in the target market sectors (e.g. retail, forestry) to use rail and hence for the Scottish Government’s growth target for rail freight to be achieved by the end of CP6.

This plan to facilitate new rail freight growth in Scotland will need to address:

– The legacy of the limitations of Scottish rail infrastructure north of the Central Belt which currently inhibit freight capacity and capability
– How to develop an innovative new rail freight offer that reflects the dispersed nature of the population and economic activity across much of Scotland
– The role in the new Scotland Rail Enhancements & Capital Investment Strategy and rail freight development
– The specification for freight gauge capacity which will form part of the Scottish Gauge Requirement (SGR)
– The development of a potential freight journey time metric, for assessment over CP6 as to how deliverable it might be
– How performance will achieve 94.5% Freight Delivery Metric (FDM) by the end of CP6

The plan will fulfil the requirement that Network Rail “clearly demonstrates throughout CP6 that it is using all levers at its disposal to make the use of rail freight attractive across Scotland, including the simplicity of processes and a flexible approach to accommodating new rail freight traffic”.

The 15-year horizon

Building on the foundations to be laid in CP6, a framework for growth demands a longer term perspective, indeed the realisation of many of the physical network and terminal interventions required to facilitate sector growth necessarily span multiple control periods.

To this end the following sections consider the specific areas of intervention and action that will collectively constitute the framework for growth over the 15 years beyond the current control period (so through to end of CP8 / 2034), a timeframe that nests within that of the FNS.

Realising a Strategic Freight Network

The concept of a Strategic Freight Network was originally enshrined in the Department for Transport's 2009 vision for rail freight "Strategic Rail Freight Network: The Longer Term Vision" which formed the centrepiece of DfT's rail freight strategy between 2009-16 and was supported by the CP4 and CP5 "Strategic Freight Network" ring-fenced enhancement funds.

This promoted the progressive realisation of a core network of freight-capable rail corridors linking the nation's key deep sea, short sea and bulk ports with the terminals and railheads serving centres of production, distribution and consumption – a strategic freight network.

The corridors forming would conform to a consistent set of operational benchmarks; namely:

– W10/W12 loading gauge
– 775m length functionality (650m minima & 1500m aspiration)
– RA10 without infrastructure driven speed restriction
– Electrified (25kV AC, though noting the DfT's current position set out in 2016 by the Secretary of State).
– 24/7 availability (through core & diversionary routes)

Such corridors would be augmented by a network of Nodal Yards, located at key corridor intersections, optimising freight path capacity over adjacent corridors on an increasingly heavily-utilised network.

The preparation of the 2017 Freight Network Study entailed significant sector input in identifying a consensus around key capacity and capability constraints. As a result, the rail freight sector already has a large measure of agreement on the key capacity and capability gaps beyond the end of CP5 by rail freight corridor.

Table 6.1: Summary of Capacity Gaps

Corridor	Driver of Gap						
	Capacity Constraints	Diversionary Route Capability	Operational and Timetable Constraints	Line Speed Constraints	Insufficient Gauge Clearance		Electrification of Route section
					W10	W12	
1. West Coast Main Line	■	■	■	■		■	
2. East Midlands and Yorkshire		■	■		■	■	■
3. Felixstowe to the West Midlands and the North	■		■			■	■
4. Southampton to the West Midlands and the WCML	■	■	■	■	■	■	■
5. Channel Tunnel freight		■	■		■	■	
6. Cross London freight flows	■	■	■				
7. South West & Wales to the Midlands	■	■	■				■
8. Northern Ports & Transpennine	■	■	■	■	■	■	■
9. Midland Main Line	■		■	■	■	■	
10. Great Western Main Line	■		■				■
11. Anglo-Scottish & Northern regional traffic	■	■	■		■	■	■

The Freight Network Study (FNS) referenced 11 key rail freight corridors and flagged the freight capacity and/or capability gaps for each as summarised in the table below:

To address these constraints the FNS put forward an array of suggested infrastructure enhancement options, from grade separation at key junctions to additional regulation loops or additional running lines.

Achievement of such an expanded Strategic Freight Network requires a long-term approach and FNPO will work to lead the sector in translating the FNS intervention options into a prioritised programme of works that will progressively realise the core components of the envisaged Strategic Freight Network over the 15 year horizon referenced earlier.

Based on this gap analysis, the table left, illustrates a proposed sequential ordering of the development and delivery of interventions across all 11 key corridors over a 15 year horizon to deliver the core features of a Strategic Freight Network. It should be noted that Appendix D is a list of investment options and none of the schemes are committed.

The investment options identified in Appendix D also clearly illustrate that realisation of such a programme requires a commensurate long-range funding envelope, cumulatively in the order of £2bn.

Recognising that the CP4 & 5 model of ring-fenced central government funding for SFN enhancements may not apply in future control periods and that the case for any such central government funding is strengthened not only by compelling BCR's but also the attraction of other contributory funding sources, FNPO will seek to leverage contributory funding opportunities from a range of parties and sources such as:

– Regional development bodies or Local Enterprise Partnerships –where such enhancements align with regional economic development agendas
– Principal beneficiaries – where such enhancements deliver demonstrable business benefits to rail using businesses (e.g. ports, quarries, manufacturers)
– Ring-fencing (or otherwise recognising) the value generated by the Network Rail freight estate, if appropriate. The freight estate has the potential to become a "prime mover" supporting future freight network enhancements – offering a direct, incentivised, linkage between further development in the scale of freight estate activity and the resultant incomes then supporting freight network enhancements

Terminals

Critical to facilitating rail freight growth are the terminals that provide the origins and destinations of freight traffic; ranging from a simple single customer facility with hard standing adjacent to one siding to multi-acre facilities encompassing sophisticated rail linked warehousing.

Network capacity and capability enhancements are ineffective if there is insufficient terminal capacity to accommodate the traffic they enable, such capacity being a function of both the number of terminals and their respective individual capability.

Set out below are the terminal-related demands of the two sectors offering the most immediate growth prospects:

– **Intermodal:**

Additional inland terminal facilities are required and this need is primarily addressed by Strategic Rail Freight Interchange (SRFI) developments.

SRFI's are typically 60Ha plus in size. As the Network Rail freight estate lacks locations of this scale in the UK's distribution heartland, such facilities are typically privately developed on third party land. They feature extensive on-site commercial warehousing. This is necessary to attract retail customers given their business models and to generate returns sufficient to justify the rail infrastructure investment costs.

In these cases, FNPO's role varies from advocacy for planning consent through facilitation of physical connections to the provision of suitable capacity to run trains.

– **Bulk / Construction:**

These sectors are dependent on developing an appropriate network of railhead facilities (such as aggregates distribution points, asphalt plants, concrete facilities, batching plants etc.) in and around Britain's principal population centres where commercial construction activity is focused.

The location and scale of sites in Network Rail's freight estate often coincides with the needs of these sectors. Increasing the availability of additional such rail-connected sites within Network Rail's freight estate will be key for FNPO. In these cases FNPOs role includes helping to identify suitable Network Rail sites for use, putting in place suitable commercial lease and connection agreements and ensuring there is suitable capacity available to run trains.

FNPO also has a key role in helping develop innovative solutions to provide cost-effective loading and unloading solutions in cases where a permanent solution is either not feasible or unaffordable. These may include lineside loading under licence (either from a network siding or a running line), which avoids the cost of new connections and sidings. It is ideally suited to lower frequency traffics (i.e. weekly or less) or for campaign / sporadic traffic flows.

Its application is inevitably subject to consideration of timetabling and infrastructure limitations but the FNPO team will draw on recent successes to develop a Loading on the Line (LoTL) template and promote wider application of this technique.

The Network Rail freight estate

The Network Rail freight estate currently generates some £20m p.a. rental income and can be divided into four categories:

– Sites in active rail freight use by rail using tenants
– Sites under long lease to FOC's (yards, TMDs etc.)
– Strategic freight sites and Supplemental Strategic freight sites (SFS and SSFS) as defined under the 1994 Agreement held pending freight traffic development and potentially under short term lease to non-rail users
– Other land let or vacant currently within the freight estate portfolio

At privatisation, much of the active freight estate was vested with the FOCs by way of long, peppercorn head leases; the FOCs in turn sublet sites to rail freight end users on commercial terms. Under the freight estate acquisition programme in 2014 (also known as "*Project Mountfield"*), Network Rail took a controlling position in the freight estate - through a self-funding commercial arrangement whereby the FOCs surrendered their head leases. One effect of this was to separate the landlord and haulier relationship for end user tenants.

The effective utilisation of the freight estate plays a significant role in facilitating traffic development in the key growth sectors and CP5 has seen the Network Rail freight and property teams working closely to develop and pilot new models of freight estate development. These models are founded on gaining an understanding of the rail freight user's needs and then seeking to identify, promote and exploit latent capacity in the freight estate to host additional rail freight activity – where possible harnessing resultant lease value to support initial site development, for instance:

– Intensification of tenure on existing active tenanted sites
– Development of new marketable freight sites, development costs funded through part disposal for non-freight or non-rail development
– Identification of new sites capable of multiple tenure; multiple tenants sharing site rail development costs under a rental concession

With rail-using tenants investing in such sites to create facilities that serve their business needs the NR freight estate is the focus of significant private sector investment – circa £1.5m since 2014 alone, with a pipeline of a further £2m by the end of CP5 and potentially in the order of £10m through the course of CP6. Such private investment see's the NR freight estate become an integral part both of the rail freight service offer and our tenant's production infrastructure.

Strategic Freight Sites

During CP5, Network Rail FNPO, Network Rail Property and the FOCs have worked together to reinvigorate the composition of the strategic freight site portfolio held by Network Rail. This exercise objectively:

– Identified those sites lacking demonstrable future freight utility (for subsequent release for other non-freight or non-rail development, with a number being released for residential development in support of national governmental housing supply policy)
– Added previously unrecognised sites with demonstrable freight potential to the list and so protecting them for future rail freight use

Network Rail now holds a market-relevant portfolio of sites with genuine potential freight utility that can now be actively promoted for freight-tenure and traffic development. The process of site list review remains ongoing in the light of emerging market trends and needs.

Going forward, the FNPO and Network Rail property team will begin to consider the portfolio strategically on a regional basis, focused on the nations principle population centres. This approach will seek to ensure that NR has the freight estate availability to accommodate emerging rail freight demands – from bulk construction sites today to urban logistics hubs tomorrow.

Planning protection for freight site usage

Against a nationwide trend of increasing re-urbanisation there are increasing instances of residential development on land adjacent or very near to established or potential urban freight sites. Unchallenged, such adjacent development can subsequently see the imposition of environmental restrictions (noise, hours of activity) that can fundamentally undermine the utility of the sites.

Paradoxically, the normal times of planning restrictions of operating hours are frequently at odds with the operational realities of rail freight pathing on the adjacent network. As a statutory consultee for town planning purposes, Network Rail therefore has a critical leadership role to play in making positive representations about rail freight to planning authorities to protect the long term operational viability of key rail freight sites.

FNPO will continue to work with Network Rail's property and town planning teams to better coordinate the company's response in such instances and will also provide factual input to key sector bodies (e.g. the Rail Freight Group and the Minerals Planning Association) articulating the socio-economic and environmental benefits of rail freight to inform their input in such cases.

The table below notes the key schemes being delivered through the SFN programme in CP5 (*Felixstowe capacity starts in CP5, delivered in CP6):

Key schemes delivered for the Strategic Freight Network in CP5

Scheme	Expected cost	Target Completion	Outputs	BCR
Felixstowe branch capacity*	£52m,	Late 2019	Additional 10+ trains per day	>4
Southampton to West Midlands train lengthening	£69.6	March 2019	Works to enable operation of 775m trains	1.7
Great Western Main Line gauge sites	£7.4m	March 2019	Gauge clearance gauge sites (inc. Alderton Tunnel)	2.7
ECML Gauge clearance works	£4.5m,	July 2017	W12 gauge	6.2-7.2
Doncaster Immingham	£7.8m	March 2019	W12 gauge	>4
Buxton to Peak forest train lengthening	£17.4m	March 2019	Works to enable 2600t trains	4.0
Yorkshire Terminals W12 gauge	£2.2m	Dec 2018	W12 gauge to Selby, Wakefield, Leeds	>4
Oxford 3 minute headways	£5.1m,	March 2018	Capacity enhancement	4.1
Northern Ports & Trans Pennine Capacity	£8m,	March 2019	Port of Liverpool capacity enhancement works package	>4
Thames Gateway Level Crossings	£0.5m	March 2019	Train length increase, quantum study	>3

Other CP5 enhancement schemes with freight benefit

Recognising that on a mixed traffic railway the value of certain network enhancements accrues to both passenger and freight traffic operations; the table below illustrates the notable non-SFN funded schemes have been delivered or due for delivery during CP5 (or by end 2019) that will yield demonstrable freight benefits.

Scheme	Outputs
Stafford Area Improvement Scheme	Additional freight path per hour
Reading Station Area Redevelopment	Increased freight capacity
Crossrail W12 Gauge Clearance (Reading / Acton)	W12 Gauge
Gospel Oak to Barking Electrification	Electrification
North of England Programme (LNW)	Freight Capacity
Oxford Corridor Capacity Improvements	Train Lengthening

CP6 candidate freight schemes

Through work undertaken with the sector in the derivation of the PR18 process and latterly within the SFN Steering Group forum; a broad consensus has emerged identifying that of the 11 freight corridors referenced in the FNS, 5 in particular warrant the most urgent intervention so as to address currently frustrated potential traffic growth. For further detail see Appendix D.

CP6 Other Schemes that could benefit freight

Examples of longer term (CP6 and beyond) schemes that have the potential to positively impact freight capacity and capability include:

– Grade separation of Werrington Junction, near Peterborough
– East-West Rail scheme linking Oxford with the West Coast and Midland Main lines
– HS2

With all such programmes, FNPO will work with the geographical routes and SO to be alert to the potential to realise freight capacity and capability benefits.

National Passenger Operators

Route Strategic Plan

Cross Country Trains

Business overview

Cross Country Trains Ltd (XCTL) is a national operator with services running from Scotland to Cornwall, the North West to the South Coast and from Wales to East Anglia - the largest geographical coverage of any UK passenger train operator. Unlike other train operators, they do not manage any railway stations.

XCTL delivers 37 million journeys p.a., operates 297 planned services a day calling at 121 stations, operating on all of Network Rail geographic Routes except South East. The hub of its operations is Birmingham New St station in Britain's second city and is a pivotal location where performance of services is of paramount importance.

XCTL customers predominantly come from the leisure and business travel markets over a variety of distances, with demand varying each day of the week and every month of the year. Around 15% of passengers commute on a daily basis and most business and leisure travel is discretionary. XCTL must attract and keep customers who have the option not to travel, as well as take alternatives. This is particularly important given the well-known challenges of timetabling and journey times that can make other modes more attractive.

Emerging issues around HS2 construction works are likely to see an impact on performance. We are yet to understand to what degree as the current issues revolve around how XCTL are indirectly impacted by works on the WCML, particularly at Euston. With other Operators running fewer services to London, XCTL is likely to experience heavier passenger loadings as alternative routes to London destinations are used by the travelling public, notably via Birmingham to link up with Chiltern services to Marylebone or via Leicester to utilise the East Midlands Trains to St Pancras. It has been seen that this places considerable strain on the resources available to XCTL and managing this appropriately across the Network is key over the next 5-10 years. As construction picks up pace and moves to the Midlands area, severe disruption is likely to be seen on key flows around Birmingham New Street.

Passenger demand

During CP5 XCTL saw an increase in passenger growth. In CP6 passenger demand is expected grow across the various flows and is likely to be sustained at or around the 4% pa. The key areas of growth are likely to be at:-

– Major city to city, particularly North East (Newcastle, Leeds, York and Sheffield) to Birmingham and the Manchester – Birmingham corridor. There is likely to be sustained growth on all Routes that gravitate towards Birmingham.
– Airports, particularly Birmingham, Stansted and Manchester will see further demand for rail travel to these locations. Connectivity to Heathrow will add potential links between multiple airports.

Objectives

To support our customers in delivering their future passenger growth and to deliver an effective reliable transport services for passenger undertaking leisure, business and commuting journeys, our aims throughout CP6 will be to:

– Deliver a safe railway for our passengers and workforce.
– Continually review our performance, deliver our targets and through collaboration, focus on specific areas to drive improvement.
– Maximise capacity and capability.
– Protect and improve journey times.
– Optimise timetabled disruption to minimise the impact on passenger journeys

Scorecard

The customer scorecards have a line of sight with the FNPO Route Scorecards (ref Section Route Objectives). For XCTL, PPM remains the industry regulatory measures.

This focused approach has driven improvements across some of the metrics and with more understanding of the measures generated through the various specific work streams setup around these measures, which will give a firm footing as we head into CP6. Discussions with DfT early in 2019 may lead to other metrics being added.

There still remain a few TBCs on the Cross Country Scorecard, which is linked to ongoing discussions between Cross Country and DfT. These were not concluded when this version of the plan was closed in February 2019.

Safety

– **Passenger and public safety**

The safety of the public that interact with the Network is paramount to CrossCountry businesses. CrossCountry are here to move people from A to B and must ensure they do that in the safest manner possible, day in, day out.

Focus is given to:

- Platform Train Interface
- Ill passenger protocols
- Emergency egress from trapped trains

The management and operation of the platform – train interface (PTI) is complex and presents several hazards for station users. These are often exacerbated by an individual's actions and behaviour. Following accidents at the PTI, there has been considerable focus on improving the operation and management of

the PTI. This includes the consideration of operational performance, passenger capacity, right of access for train operation (including freight services), accessibility, special event management, public behaviour, and perception.

It is also vital that robust procedures are in place to deal with customers who become ill on train services, not only to reduce the performance impact (delays and cancellations) but also to ensure the health and wellbeing of the public.

It is important to minimise the risk of passengers being trapped in queuing services consequently creating the risk of passengers becoming ill or agitated on following services. CrossCountry continues to work with station and on-train staff as well as the Emergency Services to mitigate this risk and reduce the risk of customers self-egressing from trains that are trapped.

– **Level Crossing Safety**

There are approximately 6,500 level crossings in use on the national mainline rail network in Great Britain. Britain's mainline railway remains amongst one of the safest in the European Union (EU) in terms of the number of unsafe events that have happened and is the best in the EU at managing risks at level crossings. However, every incident has the potential for significant human and economic loss. Level crossing risk control is a shared responsibility between Network Rail, XCTL, Highway Authorities and users of the crossing. Effective co-operation and collaboration between these parties is critical and each has a role to play, although the contribution of each party to risk control will vary at each crossing, as will their level of understanding of the risks.

– **Workforce Safety**

In a 24/7 railway industry, fatigue is an operational concern that needs to be effectively managed just like any other hazard. This is particularly the case in respect of the work carried out by drivers, signallers, train managers/senior conductors, train dispatchers, control room operators and maintenance workers which is critical to safe operations. Safety critical work can occur at any time, day or night, in difficult circumstances and against demanding work schedules. It is therefore essential that controllers of safety critical workers understand the multiple causes of fatigue and adopt a more systematic approach to managing the risks.

Priorities

– Deliver FNPO Route Scorecard – safety metrics i.e. LTIFR, SPADS, Derailments, Close Calls.

– Maintenance at our managed stations, specifically:

  Birmingham New Street is an area of focus where water ingress and lighting have been of particular concern, both impacting passengers and work force. The "Lamp Block", at the north end of platform 1, is XCTL's primary train crew hub and conditions in and around this area, as well as safe access to it, have raised concerns over the past few years. It is imperative than any issues at Birmingham New Street and the Lamp Block are addressed swiftly.

Bristol Temple Meads has several safety and passenger experience issues such as poor platform markings, lack of tactile paving and poor location of the customer information point. It will be key to address these issues as part of any station works here in CP6.

– Maintenance of lineside environment such as walking routes and security around stabling locations is important to protect National Passenger Operator (NPO) staff and assets (rolling stock). This is a similar risk as that listed for Freight Operators. The provision of safe walking routes for XCTL staff on Network Rail infrastructure has been a feature over the past few years, particularly at Birmingham New Street and Central Rivers depot (near Tamworth) which is XCTL's main depot for the fleet of Voyagers. It is important that more effort is put into managing safe walking routes proactively.

– Leicester Carriage Sidings is also a notable hot spot where continued action on trespassers and graffiti incidents on XCTL rolling stock to reduce incidents of this type. Ongoing work to minimise trespass on to the network at out stabling locations is key to reduce vandalism of railway assets.

– Improvements on the passenger / train interface (PTI) are important to continually reduce the risk of passenger incidents at stations. Most notably in this area is the correct use of signage and platform markings (white / yellow lines), announcements through PA systems, correct use of tactiles etc.

– Maintaining and improving stepping distances is an area of focus to decrease the risk of passenger incidents when joining / alighting services. Through collaboration between Network Rail and XCTL, we can further understand maintenance activities such as tamping to act against increasing the stepping distances and potentially improve them with little additional cost.

– Lineside boundary management is a growing area of concern for XCTL and the number of incursions due to unauthorised access onto the line has increased in recent years. Since XCTL run over 7 Routes, the area of lineside fencing that its operations are exposed to is considerable. All fencing should be fit for preventing unauthorised access and this should be consistent across all Routes.

– Unmanaged vegetation obscures drivers' sighting (especially signals & speed boards) and damages rolling stock. The incidents arising from poorly managed vegetation has increased recently. It is important for operational safety that all Routes are consistently and adequately managing their vegetation risk.

Train Performance

The sections on performance are accurate as of 8th February 2019, however, given the Direct Award detail is still forms part of discussions between DfT and XCTL, further revisions of this document will see these sections updated.

Performance for XCTL saw steady improvement throughout the first 3 ½ years of CP5. However, this has significantly dropped off through the last year of the control period – and the CP5 exit point is likely to be significantly adrift of target. This is reflected by the fact that Network Rail performance for CrossCountry appears on the Regulatory Escalator.

Consistently good performance is critical to XCTL as the majority of the passenger base is leisure and discretionary. The average XCTL passenger only travels once or twice a year so every journey matters. No one flow is worth more than 1% of total revenue so delivering consistently across the whole network and into a number of key nodes is vital. 40% of XCTL's passengers interchange and 10% of passengers change at Birmingham New Street on to another Operators service so right time delivery is crucial across the network but even more so at Birmingham.

Transport Focus research states that the number one priority for XCTL's customers is seat availability. A reduction in service provision either planned or unplanned is something that needs to be avoided wherever possible. This requires sensible access planning and service recovery plans that are balanced to reduce DPI and continue to offer capacity to disrupted customers. Due to the journey length operated by a large number of services, most passenger journeys take place between intermediate stations. This means that PPM at destination, as the current key performance measure, isn't suitable to the delivery of punctuality and reliability that impacts on the passenger. On Time and cancellations should be seen as the more important measures for XCTL's passengers.

Performance challenges

The sections on performance are accurate as of 8th February 2019, however, given the Direct Award detail is still forms part of discussions between DfT and XCTL, further revisions of this document will see these sections updated.

The overarching strategy is to move the Average Lateness at Destination curve to the left, which aligns with Transport Focus feedback to the industry at CP6 workshops. Average Lateness at Destination is a key metric for the remainder of CP5. It seeks to understand the average lateness for XCTL's services at destination. Whilst we are focusing on destination only at this point, it is a sign of the shift towards an On Time operation and the new suite of measures for CP6. It is envisaged this measure will move towards Average Minutes Lateness as we move into CP6. All performance improvement activity should look to improve this graph. This is a new measure that was introduced for 2017/18 and specific plans to understand and improve it are being developed.

Analysis of Network Rail's performance highlights some of the KPIs that remain the biggest impacting, with little improvement seen throughout CP5 so far. These are areas where focused improvement from the Network Rail routes is required to push PPM to the required level by the end of CP5 and give us a strong footing as we move into CP6. Fatalities and Trespass remains the single biggest impacting KPI on XCTL performance, with LNE & EM and LNW the biggest impacting Routes. Work in this area has been developing over the years, with physical mitigations such as lineside fencing improvements, mid platform and platform end fencing the primary interventions. Through CP5 there has been a move towards more "soft" mitigations such as improvements in interventions at key hotspots and the introduction of smart cameras. The strategy is developing further into working in partnership with local mental health authorities. Reactionary delay to a fatality incident has had similar focus, with changes to response and management of the inevitable disruption these types of incident cause. Continued focus to drive down incidents in this KPI is vital to the success of XCTL's performance.

The impact of track faults and the inevitable Temporary Speed Restrictions (TSR) that are imposed following such incidents have considerable impact. Whilst TSR's don't often have an impact on PPM, they do have a considerable impact to On Time performance if they are severe enough. Improvements in the management and swift removal of TSRs generated through track faults and other infrastructure issues would see the On Time performance of XCTL services improve considerably. This has been demonstrated regularly where On Time performance dips with the introduction of a TSR, only to return to a normal performance level once the TSR is removed. Unfortunately, some TSRs remain in situ for a considerable length of time.

Severe weather remains a risk as this KPI has seen some variance over the years. Further work on infrastructure robustness, particularly flooding on the Western Route, is required to improve resilience in this area. The works at Hinksey have helped improve this although Cowley Bridge and Dawlish remain susceptible to extremes of weather. The management of the train services across all Routes and Operators is another area that can be improved to ensure that when the infrastructure is susceptible to severe weather, the train service is managed appropriately to reduce the impact on XCTL and the travelling public.

The process for the governing of Network Rail's Performance Delivery is that of a continuous plan, do and review cycle. By focussing on the attrition categories we can understand where PPM is lost. While focus remains on primary delay, including improved governance of Network Rail KPIs, there is an increasing need for robust mitigation of reactionary delay and to gain better understanding of underlying poor performance on our best days through improved analysis and insight gained from our Train Running Specialists to deliver improvements in the day to day plan.

The key areas of network wide and routes focus is summarised below:-

Network wide focus

- Autumn preparedness including vegetation clearance and Rail Head Treatment Train circuit improvements
- Reduction in line obstruction and lineside fencing improvements at key hotspots (identified by both Network Rail and XCTL) to reduce instances of animal incursion
- Continual improvement in asset reliability
- Weather resilience actions
- Working more closely with Infrastructure Projects to ensure performance delivery is included in their remits where possible
- Changes to regulation policies to align with the new CP6 performance metrics
- Expected performance of the train plan
- Sourcing funding for performance improvements irrespective of the Route of ownership
- Improvements to analytical capabilities
- Improved service recovery plans to help reduce DPI

Route specific focus

LNW	**Wessex**
Right time arrivals at Birmingham New Street	Reading Right Time arrivals from Basingstoke
Reduce HS2 impact as much as reasonably practicable	Track quality, TSR management including timely removal
Service recovery	Bournemouth and Southampton platforming during perturbation
Fatalities & Trespass	Freight management, recognising the projected increase in traffic
	Animal Incursions
Western	**Anglia**
Right Time departures from Bristol Parkway	Right Time arrivals Peterborough Scorecard Measure
Weather resilience	Track quality and TSR management and timely removal
Fatalities and trespass, particularly off route (Thames Valley) impacting XCTL	Incident reduction in the Cambridge area
Wales	**Scotland**
Right Time improvement for XCTL originators and terminators at Cardiff	Fatalities and Trespass
Operational resilience in the Cardiff area post - Cardiff Area Signalling Renewal	Signalling systems and power supply
	Right Time Improvements on Glasgow – Edinburgh corridor
LNE	**East Midlands**
Right Time boundary handovers and Scorecard Measures	Points failures
Fatalities and Trespass	Signalling systems and power supply
Bridge strikes	Right Time improvement at Nottingham and Leicester

Capacity & Capability

Currently, XCTL journeys are "slowed down" by approximately 2000 minutes each day due to pathing allowances and excess dwells (compared to TPR requirements) in the timetable, which equates to around 7 minutes per train. From a passenger perspective, this situation translates into longer journey times and the perception of a slower journey as the train will spend significant amounts of time being stationary. From an economic point of view, this situation reduces the value of the XCTL franchise as it creates a less attractive product when the journey time is compared to that of other modes of transport such as the car which can be seen as more favourable in respect of door to door journey time, flexibility, convenience (parking, changing trains etc) and cost.

Reduced journey times result in rail being more attractive to the public, particularly when compared to road travel. In addition to relieving congestion and reducing road accidents, rail travel also reduces carbon emissions and the wider impact on the economy all of these factors have. Journey Time is therefore an important consideration in the development of enhancements and renewals, including the opportunity to enhance the infrastructure simultaneously. All improvements should be factored in to the development of the timetable to reduce journey times and improve performance.

Priorities

- Identifying schemes that lead to removal of bottlenecks and improve performance
- Integrated transport solutions such as good parking at stations or convenient bus / tram connections to make a journey by train as simple as possible and attractive to the passenger
- Maximise benefits for all operators not just those of a single Operator
- Future-proof and improve the reliability of the infrastructure
- Ensure better links between Projects/System Operator/Performance
- Maximise the opportunities created by new rolling stock and enhanced infrastructure to deliver a reduction in journey times and additional services
- Particular focus on improved journey times for LNW on Birmingham – Reading and East Mids to West Mids XC routes
- Additional path via Birmingham International
- Improvement to planning headways
- Earlier services to Stansted Airport
- Line speed improvements through CP6 infrastructure enhancements

Access and Timetable Planning

Altering the XCTL timetable structure without changing the service outcome (frequency, calling pattern or service flows) is very challenging because of its rigidity, due to:

– The large operating area
– Scale of interaction with other operators
– Number of congested nodes across the network which XCTL services need to be planned through
– Rolling stock allocation based on the original franchise specification to deliver peak demand numbers.

Developing and delivering high quality timetables is a collaborative process. This is particularly necessary on a large, diverse network such as XCTL's, where many routes are shared with other TOCs and freight operators. The XCTL timetable must be:

– Deliverable - it must not have errors that prevent the base timings being achieved
– Robust - able to cope with some degree of perturbation

The industry must ensure the Timetable Planning Rules and overall construction of the timetable delivers the target performance levels. Amended timetables must facilitate the enhancement, renewal and maintenance programme while balancing service quality and the overall passenger experience with the need for efficient project delivery

Priorities

– To work collaboratively with XCTL to continually seek innovative ways to ensure that the Timetable Planning Rules and overall construction of timetables delivers the target performance levels
– Earlier access planning to ensure robust delivery and performance of the timetable
– Earlier timetable work to understand the impact of engineering work on XCTL's train service as part of the package for disruptive access to give more certainty and better understanding of costs incurred by Network Rail.
– Develop more robust industry processes within the Engineering Access Statement process to reduce late change and cost, time and quality pressure exerted by late changes to the plan
– A more flexible workforce within the SO to ensure resource is where it is needed and to enable better workload planning
– Reshaping timetable design to support On Time delivery
– An integrated approach by Event Steering Groups to ensure network wide TT benefits for all operators and reduction of performance risk
– Recognise the impact multiple disruption has on a cross-route operator and commit to working with XC to minimise the impact of disruption to the passenger
– Reduce conflicts across our network where possible and maintain adherence to the Rules of the Revenue
– Minimises the impact of HS2 delivery
– Learn lessons from CP5 and introduce improved network-wide governance

Caledonian Sleepers

Business overview

Caledonian Sleepers operates sleeper train services between London and major cities across Scotland including Edinburgh and Glasgow. In 2015 the services were moved out of the Scotrail Alliance and became a standalone 15-year Franchise with Serco Caledonian Sleepers chosen by the Scottish Government as the new operator. The vision is for the Sleepers to be a modern, revitalised overnight travel and hospitality experience between Scotland and London.

With a mix of business and leisure travellers, the Caledonian Sleepers offers a rather unique passenger experience, being a mix of normal train travel coupled with "hotel-like" customer service. The services operate six nights a week between London and Scotland, serving London Euston, Glasgow, Edinburgh, Aberdeen, Inverness and Fort William.

The Caledonian Sleepers "Highlander" operates between London Euston and Fort William, Inverness, and Aberdeen. Services depart from Aberdeen, Inverness and Fort William with the 3 portions combining at Edinburgh into a single service to London Euston. In reverse, the service departs Euston in the late evening and divides at Edinburgh, with additional "day coaches" added to the Fort William portion.

The Caledonian Sleepers "Lowlander" operates between London Euston, Glasgow Central and Edinburgh Waverley. A late evening service departs both Glasgow and Edinburgh before combining to form a single service to London Euston with the exact same operation in reverse in each night.

The current rolling stock consists of a mix of specially converted Mark II and Mark III coaches which is now some of the oldest rolling stock still operating on the network. The fleet of locomotives hired in from GBRf to operate the sleeper service is made up of 7x class 92 electric locos which haul the portions to / from Euston, Glasgow and Edinburgh and 6x class 73s that are used on the "Highlander" portions north of Edinburgh.

The separate portions are not reported individually as a train service for performance measurement and only the arrivals at destination are considered. These are made up of the 2 morning Euston arrivals (the "Highlander" and "Lowlander") and the morning arrivals at the 5 Scottish destinations (the Glasgow and Edinburgh portions of the "Lowlander" and the Inverness, Aberdeen and Fort William portions of the "Highlander").

Priorities

Caledonian Sleepers will introduce a brand new fleet of sleeper coaches (known as the Mark V), with 'Lowlander' services expected to operate from early 2019. Minimal disruption during the Mark V introduction will assist with the continued growth in year round business and maximise the commercial impact of the introduction. While Caledonian Sleepers appreciate that Network Rail's possession and enhancement strategy often revolves around Bank Holidays (due to it being the least disruptive time for most day time passenger operators) Network Rail need to have cognisance of the fact that this is Caledonian Sleepers' busiest period and try to minimise the impact on its services.

The current Right Time Arrival at destination is a very challenging 80% for 2018/19 and remains flat for the rest of the franchise after this point. Caledonian Sleepers and Network Rail need to work closely to improve Right Time arrivals to achieve this consistently.

Caledonian Sleepers are looking to expand into new markets including Oban and the Far North of Scotland with possible new intermediate markets between England and Scotland and providing its own dedicated lounges at key stations.

Development of options for ‘early boarding’ at managed stations to further enhance the service offering to guests. This would provide the opportunity to arrive early, get settled and enjoy a meal or a drink prior to departure in the comfort of the train’s lounge car. This is a key aspect of the Caledonian Sleepers business plan, but needs balancing against challenges of station occupancy to be worked through in collaboration.

The new Mark V vehicles arriving in early 2019, and a gauging project is almost complete to facilitate this, with sponsors and project managers appointed in the various routes where surveys and possible infrastructure interventions have been identified. Testing of new stock over a set piece of infrastructure will take place. Development work was completed to understand if improvements at Inverness can help with improved dedicated servicing facility freeing up platform capacity and reducing the number of moves in and out the station at a time when the station will see an uplift in traffic as a result of the Aberdeen to Inverness infrastructure enhancements.

Under the FNPO Route’s stewardship, particularly the FSDM monitoring and interventions, improvements have been made with 'on the night' action and help to overcome issues with other industry partners. Further work on the “last mile” initiative will be required to improve Caledonian Sleepers’ On Time performance as we seek to reduce the On Time near miss numbers even further.

Network Rail acknowledges that HS2 works will have a significant impact on London Euston, Caledonian Sleepers’ services and its customers. Discussions are ongoing between Caledonian Sleepers and Kings Cross / St Pancras International and will continue until a conclusion. This may lead to future opportunities in growing the sleeper market should any change in terminus prove beneficial to the guests using the service. Caledonian Sleepers are committed to working with HS2 and all TOCs to improve customer satisfaction levels at Euston.

Management of vegetation on the network remains a challenge. Vegetation in Scotland causes damage to rolling stock. RETB aerials which are required for signalling on the West Highland Line are very susceptible to vegetation strikes. This type of damage can cause significant delay to passengers and guests and cause reactionary delay on routes that are notoriously difficult to recover.

Co-ordination of the access plans across the Network Rail Routes is likely to be increasingly more difficult and Network Rail must ensure its plans leave a viable route available via either the WCML or ECML to facilitate the sleeper operating its nightly services.

Charters & Open Access Operators

Charters and Open Access Operators are important niche markets within the FNPO portfolio. Their specialised requirements are recognised in having a dedicated management team.

1000 Charter Services operate across the network each year, with around 50% of these being steam hauled. The market is diverse, ranging from:
– "High end" luxury dining and hotel services
– Days out to popular destinations
– Bespoke charters, e.g. for sporting events
– "Enthusiast" tours to appreciate specific locomotives or branch lines

There is an intensive seasonal peak, with around 70% of services operating between May and September. A number of parties are involved in the supply chain, each of whom will attempt to engage with multiple parties within Network Rail at every conceivable opportunity. i.e.
– Tour promoters who devise and market the product
– Charter Train Operators who plan and operate the train.
– A third-party rolling stock and/ or loco owner may also be involved

Charter Train Operations bring a positive benefit to both the rail industry and to UK Plc.
– They boost local economies by bringing tourism to key destinations across the network
– High profile excursions using revered locomotives such as the Flying Scotsman and Tornado, create an empathy for the railway, which aids Network Rail's profile
– The Jacobite, which operates between Fort William and Mallaig, is an international attraction, with many foreign tourists travelling on this service as part of their UK trip

Unlike other passenger operators, Charter Train Operators have Track Access Contracts granted by the ORR under General Approval. These give operators the ability to bid to run bespoke charter operations anywhere on the network, subject to network capacity and capability.

The 'go anywhere' nature of these rights, means that Network Rail has the challenging requirement to;
– Maintain published gauge capability over the entire network
– Keep the entire network free of vegetation encroachment

A twice yearly industry Charter Conference has taken place since 2017, which brings together key stakeholders within the charter industry, to deliver a Charter Strategy, committed to a sustainable future for charters. This Strategy is the basis of FNPO delivery to the charter industry through CP6.

The nature of Charter Track Access rights means paths can only be requested from Network Rail after other operators' firm rights have been planned. This can create uncertainty for the tour promoter who has to plan a service or programme many months in advance. Capacity Planning work hard with the industry to find solutions and in the majority of cases they are successful. On some occasions unfortunately, paths cannot be found and in the worst case, proposed services cannot be confirmed and have to be cancelled. We plan to minimise this risk by developing Strategic Capacity for Charters.

In the summer months, the operation of steam services across the network can present the risk of lineside fires. FNPO Route has established a 'Fire Risk Protocol' with geographic routes and Charter Train Operators, that describes the risk assessment process and mitigations to be put in place to reduce the risk of steam related fires.

An ongoing challenge is the ability to secure network capacity. FNPO is trialling strategic charter paths in the December 2018 timetable. This will then be developed further through CP6 in order that a catalogue of Strategic Paths is established. These paths would be gauge cleared for specific locomotives, and kept operationally robust and clear of vegetation. This approach minimises NR costs by avoiding bespoke planning and clearance, and provides more certainty for operators and customers.

Network Rail has a commitment to ensure effluent discharge is eradicated from the network by 2020. To achieve this FNPO Route is working closely with Charter Operators and rolling stock providers to find solutions which is challenging given the nature/age of heritage rolling stock, and the lack of depot discharge facilities. Network Rail Executive Committee has endorsed the progression of this change through the Network Change mechanism. Delivery plans are in development which will confirm the timeline for full Charter Industry compliance. It has been acknowledged that the target date of 2020 will not be achieved without derogations, although significant progress has been made towards technical solutions.

The main CP6 objective the creation of a Strategic Capacity Statement for charters. The output will be a catalogue of robustly performing paths, which are fully gauge cleared, and have further operational characteristics such as watering locations and vegetation clearance. In parallel, Network Rail is working on updating the rules applied to gauging steam locos, which means that fewer prohibits are now being issued. The intention is to provide annual certification for regular running locomotives over specific routes, which will reduce the volume of bespoke gauging clearance required.

FNPO Route will also develop:

- Performance strategies for Charter Operators, detailing performance initiatives such as standby locos, and robust station dispatch arrangements
- Joint Safety Strategies with each Charter TOC, which will set out obligations on both the Operator and Network Rail and will work towards achieving agreed safety targets. During CP6 we will develop a strategy for ETCS fitment and funding of Charter and heritage fleet, although it is not yet clear in what timescales charter operations might be affected by ETCS
- Network Rail will progress current discussions aimed at the elimination of effluent discharge from charter trains, as soon as is practicable. These discussions involve the charters community, ORR and DfT

Aspirant Open Access Operators

FNPO Route represents all aspirant Open Access Operators (OAOs) within Network Rail. FNPO is committed to support open access operations with the aim of increase passenger growth and improving customer satisfaction. We work collaboratively with the geographic routes and keep them informed as to the particular needs of open access operators, and the requirement to treat them fairly and consistently. Aspirant OAOs occupy a niche position. They often have different (and often more complex needs) compared to franchised operators whilst having less railway experience and familiarity. FNPO Route provides a centre of expertise to advise them and represent these needs. These operator aspirations often;

– cross multiple route boundaries
– have multiple operator interactions
– occur outside of refranchising timescales

Grand Central and Hull Trains operate successfully on LNE Route, recording high levels of customer satisfaction. First East Coast Trains will also commence open access operations on LNE&EM Route in 2020.

Since FNPO Route assumed responsibility for Open Access Operators, the first-ever jointly negotiated Section 18 contract with an open access operator was awarded by ORR in 2015 to Network Rail and Alliance Rail, securing rights between London Euston and Blackpool under the Great North Western Railway (GNWR) brand. A measure of FNPO Route's collaborative and supportive approach to working with operators can be seen in the successful work carried out to renegotiate new rights for GNWR in response to changes in available rolling stock OAOs are often funded by 3rd party investors who need certainty of access rights in place before they will confirm capital investment (e.g. in rolling stock) – whereas ORR would prefer that investment funding to be in place before they grant of access rights. Securing access to the network in advance is thus not straightforward. FNPO Route is also working with Go-Op to introduce new services from what will be the first co-operatively owned train company in the UK. FNPO Route is working with a further two aspirant OAOs, offering a level of support and advice based on early meetings to establish their specific needs capabilities.

Priorities

There is a complex relationship between Government, ORR and OAOs if there is any prospect of an OAO affecting franchise revenue streams, irrespective of abstraction tests carried out by the ORR. Potential OA operations are usually highly political sensitive and require careful management. The access charging regime for open access operators may change in CP6, with open access operators paying a contribution to the fixed charge. If that happens, it is anticipated that the process of gaining access to the network for OAOs will become easier.

There would then be an opportunity for Network Rail to work with aspirant OAOs to agree how to improve the process for operators seeking capacity on the network. FNPO will work with SO Capacity Planning and OAOs to establish a robust process for the assessment of capacity for applications involving timetables beyond the current timetable development stage.

Appendix D Scenario planning

Part 1b: Investment options

Please note that none of the schemes below have funding in place yet

Package ID	Package title	Description	Capex (£m)	Opex (£m)	Justification for spend
1.	Felixstowe to West Midlands & the North	Doubling of Haugley Jn	£10m - £15m		Capacity, performance
		Signalling headways Bury St Edmunds	£50m - £70m		Capacity, performance
		Ely Area (level crossings / bridge speeds)	£100m - £250m		Capacity, performance
		Ely to Soham Doubling	£120m - £150m		Capacity, performance
		Peterborough – Syston signalling/level crossings	£50m - £60m		Capacity, performance
		Syston – Sheet Stores gauge (W10/W12)	£5m - £10m		Gauge capability
		Further refine layout at Ipswich Yard	£1m - £5m		Capacity, performance, train length capability
2	Southampton to West Midlands & WCML	Kenilworth doubling	£100m - £170m		Capacity, performance, train length capability
3.	Channel Tunnel classic route	Channel Tunnel classic routes – gauge enhancements (up to W12)	£50m - £80m		Gauge capability
4.	Cross London and Essex Thameside	Ripple Lane Nodal Yard	£15m – £20m		Capacity, performance, train length capability
5	Northern Ports & Trans Pennine	Trans-Pennine gauge enhancement (up to W12)	£100m - £200m		Gauge capability
		New loop between Up Decoy and South Yorkshire Joint Line	£5m - £10m		Connectivity
		Eaglescliffe – Northallerton W12 gauge	£10m - £20m		Gauge capability
		Trans-Pennine capacity	tbc		Capacity
6	Great Western Mainline	W10/W12 gauge clearance between Didcot and Bristol/Cardiff	£10m - £15m		Gauge capability

Appendix E Asset by asset long term forecast

Not applicable for FNPO

Appendix F Freight and National Passenger Operators Route Plan

Anglia Route & Freight & National Passenger Operators (FNPO) Route

This summary sets out how the Anglia and FNPO routes will work together to deliver the Route Strategic Plan for Anglia. It outlines existing FNPO activity, and then describes the impact of the plans and aspirations of FNPO customers to grow and develop their businesses. It summarises what Network Rail needs to do to deliver these strategies and how, in doing so, efficiencies can be identified and realised.

National Passenger Operators:
CrossCountry is a regular user of Anglia route, with services to and from Stansted Airport. In addition to the Ely area scheme in CP6, there are two important signalling schemes that could improve Cross Country services in CP6. These are the Cambridge area signalling renewal and Ely to Peterborough.

Integration meetings are schedules early in 2018 to connect the Ely scheme and signalling renewal team. The interdependencies that these schemes have are important and need monitoring at programme level to ensure maximum benefits are obtained.

Other key issues include right time arrivals from to and from Peterborough, TSR management and timely removal and incident reduction in Cambridge area.

Charter trains also operate across Anglia route, especially at weekends, to a variety of leisure destinations being hauled by both standard and heritage steam and diesel locomotives. This leisure market is expected to grow during CP6.

Challenges and Opportunities

No	Key Challenges, Risks and Opportunities	What we plan to do
1	Aggregate Growth O: Volume growth from sea-dredged sand facilities to concrete batching plants across Anglia – Ipswich Griffin Wharf, Marks Tey, Norwich Riverside, Trowse, Brandon, Kennett, Harlow, Chelmsford, Purfleet, Bow East and West. R: Capacity and capability. Infrastructure not able to cope with traffic demand.	• Explore opportunities for longer and heavier trains maximising loco capability • Support introduction of new wagons that maximise payload/length ratio • Support Terminal and Yard developments – e.g. complete redevelopment of Bow Yard on the Anglia Route for rail freight to be a part of the future Olympic Legacy development in Stratford. • Support introduction of 'pop-up' terminals, bringing out of use infrastructure back into use and increased use of lineside loading • Explore opportunities for new capacity – enhanced use of HS1 and the Channel Tunnel for rail freight to either free-up paths on the classic network or stimulate entirely new traffic
2	**Domestic & Deep Sea Intermodal Growth** O: Volume growth from Ports / Terminals (Felixstowe, London Gateway, Tilbury 2) R: Train paths and SRT discrepancies with longer, heavier trains R: Capacity and capability, including gauge clearance and diversionary capability	• Work with customers to maximise opportunities to increase length of trains • Increase Average Journey Speed origin to destination • Explore provision of recognised diversionary routes with adequate capability • Facilitate new terminal developments – future expansion of London Gateway with additional rail terminals similar to the Port of Felixstowe. Demand dependent, but rail needs to be fostered as the best solution for end users. • Explore opportunities for new capacity – Strategic Freight Corridor improvements on the cross country route from Felixstowe to the Midlands and the North including promoting the business cases for Haughley Junction Doubling, Ely-Soham Doubling, Ely area improvements, as well as off route enhancements at Leicester to facilitate the future growth in traffic from Felixstowe •

No	Key Challenges, Risks and Opportunities	What we plan to do
3	**Gauge establishment** C: Establishment of recognised diversionary routes for gauge critical traffic	• Explore gauge clearance on key corridors, e.g. (GE Mainline, Thameside, North London Line, Gospel Oak-Barking, West Anglia Main Line), and provision of diversionary capability • Explore funding opportunities, including Third Party • Documented diversionary routes for core intermodal flows • Review of RT3973 provision to more closely align with traffic flows – reduced duplication
4	**Other Commodity Traffic Growth** O: Steel & other scrap metals O: Automotive O: Forest Products O: Bulk O: Aviation Fuel & other Petro-chemicals	• Work with customers to maximise opportunities for longer and heavier trains maximising loco capability • Support Terminal / Yard developments to facilitate growth • Support introduction of 'pop-up' terminals, bringing out of use infrastructure back into use and increased use of lineside loading. Promotion of and assisting customers to set up new automotive flows and growing traffic from Dagenham and Purfleet Deep Wharf. • Work with FOCs and Freight End Users to deliver new network connections and necessary capacity and capability, or bring out of use infrastructure back into use including the Parkeston Tip Sidings
5	**Franchise changes / Crossrail** R: Refranchising of Greater Anglia Franchise on Anglia seeks greater capacity on shared lines	• Retain adequate capacity, capability and flexibility for existing and forecast freight • Review Impact on possession strategy from new flows • Review stabling plans for new rolling stock / change of maintenance locations for Greater Anglia, an enhanced Ilford Depot for Crossrail and Greater Anglia
6	**Infrastructure enhancements / electrification** O: Greater capacity/opportunity following enhancement (Thameside/Great Eastern OLE Enhancements). O: Electrification of the Gospel Oak – Barking Line - opportunity for through electric rail freight to Ripple Lane & Barking. R: Loss of Capacity following timetable change. Crossrail and Greater Anglia on Anglia Route	• OLE upgrades could potentially present greater opportunities for electric rail freight on the GE and Thameside Routes. • Support Route forums (RSPG etc.) to influence scope and secure freight benefit following scheme delivery • FNPO, FOCs and Freight End Users to provide appropriate input into the decision making process • Work with Route Business development team to identify potential Third Party funding sources
7	**Construction projects / HS2** O: Opportunity for spoil and waste out and aggregate and other commodities in to support construction R: Capacity for new aggregate and spoil flows from HS2 project	• Work with DfT, HS2 Ltd, FOCs and End User -customers to offer solutions to demands of major projects • Work with customers to manage the impact of major projects on their business (HS2) • Terminal / Yard developments ('pop-up' terminals / lineside loading potential) • Work with FOCs and Freight End Users to deliver new network connections and necessary capacity, or bring out of use infrastructure back into use
8	**SRFI Terminal Development** O: SRFI terminal development supports intermodal growth especially addressing demand for inland terminals C: Securing of sufficient capacity to support SRFI developments through planning and into use	• Work with Developers to understand SRFI proposals progression through planning • Offer NR support to proposals when adequate strategic fit and capacity Work with System Operator to support funded early stage timetable work for SRFI developers. Intermodal developments for Anglia will be the additional paths from Felixstowe and the expected expansion of London Gateway Intermodal Operation
9	**End User-customer service** O: Closer working with FEU's enables greater understanding of customer priorities for future (e.g. Tarmac, Aggregate Industries)	• Work with end user -customers to develop business growth and support modal shift to rail • Work with end user -customers to strengthen service delivery and support

No	Key Challenges, Risks and Opportunities	What we plan to do
10	**Review of redundant and unused assets** O: Following traffic changes in CP5 and structural change in energy market, opportunity exists to review size and organisation of non-passenger network R: FOC objection to supporting Network Changes	• Identify opportunities to reduce maintenance costs and remove unneeded infrastructure • Regularise the status of freight assets and other assets including gauge, S&C (actual v published capability) • Explore potential to transfer ownership of redundant lines / assets to secure better opportunities for redevelopment
11	**Yards and sidings infrastructure** R: Yard and Siding Infrastructure asset condition is critical to avoid derailment events and customer LTI's	• Working with Routes and customers to review asset condition on regular basis. Keeping up emphasis on maintaining and enhancing major terminal infrastructure, including Bow. • Working with Routes and customers to establish and benchmark walking route use and condition. For instance, establishing a walking route to the headshunt for the Carless Operation at Parkeston •
12	Timetable Review O/R: Timetable Improvements to closely reflect capability of trains and capacity of network required on busier network	• Continuation of CP5 work to review path usage and remove unused paths and agree strategic capacity • Work with FOC's to more closely align Train Slots in the Timetable with Access Rights in the TAC, and remove unused rights where there is no corresponding Train Slot • Work with the Route, System Operator and FOC's/TOCs where in upcoming major timetable re-casts the available capacity may be less than contracted rights, the new Greater Anglia and Crossrail Timetables for Anglia Work with System Operator and customers to review opportunities to improve average speed origin-destination • Review with System Operator and customers suitability of current systems to capture network constraints and traction capability (Loads Book, Timing Loads, Lengths)
13	Digital Railway O: Successful introduction of Digital Railway offers potential for growth on busiest corridors	Act as internal client on behalf of Freight to build sympathetic capability for freight traffic needs. The first major challenge will be the implementation of Traffic Management on the Thameside Route and ensuring that Freight is fully represented, and interests protected as we move towards this new way of operating
14	Upgrades and Disruptive Possessions R: Major upgrade programmes including Crossrail, Thameslink and Great Eastern Track and S&C renewals including High Output will require significant disruptive access	• Champion requirements of FOCs and Freight End Users so that services can operate as required during disruptive possessions including availability of diversionary routes and timely provision of capacity studies to identify train service capability

CP6 Plan

Section	Key Themes	Strategy	Specifics	Owner	Timescale
Safety	Lost Time Incidents	Reduce LTIs through concentration on Network Rail yard infrastructure, connecting sidings and walking routes conditions.	• Published rolling programme of joint health and safety visits with customers (FOCs/TOCs) to agreed sites • Complete review of authorised walking routes/crew change locations per customer • Subject to funding, a programme of improvements will be specified and implemented • 'Go Look See' with customer within two weeks of any reportable customer LTI event on network infrastructure	FNPO Operations and Safety Manager/ SRFM	Initial Programme was published in 2018/19 and agreed then annually during CP6
	Freight Train derailments	Reduce freight train derailments through concentration on Network Rail yard and sidings infrastructure.	• Published rolling programme of joint health and safety visits with customers to agreed sites • End Customer Forum to be implemented to share issues of concern around connection points and maintenance either side of boundary point • Subject to funding, a programme of improvements will be specified and implemented	FNPO Operations and Safety Manager/ SRFM	Initial Programme was published in 2018/19 then annually during CP6
	FNPO SPADs	Reduce freight SPADS by collaborative working	• SPAD Forum to be implemented with FOCs to share learning and best practice	FNPO Operations and Safety Manager	Creation of Forum. Meeting regularity proposed quarterly.
Performance	Right time departure performance at key hubs and terminals	Use Strategic Freight Corridors to focus delivery Measuring Right Time Departures from terminals at the start of the journey	• Local Working Groups (e.g.Thameside Performance Improvement Group) • Use of Control Rooms and Visualisation at major sites (e.g. Felixstowe) • Re-brief Freight Strategy – 'Freight Delivery Matters' and linkage between RTD and FDM delivery	SRFM/ FNPO Performance Manager	Existing Working Groups to continue into CP6. Quarterly FNPO review of terminal engagement arrangements.
	Measuring FDM and FDM-R	Focus on defined key routes: • Asset Performance • Asset Resilience • Effective contingency plans	• Target FDM-R Route target for end CP6 of 92.9% • Input to Route CP's for consistent application of freight contingency arrangements • FSDM input to incident recovery real-time to build consistency • Asset Reviews with Route Asset teams to share traffic forecasts and asset challenges with SRFM • Influence at RSPG to define future asset strategy in terms of renewals to support freight growth	SRFM/FNPO Performance Manager	Annual target setting during CP6. Periodic review of FDM-R delivery and key influencers
	Joint Freight Performance Improvement Strategies	Agreed joint strategy with each FOC including details of plans to reduce each delay area	• Complete plan annually with each FOC concentrating on primary delay categories • Agreed industry information share • Regular reviews against plan with each Route and FOC customer	FNPO Performance Manager/CRE	Joint Strategy Plan per Operator to be published annually during CP6 and reviewed quarterly

Section	Key Themes	Strategy	Specifics	Owner	Timescale
Capacity & Capability	Identifying future capacity and capability needs.	Bring together all freight capacity plans: • Route Studies • SFN • Customer specific	• All future project specifications to include a specific output level for freight services, reflecting the SFN specifications and forecast future traffic requirements. • Future Capability needs assessment to be undertaken – RA, Gauge, HAW – future plans for improvement to meet capacity requirements • Interactive maps for Gauge, RA to be created and maintained • Continued support for longer, heavier trains programme	Project Sponsor/SRFM. FNPO Head of Strategic Capability/ FNPO Head of Network Management	Future capability programme definition by May 2019 and delivery per strategic route
	Review existing capability constraints	Undertake Capability Review	• Improved gauge and operational flexibility on key freight corridors • Robust gauge cleared diversionary routes • Transparent network capability per route for customers	SRFM/ FNPO Head of Strategic Capability/ FNPO Head of Network Management	Existing capability constraints review definition by May 2019 and delivery per strategic route
	Freight Train Average Speed	Undertake Average Speed Review	• Establish framework for average speed measurement and improvement • Work with Stakeholders to target specific flows and services • Annual plan in connection with annual timetable change	FNPO Head of Performance/ FNPO Head of Strategic Capability/ FNPO Head of Network Management	Measurement framework to be agreed by industry July 2019. Flows to be agreed for annual TT change
	Connections to new terminals and SRFIs	Facilitate connections to the network and associated capacity	• Work with FOC's, Freight End Users and Developers to identify potential new connections, including development of SRFI's • Information share of prospective sites via RSPG • Facilitate new network connections e.g. (Route TBC) • Identify potential sites (new connections, bringing out of use infrastructure back into use and increased use of lineside loading) to facilitate growth, e.g. (Route TBC) for aggregates • Advice to System Operator of future sites and flows to understand timetable and capacity impact • Timetable studies for major terminal developments, e.g. SRFI's	SRFM/ FNPO Business Development Managers	Forward programme of FEU and Developer engagement to be agreed annually during CP6. Freight Developments Register to be held by SRFM for review at RSPG quarterly.
	Delivery of agreed CP6 freight enhancement programme	Continuation of Strategic Freight Network funding and industry governance group	• Promotion of potential freight projects and enhancement schemes • Prioritise funding to best meet demand and facilitate growth • Align SFN proposals with Route and National proposals to deliver a coherent forward strategy which best meets overall requirements	FNPO Head of Freight Development/ System Operator	Ongoing
	Consideration of incremental freight improvements in all schemes	Structured review process with Route planners and Sponsors	• Work with FOC's and System Operator to identify opportunities for incremental freight enhancements as part of the development of enhancement and renewals proposals, e.g. faster entrance/exit speeds into loops and through crossovers. • Defined and consistent engagement process to be agreed with Route Planning team and Sponsors	SRFM/ System Operator	Defined engagement process and inputs to be in place with Route Strategy by May 2019

Section	Key Themes	Strategy	Specifics	Owner	Timescale
Network Availability	Engineering plans that meet both FNPO customer and Route needs.	Regular and co-ordinated freight input into • Engineering Access Statements • Access Planning Requests	Engineering plans that are; • Transparent • co-ordinated • consistent across Routes • planned well in advance and • take into consideration contingency arrangements for long distance services	SRFM/ FNPO Capability and Planning Manager	Annual review of process/requirements between FNPO and Engineering Planning incorporating end to end Access process
Freight Asset Management Plans	Effective asset management arrangements for yards and sidings infrastructure	Create a joint understanding of maintenance responsibility, traffic level changes and asset condition	• Enable Asset Management and Engineering teams to plan the targeted maintenance and renewals requirement of each site • Ensure appropriate standards in use at each location.	SRFM/ Route COO/ RAM	Biannual review of yard and sidings maintenance priorities / traffic flows
	Review of Locomotive and Heavy Axle Weight (HAW) track and structure restrictions	Establish potential/cost for removal of restrictions	• Input into track/structures renewals and maintenance plans	SRFM/ Route COO/ RAM	Review definition and programme issued by April 2019. Delivery per strategic route to be programmed.
	Review Freight Only lines and other infrastructure	Understand the potential to reduce OMR.	• Review based on existing & predicted future use • Input into track/structures/maintenance plans • Outputs to be agreed with customers/ORR	SRFM/ Route COO/ RAM	Agreed Action Plan through CP6 per Route
	Removal of TSRs / PSRs in timely fashion	Establish removal plan recognising freight impact	• Work with the Route teams to identify the impact of speed restrictions on freight services and work collaboratively to remove them.	SRFM/ Route COO/ RAM	Ongoing periodic review of performance impact of TSRs to be agreed per Route

LNE&EM Route & Freight & National Passenger Operators (FNPO) Route

This summary sets out how the LNE&EM and FNPO routes will work together to deliver the Route Strategic Plan for LNE&EM. It outlines existing FNPO activity, and then describes the impact of the plans and aspirations of FNPO customers to grow and develop their businesses. It summarises what Network Rail needs to do to deliver these strategies and how, in doing so, efficiencies can be identified and realised.

National Passenger Operators:
CrossCountry is an extensive user of LNE&EM route and key issues include boundary handover of services, as well as the management of fatalities and trespass incidents. The access strategies on LNE&EM for CP6 are key as well as TOC mutually agreed and balanced service recovery plans during times of perturbation, with the aim of reducing overall industry

Caledonian Sleeper operates on the East Coast Main Line into Kings Cross, when diverted away from the West Coast Main Line due to engineering possessions

Charter trains also operate across LNE&EM Route, especially at weekends, to a variety of leisure destinations being hauled by both standard and heritage steam and diesel locomotives. This leisure market is expected to grow during CP6.

Challenges and Opportunities

No	Key Challenges, Risks and Opportunities	What we plan to do
1	**Aggregate Growth** O: Volume growth from Peak District, Leicestershire and Yorkshire R: Capacity and capability (e.g. MML South currently congested infrastructure), infrastructure not able to cope with traffic demand R: Development of new connections and 'pop-up' terminals in a cost effective and timely manner	• Explore opportunities for longer and heavier trains maximising loco capability • Explore possibility of faster journey times • Support introduction of new wagons that maximise payload/length ratio • Support Terminal and Yard developments – e.g. York and Newcastle areas and other major conurbations. • Support introduction of new connections, 'pop-up' terminals, bringing out of use infrastructure back into use and increased use of lineside loading • Work with FOCs and the Route to facilitate the ongoing operational connectivity of Strategic Freight Site and Supplementary Strategic Freight Site estate • Restore actual capability to published capability where this is required, e.g. Belford, Welton Oil Terminal, Welbeck Colliery, Wardley • Explore opportunities for new capacity – e.g. Hope Valley and MML south
2	**Domestic & Deep Sea Intermodal Growth** O: Volume growth from Ports / Terminals (e.g. Felixstowe, London Gateway, Teesport, Immingham, Hull and Doncaster IPort) R: Train paths and SRT discrepancies with longer, heavier trains R: Capacity and capability, including gauge clearance and diversionary capability	• Work with customers to maximise opportunities to increase length of trains • Increase Average Journey Speed origin to destination • Explore provision of recognised diversionary routes with adequate capability • Explore amended engineering access to provide more operational access and flexibility on the core W12 routes • Facilitate new terminal developments – e.g. Radlett, East Midlands Gateway, Humber and Hinckley • Explore opportunities for new capacity – e.g. F2N schemes, Leicester and Trans-Pennine

No	Key Challenges, Risks and Opportunities	What we plan to do
3	**Gauge establishment** C: Establishment of gauge (e.g. Immingham to Doncaster and Trans-Pennine) and recognised diversionary routes for gauge critical traffic R: Exclusion from major programmes (e.g. Trans Pennine Route Upgrade), and funding	• Explore gauge clearance on key corridors, e.g. Trans-Pennine and Northallerton to Tees via Yarm, and provision of diversionary capability • Explore funding opportunities, including Third Party • Documented diversionary routes for core intermodal flows • Review of RT3973 provision to more closely align with traffic flows – reduced duplication
4	**Other Commodity Traffic Growth** O: Coal O: Steel O: Biomass O: Automotive O: Forest Products O: Bulk, including waste O: HS2 phase 1 spoil and construction materials R: Unit moves generated by Rolling Stock Cascade Programme R: Capacity and capability on certain routes R: Reinstating dormant and out of use infrastructure in a timely manner	• Work with customers to maximise opportunities for longer and heavier trains maximising loco capability • Explore possibility of faster journey times • Support Terminal / Yard developments to facilitate growth • Support introduction of new connections, 'pop-up' terminals, bringing out of use infrastructure back into use and increased use of lineside loading • Restore actual capability to published capability where this is required • Work with FOCs and Freight End Users to deliver new network connections and necessary capacity and capability, or bring out of use infrastructure back into use • Work with FOCs and the Route to facilitate the ongoing operational connectivity of Strategic Freight Site and Supplementary Strategic Freight Site estate • Work with FNPO Programme Manager HS2, FOCs and Freight End Users to understand the likely HS2 phase 1 capacity requirements, including terminal considerations
5	**Logistics and Mail Opportunity** O: Potential mail growth on main corridors and premium logistics developments R: Reduction in windows for overnight emergency possessions, and potential impact upon standard possession opportunities	• Explore opportunities for business growth with existing and potential new customers • Review impact upon possession strategy from new flows and impact upon operational contingency and flexibility
6	**Franchise changes** R: Refranchising of TOCs in Route seeks greater capacity on shared lines	• Retain adequate capacity, capability and flexibility for existing and forecast freight • Review Impact on possession strategy from new flows • Review stabling plans for new rolling stock / change of locations
7	**Infrastructure enhancements / electrification** O: Greater capacity/opportunity following enhancement (e.g. East West Rail on LNE&EM) R: MML Electrification to Kettering – risk to freight capacity R: TRU emerging position will not provide gauge enhancement to W12 or additional freight capacity R: Current enhancement proposals may not be delivered due to affordability. An example of this is the decision to withdraw the development of 3 freight loops on the ECML north of York, and withdrawal of reinstatement of 4 tracking between Huntingdon and Woodwalton.	• East/West Rail provision for gauge and freight diversions • Trans-Pennine provision for gauge and freight growth including diversionary capability to meet FOC and FEU aspirations for East-West freight land bridge • Support Route forums (RSPG etc.) to influence scope and secure freight benefit following scheme delivery • FNPO, FOCs and Freight End Users to provide appropriate input into the decision making process • Work with Route Business development team to identify potential Third Party funding sources

No	Key Challenges, Risks and Opportunities	What we plan to do
8	**Construction projects / HS2** O: Opportunity for spoil and waste out and aggregate and other commodities (e.g. Tunnel segments) in to support construction R: HS2 routing requires the removal and re-location of existing freight facilities (e.g. Toton, Leeds Freightliner Terminal, Leeds Midland Road and Leeds Stourton Aggregates)	• Work with DfT, HS2 Ltd, FOCs and End-customers to offer solutions to demands of major projects • Work with customers to manage the impact of major projects on their business (HS2) • Terminal / Yard developments ('pop-up' terminals / lineside loading potential) • Work with FOCs and Freight End Users to resolve conflicts with existing freight facilities (e.g. Toton, Leeds Freightliner Terminal, Leeds Midland Road and Leeds Stourton Aggregates) • Work with FOCs and Freight End Users to deliver new network connections and necessary capacity, or bring out of use infrastructure back into use
9	**SRFI Terminal Development** O: SRFI terminal development supports intermodal growth especially addressing demand for inland terminals C: Securing of sufficient capacity to support SRFI developments through planning and into use	• Work with Developers to understand SRFI proposals progression through planning • Offer NR support to proposals when adequate strategic fit and capacity • Work with System Operator to support funded early stage timetable work for SRFI developers
10	**End User-customer service** O: Closer working with FEU's enables greater understanding of customer priorities for future (e.g. Tarmac)	• Work with end-customers to develop business growth and support modal shift to rail • Work with end-customers to strengthen service delivery and support
11	**Review of redundant and unused assets:** O: Following traffic changes in CP5 and structural change in energy market, opportunity exists to review size and organisation of non-passenger network R: FOC objection to supporting Network Changes	• Identify opportunities to reduce maintenance costs and remove unneeded infrastructure • Regularise the status of freight assets and other assets including gauge, actual v published capability • Explore potential to transfer ownership of redundant lines / assets to secure better opportunities for redevelopment
12	**Yards and sidings infrastructure** R: Yard and Siding Infrastructure asset condition is critical to avoid derailment events and customer LTI's R: Limited Route funding is prioritised to passenger and mixed route parts of the network at the expense of freight yards and sidings network infrastructure	• Working with Routes and customers to review asset condition on regular basis • Working with Routes to identify and plan necessary infrastructure interventions to protect key freight yards and sidings resilience • Working with Routes and customers to establish and benchmark walking route use and condition
13	**Timetable Review** O/R: Timetable Improvements to closely reflect capability of trains and capacity of network required on busier network R: Without faster freight journey times freight capacity will be marginalised at the expense of more frequent and faster passenger services particularly on core routes, e.g. ECML, MML	• Continuation of CP5 work to review path usage and remove unused paths and agree strategic capacity • Work with FOC's to more closely align Train Slots in the Timetable with Access Rights in the TAC, and remove unused rights where there is no corresponding Train Slot • Work with the Route, System Operator and FOC's/TOCs where in upcoming major timetable re-casts the available capacity may be less than contracted rights, e.g. ECML December 2019 timetable change • Work with SO and customers to review opportunities to improve average speed origin-destination • Review with System Operator and customers suitability of current systems to capture network constraints and traction capability (Loads Book, Timing Loads, Lengths)
14	**Digital Railway** O: Successful introduction of Digital Railway offers potential for growth	• Act as internal client on behalf of Freight to build sympathetic capability for freight traffic needs
	Upgrades and Disruptive Possessions R: Major upgrade programmes such as MML, ECML and TRU will require significant disruptive access R: Routes may seek to make greater use of midweek cyclical maintenance, including enhancing the existing windows	• Champion requirements of FOCs and Freight End Users so that services can operate as required during disruptive possessions including availability of diversionary routes and timely provision of capacity studies to identify train service capability

CP6 Plan

Section	Key Themes	Strategy	Specifics	Owner	Timescale
Safety	Lost Time Incidents	Reduce LTIs by concentrating on Network Rail yard infrastructure, connecting sidings and walking routes conditions	• Published rolling programme of joint health and safety visits with customers (FOCs/TOCs) to agreed sites • Complete review of activities undertaken at Network Rail locations for each customer (FOCs/TOCs) and including authorised walking routes/crew change locations etc • Subject to funding, a programme of improvements will be specified and implemented • 'Go Look See' with customers within two weeks of any reportable customer LTI event on network infrastructure	FNPO Operations and Safety Manager/ SRFM, Route DU's/RAM's	Initial Programme was published in 2018/19 and agreed then annually during CP6
	Freight Train derailments	Reduce freight train derailments by concentrating on Network Rail yard and sidings infrastructure	• Published rolling programme of joint health and safety visits with customers to agreed sites • End Customer Forum to be established to share issues of concern around connection points and maintenance either side of boundary point • Subject to funding, a programme of improvements will be specified and implemented	FNPO Operations and Safety Manager/ SRFM, Route DU's/RAM's	Initial Programme was published in 2018/19 and agreed then annually during CP6
	SPADs	Reduce freight SPADS by collaborative working	• SPAD Forum to be established with FOCs to share learning and best practice	FNPO Operations and Safety Manager	Forum created with programme of meeting dates published by FNPO Ops and Safety Manager.
Performance	Right time performance at key hubs and terminals	Use Strategic Freight Corridors to focus delivery Measuring Right Time Departures from terminals at the start of the journey	• Use of joint Control Rooms and visualisation at major sites (e.g. Immingham and Drax) • Local workings groups to be established where appropriate, e.g. Mountsorrel and Doncaster area • Re-brief of Freight Strategy – 'Freight Delivery Matters' and linkage between RTD and FDM delivery	SRFM/ FNPO Performance Manager	Existing Working Groups to continue into CP6. Quarterly FNPO review of terminal engagement arrangements.
	Measuring FDM and FDM-R	Focus on key defined routes – e.g. ECML, MML, Trans Pennine corridor and Immingham to Doncaster: Asset Performance Asset Resilience Effective contingency plans	• Target FDM-R LNE&EM target for end CP6 of 95.3% • Input to Route Contingency Plans for consistent application of freight contingency arrangements • FSDM input to incident recovery real-time to build consistency • Asset reviews with Route Asset teams to share traffic forecasts and asset challenges • Influence at RSPG to define future asset strategy in terms of renewals to support freight growth	SRFM/FNPO Performance Manager	Annual target setting during CP6. Periodic review of FDM-R delivery and key influencers
	Joint Freight Performance Improvement Strategies	Agreed joint strategies with each FOC including details of plans to reduce each delay area	• Complete plan annually with each FOC concentrating on primary delay categories • Agreed industry information share • Regular reviews against plan with each Route and FOC customer	FNPO Performance Manager/CRE	Joint Strategy Plan per Operator to be published annually during CP6 and reviewed quarterly

Section	Key Themes	Strategy	Specifics	Owner	Timescale
Capacity & Capability	Identifying future capacity needs.	Bring together all freight capacity plans: • Route Studies • SFN • Customer specific	• All future project specifications to include a specific output level for freight services, reflecting the SFN specifications and forecast future traffic requirements • Capability constraints review – RA, gauge, HAW and other. Reconcile published versus actual infrastructure capability. Future plans for improvement to meet capacity requirements • Interactive maps for gauge, RA to be created and maintained • Continued support for longer, heavier trains programme	Project Sponsor/SRFM. SRFM/ FNPO Head of Strategic Capability/ FNPO Head of Network Management	Future capability programme definition by May 2019 and delivery by strategic route
	Review capability constraints	Undertake Capability Review	• Improved gauge and operational flexibility on the key freight corridors • Robust gauge cleared diversionary routes • Transparent network capability for each route	SRFM/ FNPO Head of Strategic Capability/ FNPO Head of Network Management	Existing capability constraints review definition by May 2019 and delivery per strategic route
	Freight Train Average Speed	Undertake Average Speed Review	• Establish framework for average speed measurement and improvement • Work with Stakeholders to target specific flows and services • Annual plan in connection with annual timetable change	FNPO Head of Performance/ FNPO Head of Strategic Capability/ FNPO Head of Network Management	Measurement framework to be agreed by industry May 2018. Flows to be agreed at annual TT change
	Connections to new terminals	Facilitate connections to the network and associated capacity	• Work with FOC's, Freight End Users and Developers to identify potential new connections, including development of SRFI's • Information share of prospective sites via RSPG • Facilitate new network connections e.g. Radlett and East Midlands Gateway • Identify potential sites (new connections, bringing out of use infrastructure back into use and increased use of lineside loading) to facilitate growth, e.g. York and Newcastle area for aggregates • Advice to System Operator of future sites and flows to understand timetable and capacity impact • Timetable studies for major terminal developments, e.g. SRFI's	SRFM/ FNPO Business Development Managers	Forward programme of FEU and Developer engagement to be agreed annually during CP6. Freight Developments Register to be held by SRFM for review at RSPG quarterly.
	Delivery of agreed CP6 freight enhancement programme	Continuation of Strategic Freight Network funding and industry governance group	• Promotion of potential freight projects and enhancement schemes • Prioritise funding to best meet demand and facilitate growth • Align SFN proposals with Route and National proposals to deliver a coherent forward strategy which best meets overall requirements	FNPO Head of Freight Development/ NSO	Ongoing
	Consideration of incremental freight improvements in all schemes	Structured review process with Route planners and Sponsors	• Work with FOC's and System Operator to identify opportunities for incremental freight enhancements as part of the development of enhancement and renewals proposals, e.g. faster entrance/exit speeds into loops and through crossovers	SRFM/ System Operator	Defined engagement process and inputs in place with Route Strategy by June 19

Section	Key Themes	Strategy	Specifics	Owner	Timescale
Network Availability	Engineering plans that meet both FNPO customer and Route needs.	Co-ordinated freight input into • Engineering Access Statements • Access Planning Requests	Engineering plans that are; • Transparent • co-ordinated • consistent across Routes • planned well in advance and • take into consideration contingency arrangements for long distance services	SRFM/ FNPO Capability and Planning Manager	Annual review of process/requirements between FNPO and Access Planning from June 2019 incorporating end to end Access process
Freight Asset Management Plans	Effective asset management arrangements for yards and sidings infrastructure	Create a joint understanding of maintenance responsibility, traffic level changes and asset condition	• Enable Asset Management and Engineering teams to plan the targeted maintenance and renewals requirement of each site • Ensure appropriate standards in use at each location.	SRFM/ Route COO/ RAM	Biannual review of yard and sidings maintenance priorities / traffic flows commencing May 2019
	Review of Locomotive and Heavy Axle Weight (HAW) track and structure restrictions	Establish potential/cost for removal of restrictions	• Input into track/structures renewals and maintenance plans	SRFM/ Route COO/ RAM	Review definition and programme issued by April 2019. Delivery per strategic route to be programmed.
	Review Freight Only lines and other infrastructure	Understand the potential to reduce Operations, Maintenance & Renewals costs	• based on existing & reasonable future use • Input into track/structures/maintenance plans	SRFM/ Route COO/ RAM	Delivery of initial opportunities report by July 2019. Agreed Action Plan through CP6 per Route.
	Removal of TSRs / PSRs in timely fashion	Establish removal plan recognising freight impact	• Work with the Route teams to identify the impact of speed restrictions on freight services and work collaboratively to remove them	SRFM/ Route COO/ RAM	Ongoing periodic review of performance impact of TSRs to be agreed per Route

LNW Route & Freight & National Passenger Operators (FNPO) Route

This summary sets out how the LNW and FNPO routes will work together to deliver the Route Strategic Plan for LNW. It outlines existing FNPO activity, and then describes the impact of the plans and aspirations of FNPO customers to grow and develop their businesses. It summarises what Network Rail needs to do to deliver these strategies and how, in doing so, efficiencies can be identified and realised.

National Passenger Operators:

CrossCountry is an extensive user of LNW route and key issues include right time arrivals at Birmingham New St, as well as the management of fatalities and trespass incidents.

Caledonian Sleeper also operates nightly services, six nights per week, from London Euston via WCML to Glasgow, Edinburgh, Aberdeen and the Scottish Highlands. These services rely on overnight availability and reliability of WCML and the longer platforms at London Euston station.

Charter trains also operate across LNW Route, especially at weekends, to a variety of leisure destinations being hauled by both standard and heritage steam and diesel locomotives. This leisure market is expected to grow during CP6.

Challenges and Opportunities

No	Key Challenges, Risks and Opportunities	What we plan to do
1	**Aggregate Growth** O: Volume growth from quarries in the Peak District area R: Capacity and capability. Infrastructure not able to cope with traffic demand.	• Explore opportunities for longer and heavier trains maximising loco capability • Support introduction of new wagons that maximise payload/length ratio • Support Terminal and Yard developments – e.g. Peak Forest and other locations required for sector growth. • Support introduction of 'pop-up' terminals, bringing out of use infrastructure back into use and increased use of lineside loading • Explore opportunities for new capacity – e.g. Buxton URS lengthening, trial longer trains
2	**Domestic & Deep Sea Intermodal Growth** O: Volume growth from Ports / Terminals (Daventry, Hams Hall, Liverpool, Trafford Park) R: Train paths and SRT discrepancies with longer, heavier trains R: Capacity and capability, including gauge clearance and diversionary capability	• Work with customers to maximise opportunities to increase length of trains • Increase Average Journey Speed origin to destination • Explore provision of recognised diversionary routes with adequate capability • Facilitate new terminal developments at Daventry, Northampton, West Midlands and Parkside. • Explore opportunities for new capacity through better paths, longer trains, faster and cleaner paths.
3	**Gauge establishment** C: Establishment of recognised diversionary routes for gauge critical traffic	• Explore gauge clearance on key corridors and provision of diversionary capability • Explore funding opportunities, including Third Party • Documented diversionary routes for core intermodal flows • Review of RT3973 provision to more closely align with traffic flows – reduced duplication
4	**Other Commodity Traffic Growth** O: Coal O: Steel R: Biomass O: Automotive O: Forest Products O: Bulk	• Work with customers to maximise opportunities for longer and heavier trains maximising loco capability • Support Terminal / Yard developments to facilitate growth • Support introduction of 'pop-up' terminals, bringing out of use infrastructure back into use and increased use of lineside loading • Work with FOCs and Freight End Users to deliver new network connections and necessary capacity and capability, or bring out of use infrastructure back into use • Support the development and introduction of the West Cumbrian Mining traffic flow to Teesside.
5	**Logistics and Mail Opportunity** O: Potential mail growth on main corridors and premium logistics developments	• Explore opportunities for business growth with existing and potential new customers • Continue to work with Royal Mail to improve performance and train service delivery

No	Key Challenges, Risks and Opportunities	What we plan to do
6	**Franchise changes** R: Refranchising of TOC in Route seeks greater capacity on shared lines	• Retain adequate capacity, capability and flexibility for existing and forecast freight • Review Impact on possession strategy from new flows • Review stabling plans for new rolling stock / change of locations
7	**Infrastructure enhancements / electrification** O: Greater capacity/opportunity following enhancement (East West Rail) R: Loss of Capacity following timetable change	• East/West Rail provision for gauge and freight diversions • Trans-Pennine provision for gauge and freight growth • Support Route forums (RSPG etc.) to influence scope and secure freight benefit following scheme delivery • FNPO, FOCs and Freight End Users to provide appropriate input into the decision making process • Work with Route Business development team to identify potential Third Party funding sources
8	**Construction projects / HS2** O: Opportunity for spoil and waste out and aggregate and other commodities in to support construction R: HS2 routing requires the removal and re-location of existing freight facilities	• Work with DfT, HS2 Ltd, FOCs and End-customers to offer solutions to demands of major projects • Work with customers to manage the impact of major projects on their business (HS2) • Terminal / Yard developments ('pop-up' terminals / lineside loading potential) • Work with FOCs and Freight End Users to resolve conflicts with existing freight facilities • Work with FOCs and Freight End Users to deliver new network connections and necessary capacity, or bring out of use infrastructure back into use
9	**SRFI Terminal Development** O: SRFI terminal development supports intermodal growth especially addressing demand for inland terminals C: Securing of sufficient capacity to support SRFI developments through planning and into use	• Work with Developers to understand SRFI proposals progression through planning • Offer NR support to proposals when adequate strategic fit and capacity • Work with System Operator to support funded early stage timetable work for SRFI developers
10	**End User-customer service** O: Closer working with FEU's enables greater understanding of customer priorities for future	• Work with end-customers to develop business growth and support modal shift to rail • Work with end-customers to strengthen service delivery and support
11	**Review of redundant and unused assets**: O: Following traffic changes in CP5 and structural change in energy market, opportunity exists to review size and organisation of non-passenger network R: FOC objection to supporting Network Changes	• Identify opportunities to reduce maintenance costs and remove unneeded infrastructure • Regularise the status of freight assets and other assets including gauge, S&C (actual v published capability) • Explore potential to transfer ownership of redundant lines / assets to secure better opportunities for redevelopment
12	**Yards and sidings infrastructure** R: Yard and Siding Infrastructure asset condition is critical to avoid derailment events and customer LTI's	• Working with Routes and customers to review asset condition on regular basis, • Working with Routes and customers to establish and benchmark walking route use and condition
13	**Timetable Review** O/R: Timetable Improvements to closely reflect capability of trains and capacity of network required on busier network	• Continuation of CP5 work to review path usage and remove unused paths and agree strategic capacity • Work with FOC's to more closely align Train Slots in the Timetable with Access Rights in the TAC, and remove unused rights where there is no corresponding Train Slot • Work with the Route, System Operator and FOC's/TOCs where in upcoming major timetable re-casts the available capacity may be less than contracted rights. • Work with System Operator and customers to review opportunities to improve average speed origin-destination • Review with System Operator and customers suitability of current systems to capture network constraints and traction capability (Loads Book, Timing Loads, Lengths)

No	Key Challenges, Risks and Opportunities	What we plan to do
14	**Digital Railway** O: Successful introduction of Digital Railway offers potential for growth on busiest corridors	• Act as internal client on behalf of Freight to build sympathetic capability for freight traffic needs
15	**Upgrades and Disruptive Possessions** R: Major upgrade programmes such as HS2 which will require significant disruptive access	• Champion requirements of FOCs and Freight End Users so that services can operate as required during disruptive possessions including availability of diversionary routes and timely provision of capacity studies to identify train service capability

CP6 Plan

Section	Key Themes	Strategy	Specifics	Owner	Timescale
Safety	Lost Time Incidents	Reduce LTIs through concentration on Network Rail yard infrastructure, connecting sidings and walking routes conditions.	• Published rolling programme of joint health and safety visits with customers (FOCs/TOCs) to agreed sites • Complete review of authorised walking routes/crew change locations per customer • Subject to funding, a programme of improvements will be specified and implemented • 'Go Look See' with customer within two weeks of any reportable customer LTI event on network infrastructure	FNPO Operations and Safety Manager/ SRFM	Initial Programme was published in 2018/19 and agreed then annually during CP6
	Freight Train derailments	Reduce freight train derailments through concentration on Network Rail yard and sidings infrastructure.	• Published rolling programme of joint health and safety visits with customers to agreed sites • End Customer Forum to be implemented to share issues of concern around connection points and maintenance either side of boundary point • Subject to funding, a programme of improvements will be specified and implemented	FNPO Operations and Safety Manager/ SRFM	Initial Programme was published in 2018/19 and agreed then annually during CP6
	FNPO SPADs	Reduce freight SPADS by collaborative working	• SPAD Forum to be implemented with FOCs to share learning and best practice	FNPO Operations and Safety Manager	Creation of Forum and meeting regularity proposed quarterly.
Performance	Right time departure performance at key hubs and terminals	Use Strategic Freight Corridors to focus delivery Measuring Right Time Departures from terminals at the start of the journey	• Local Working Groups (e.g. Peak District, Daventry) • Re-brief Freight Strategy – 'Freight Delivery Matters' and linkage between RTD and FDM delivery	SRFM/ FNPO Performance Manager	Existing Working Groups to continue into CP6. Quarterly FNPO review of terminal arrangements.
	Measuring FDM and FDM-R	Focus on defined key routes: - Asset Performance - Asset Resilience - Effective contingency plans	• Target FDM-R Route target for end CP6 of 93.9% • Input to Route Contingency Plan for consistent application of freight contingency arrangements • FSDM input to incident recovery real-time to build consistency • Asset Reviews with Route Asset teams to share traffic forecasts and asset challenges with SRFM • Influence at RSPG to define future asset strategy in terms of renewals to support freight growth	SRFM/FNPO Performance Manager	Annual target setting during CP6. Periodic review of FDM-R delivery and key influencers
	Joint Freight Performance Improvement Strategies	Agreed joint strategy with each FOC including details of plans to reduce each delay area	• Complete plan annually with each FOC concentrating on primary delay categories • Agreed industry information share • Regular reviews against plan with each Route and FOC customer	FNPO Performance Manager/CRE	Joint Strategy Plan per Operator to be published annually during CP6 and reviewed quarterly

Section	Key Themes	Strategy	Specifics	Owner	Timescale
Capacity & Capability	Identifying future capacity and capability needs.	Bring together all freight capacity plans: • Route Studies • SFN • Customer specific	• All future project specifications to include a specific output level for freight services, reflecting the SFN specifications and forecast future traffic requirements. • Future Capability needs assessment to be undertaken – RA, Gauge, HAW – future plans for improvement to meet capacity requirements • Interactive maps for Gauge, RA to be created and maintained • Continued support for longer, heavier trains programme	Project Sponsor/SRFM. FNPO Head of Strategic Capability/ FNPO Head of Network Management	Future capability programme definition by May 2019 and delivery per strategic route
	Review existing capability constraints	Undertake Capability Review	• Improved gauge and operational flexibility on key freight corridors • Robust gauge cleared diversionary routes • Transparent network capability per route for customers	SRFM/ FNPO Head of Strategic Capability/ FNPO Head of Network Management	Existing capability constraints review definition by May 2019 and delivery per strategic route
	Freight Train Average Speed	Undertake Average Speed Review	• Establish framework for average speed measurement and improvement • Work with Stakeholders to target specific flows and services • Annual plan in connection with annual timetable change	FNPO Head of Performance/ FNPO Head of Capacity and Capability/ FNPO Head of Network Management	Measurement framework to be agreed by industry June 2019. Flows to be agreed for annual TT change
	Connections to new terminals and SRFIs	Facilitate connections to the network and associated capacity	• Work with FOC's, Freight End Users and Developers to identify potential new connections, including development of SRFI's • Information share of prospective sites via RSPG • Facilitate new network connections • Identify potential sites (new connections, bringing out of use infrastructure back into use and increased use of lineside loading) to facilitate growth, (West Cumbrian Mining for coal) • Advice to System Operator of future sites and flows to understand timetable and capacity impact • Timetable studies for major terminal developments, e.g. SRFI's	SRFM/ FNPO Business Development Managers	Forward programme of FEU and Developer engagement to be agreed annually during CP6. Freight Developments Register to be held by SRFM for review at RSPG quarterly.
	Delivery of agreed CP6 freight enhancement programme	Continuation of Strategic Freight Network funding and industry governance group	• Promotion of potential freight projects and enhancement schemes • Prioritise funding to best meet demand and facilitate growth • Align SFN proposals with Route and National proposals to deliver a coherent forward strategy which best meets overall requirements	FNPO Head of Freight Development/ System Operator	Ongoing
	Consideration of incremental freight improvements in all schemes	Structured review process with Route planners and Sponsors	• Work with FOC's and System Operator to identify opportunities for incremental freight enhancements as part of the development of enhancement and renewals proposals, e.g. faster entrance/exit speeds into loops and through crossovers. • Defined and consistent engagement process to be agreed with Route Planning team and Sponsors	SRFM/ System Operator	Defined engagement process and inputs to be in place with Route Strategy by June 2019

Section	Key Themes	Strategy	Specifics	Owner	Timescale
Network Availability	Engineering plans that meet both FNPO customer and Route needs.	Regular and co-ordinated freight input into Engineering Access Statements Access Planning Requests	Engineering plans that are; • Transparent • co-ordinated • consistent across Routes • planned well in advance and • take into consideration contingency arrangements for long distance services	SRFM/ FNPO Capability and Planning Manager	Annual review of process/requirements between FNPO and Engineering Planning from June 2019 incorporating end to end Engineering Access process
Freight Asset Management Plans	Effective asset management arrangements for yards and sidings infrastructure	Create a joint understanding of maintenance responsibility, traffic level changes and asset condition	• Enable Asset Management and Engineering teams to plan the targeted maintenance and renewals requirement of each site • Ensure appropriate standards in use at each location.	SRFM/ Route COO/ RAM	Biannual review of yard and sidings maintenance priorities / traffic flows
	Review of Locomotive and Heavy Axle Weight (HAW) track and structure restrictions	Establish potential/cost for removal of restrictions	• Input into track/structures renewals and maintenance plans	SRFM/ Route COO/ RAM	Review definition and programme issued by May 2019. Delivery per strategic route to be programmed.
	Review Freight Only lines and other infrastructure	Understand the potential to reduce OMR.	• Review based on existing & predicted future use • Input into track/structures/maintenance plans • Outputs to be agreed with customers/ORR	SRFM/ Route COO/ RAM	Delivery of initial opportunities. Agreed Action Plan through CP6 per Route.
	Removal of TSRs / PSRs in timely fashion	Establish removal plan recognising freight impact	• Work with the Route teams to identify the impact of speed restrictions on freight services and work collaboratively to remove them.	SRFM/ Route COO/ RAM	Ongoing periodic review of performance impact of TSRs to be agreed per Route

Scotland Route & Freight & National Passenger Operators (FNPO) Route

This summary sets out how FNPO Route and Scotland Route Business will work together to deliver the Route Strategic Plan for Scotland. It outlines existing FNPO activity, and then describes the impact of the plans and aspirations of FNPO customers to grow and develop their businesses. It summarises what Network Rail needs to do to deliver these strategies and how, in doing so, efficiencies can be identified and realised.

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National Passenger Operators:
CrossCountry is an extensive user of Scotland route and key issues include the management of fatalities and trespass incidents and right time improvements on the Edinburgh to Glasgow corridor

Caledonian Sleeper also operates nightly services, six nights per week, from London Euston via WCML to Glasgow, Edinburgh, Aberdeen and the Scottish Highlands. These services rely on overnight availability and reliability of WCML and the longer platforms at London Euston station.

Charter trains also operate across Scotland Route, especially at weekends, to a variety of leisure destinations being hauled by both standard and heritage steam and diesel locomotives. This leisure market is expected to grow during CP6.

Key Challenges, Risks and Opportunities

- Freight Growth: Transport Scotland (TS) requires Network Rail to lead the Industry in order to secure at least 7.5% growth (measured in KNTM) by the end CP6. An agreed Industry Plan, which will cover 3 HLOS targets specific to rail freight of growth, average speed improvement and performance and which will encompass
  - Identification of productivity opportunities (ie longer, heavier trains, improved operations etc)
  - Clarification of where infrastructure interventions would be required to secure growth
  - Clarification of potential 'trade-offs' to secure growth (ie RoTR opportunities, timetabling solutions etc)
  - Review of processes to facilitate encouragement of a flexible approach to new traffic.
  - Improved promotional activity

  will be completed by end March 2019 and delivery of the resultant Action Plans will underpin Scottish Freight Customer requirements through CP6 (and beyond).

- Gauge Establishment: Work with Route Business Scotland, SO and the rail freight Industry in Scotland to develop the freight element of the Scottish Gauge Requirement and to protect existing capability as per the HLOS (published and RT3973 permissions). Explore gauge clearance requirements on key corridors and diversionary routes and develop business case to facilitate securing funding for any necessary enhancement works.

- Disruptive Access Requirements: Champion requirements of FOCs and Freight End Users so that services can operate as required during disruptive possessions including availability of diversionary routes and timely provision of capacity studies to identify train service capability

CP6 Delivery Plan (Over and above the Specifics Detailed in the Industry Agreed Freight Growth Plan)

Section	Strategy	Specifics	Owner	Timescale
Growth	• Lead response to TS challenges: ○ Development of Industry Plan to target 7.5% volume growth target by end CP6 measured in KNTM ○ Making rail freight easier for Scottish customers to use ○ Commodity/area workshops ○ Flexible approach to new traffic	• Published stakeholder engagement plan to review growth potential. • Secure support for draft Industry Agreed Action Plan • Submit draft Industry Agreed Action Plan to ORR • Develop agreed Action Plans to be delivered throughout CP6 • Submit final Industry Agreed Action Plan to TS/ORR • In partnership with FOCs, End Users and stakeholders document suggestions and, subject to funding where required, promote implementation of the proposals to secure growth.	SRFM SRFM SRFM SRFM / Industry SRFM SRFM / System Operator	Complete Complete Complete End Feb 2019 End March 2019 Throughout CP6
Safety	Reduce Lost Time Injuries (LTIs) on Network Rail yard infrastructure, connecting sidings and walking route conditions	• Publish a rolling programme of joint health and safety visits with customers (FOCs/TOCs/End Users) to agreed sites. • Route Vegetation clearance programme to include Network Yards, Sidings and Walkways • Complete review of authorised walking routes/crew change locations • Provide Scotland freight safety project candidates for the FNPO Safety Improvement Plan (FSIP). • Hold 'Go Look See' with customer within two weeks of any reportable customer LTI event on Network infrastructure.	FNPO Operations and Safety Manager / SRFM	Annual Programme to be published throughout CP6
	Reduce freight train derailments on Network Rail yard and sidings infrastructure.	• Published rolling programme of joint health and safety visits with customers (FOCs/TOCs) to agreed sites. • End Customer Forum to be implemented to share issues of concern around connection points and maintenance either side of boundary point. • Timely renewal/refurbishments of FO Infrastructure to prevent derailment risk • Subject to funding, a programme of improvements will be specified and implemented. • Review of existing standards to make sure that they are appropriate for each location.	FNPO Operations and Safety Manager / SRFM	Initial Programme to be published in March 2018 then annually during CP6
	FNPO SPADs Reduce freight SPADS by collaborative working	• SPAD Forum to be implemented with FOCs to share learning and best practice.	FNPO Operations and Safety Manager	Creation of Forum by April 2018, meeting regularity proposed quarterly

Section	Strategy	Specifics	Owner	Timescale
Performance	Right time performance at key hubs and terminals	• Proactive management of On Time targets at all Scottish terminals	SRFM / FNPO Performance Manager	Quarterly FNPO review of terminal engagement arrangements
	Measuring FDM and FDM-R Focus on WCML & other defined key routes: • Asset Performance • Asset Resilience • Effective contingency plans	• Transport Scotland HLOS target of 93% FDM-R at start CP6 increasing to 94.5% FDM at end CP6 • Input into Route CP's for consistent application of freight contingency arrangements. • FSDM input into incident recovery real-time to build consistency. • Asset Reviews with Route Asset teams to share traffic forecast and asset challenges. • Influence at RSPG to define future asset strategy in terms of renewals to support freight growth • Work with the Route teams to identify the impact of speed restrictions on freight services and work collaboratively to remove them.	SRFM / FNPO Performance Manager	Periodic review of FDM-R delivery and key influencers
	Agreed Joint Strategy with each FOC including details of plans to reduce each delay area	• Regular reviews against plan with each Route and FOC customer.	FNPO Performance Manager / SRFM / CRE	Joint Strategy Plan per Operator to be published annually during CP6 and reviewed quarterly
Capacity & Capability	Identifying future capacity needs Bring together all freight capacity plans; • Route Studies • SSFN • Customer specific	• Delivery of Freight Growth Plan Specific Capacity and Capability Actions. • Proposal of potential freight related projects (enhancements, incremental work and operational solutions) to be regularly incorporated within Pipeline proposals. • Future project specifications to include a specific output level for freight services, that reflects the SSFN specifications and forecast future traffic requirements. • Interactive maps for gauge, RA to be created and maintained • Continued support for longer, heavier trains programme	SRFM Project Sponsor / Lead Strategic Planner / FNPO Head of Strategic Capability / FNPO Head of Network Management	Throughout CP6
	Freight Gauge Specification	• Define Freight Gauge Specification (short/long term) • Produce a database of published gauge plus RT3973 permissions • Work with Scotland Route Business on developing and implementing the Scotland gauging strategy • Define requirements to secure improved gauge and operational flexibility on key freight corridors/diversionary routes and seek funding where required.	SRFM / FNPO Head of Strategic Capability / FNPO Head of Network Management / Lead Strategic Planner	Complete Complete Complete Throughout CP6

Capacity & Capability	Management of capability
	Produce baseline freight statement that outlines HLOS requirements.
		• Work with Route Business Scotland on a Gauging Strategy to satisfy HLOS requirements that;
		  ○ capability of the network to be operated and maintained as a minimum throughout CP6 at a level which satisfy all track access rights in place at the time of HLOS or by March 2019
		  ○ 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.
		  ○ freight gauge capability should be maintained to at least the level shown in the Freight Gauge Database Map, or the Sectional Appendix, or full suite of RT3973 forms or Scotland route at time of HLOS publication
			SRFM / FNPO Head of Strategic Capability / FNPO Head of Network Management / Lead Strategic Planner / DRAM	Throughout CP6

	Freight Train Average Speed	• Establish framework for average speed measurement and improvement. • Work with SO and Industry as part of the Average Speed Working Group to develop Action Plans. • Specifications for enhancement projects to consider journey time improvement output for freight services • Produce proposals, iterate with stakeholders, test and review with Transport Scotland annually.	SRFM/ SO / FNPO Head of Performance / FNPO Head of Strategic Capability / FNPO Head of Network Management	Metric to be agreed by Industry July 2018 (Complete). Benchmark agreed as Dec 2018 TT change. Ongoing participation in Average Speed Working Group led by SO
	Connections to new terminals Facilitate connections to the network and associates capacity	• Work with FOCs, Freight Users and Developers to identify potential new connections. • Information share of prospective new sites via RSPG. • Identify potential sites (new connections, bringing out of use infrastructure back into use, lineside loading) to facilitate growth. • Advice to System Operator of future sites and flows to understand timetable and capacity impact. • Facilitate and promote "Loading on the Line" wherever possible. • Promote innovative options for temporary or cost-effective connections	SRFM / FNPO Business Development Managers	Forward programme of FEU and Developer engagement to be agreed annually during CP6. Freight Developments register to be held by SRFM for review quarterly

South East Route & Freight & National Passenger Operators (FNPO) Route

This summary sets out how the South East and FNPO routes will work together to deliver the Route Strategic Plan for South East. It outlines existing FNPO activity, and then describes the impact of the plans and aspirations of FNPO customers to grow and develop their businesses. It summarises what Network Rail needs to do to deliver these strategies and how, in doing so, efficiencies can be identified and realised.

National Passenger Operators:
No national passenger operators use South East route infrastructure

Charter trains operate across South East Route, especially at weekends, to a variety of leisure destinations being hauled by both standard and heritage steam and diesel locomotives. This leisure market is expected to grow during CP6.

Challenges and Opportunities

No	Key Challenges, Risks and Opportunities	What we plan to do
1	**Aggregate Growth** O: Volume growth from locations off SE Route to end terminals on the route R: Capacity and capability. Infrastructure not able to cope with traffic demand.	• Explore opportunities for longer and heavier trains maximising loco capability • Support introduction of new wagons that maximise payload/length ratio • Support Terminal and Yard developments – e.g. Peak Forest and other locations required for sector growth. • Support introduction of 'pop-up' terminals, bringing out of use infrastructure back into use and increased use of lineside loading • Explore opportunities for new capacity – e.g. including trial longer trains
2	**Gauge establishment** C: Establishment of recognised diversionary routes for gauge critical traffic	• Explore gauge clearance on key corridors, e.g. (Ashford/Maidstone East/Sevenoaks Line, West London Line and North Kent), and provision of diversionary capability • Explore funding opportunities, including Third Party • Documented diversionary routes for core intermodal flows • Review of RT3973 provision to more closely align with traffic flows – reduced duplication
3	**Other Commodity Traffic Growth** O: Steel & other scrap metals O: Automotive O: Forest Products O: Bulk O: Aviation Fuel & other Petro-chemicals O: Intermodal	• Work with customers to maximise opportunities for longer and heavier trains maximising loco capability • Support Terminal / Yard developments to facilitate growth. Eg Howbury Park, Plumstead, Thamesport. • Support introduction of 'pop-up' terminals, bringing out of use infrastructure back into use and increased use of lineside loading. Promotion of and assisting customers to set up new automotive, Steel or aggregate flows from Sheerness and Queenborough on the Isle of Sheppey and growing traffic from Angerstein, Thamesport, Northfleet, Cliffe, Grain and Channel Tunnel traffic from Dollands Moor. • Work with FOCs and Freight End Users to deliver new network connections and necessary capacity and capability, or bring out of use infrastructure back into use including Newhaven Marine and Salfords on the Brighton Main Line.
4	**Franchise changes / Crossrail** R: Refranchising of Southeastern seeks greater capacity on shared lines	• Retain adequate capacity, capability and flexibility for existing and forecast freight • Review Impact on possession strategy from new flows • Review stabling plans for new rolling stock / change of locations including the introduction of a potential new depot for Southeastern in the inner London area

No	Key Challenges, Risks and Opportunities	What we plan to do
5	**Infrastructure enhancements / electrification** R: Loss of Capacity following timetable change. Southeastern on the Southeast Route.	• Support Route forums (RSPG etc.) to influence scope and secure freight benefit following scheme delivery • FNPO, FOCs and Freight End Users to provide appropriate input into the decision making process • Work with Route Business development team to identify potential Third Party funding sources
6	**Construction projects / HS2** O: Opportunity for spoil and waste out and aggregate and other commodities in to support construction R: Capacity for new aggregate and spoil flows in the Southeast from HS2 project	• Work with DfT, HS2 Ltd, FOCs and End-customers to offer solutions to demands of major projects • Work with customers to manage the impact of major projects on their business (HS2) • Terminal / Yard developments ('pop-up' terminals / lineside loading potential) • Work with FOCs and Freight End Users to deliver new network connections and necessary capacity, or bring out of use infrastructure back into use
7	**SRFI Terminal Development** O: SRFI terminal development supports intermodal growth especially addressing demand for inland terminals C: Securing of sufficient capacity to support SRFI developments through planning and into use	• Work with Developers to understand SRFI proposals progression through planning • Offer NR support to proposals when adequate strategic fit and capacity Work with System Operator to support funded early stage timetable work for SRFI developers. Southeast Route is hoping to see the establishment and development of Howbury Park as a major intermodal logistics hub
8	**End User-customer service** O: Closer working with FEU's enables greater understanding of customer priorities for future (e.g. Tarmac, Aggregate Industries, Brett, Days Group, Hanson)	• Work with end user -customers to develop business growth and support modal shift to rail • Work with end user -customers to strengthen service delivery and support
9	**Review of redundant and unused assets:** O: Following traffic changes in CP5, opportunity exists to review size and organisation of non-passenger network R: FOC objection to supporting Network Changes	• Identify opportunities to reduce maintenance costs and remove unneeded infrastructure • Regularise the status of freight assets and other assets including gauge, S&C (actual v published capability) • Explore potential to transfer ownership of redundant lines / assets to secure better opportunities for redevelopment
10	**Yards and sidings infrastructure** R: Yard and Siding Infrastructure asset condition is critical to avoid derailment events and customer LTI's	• Working with Routes and customers to review asset condition on regular basis. Keeping up emphasis on maintaining and enhancing major terminal infrastructure including Angerstein and Battersea Pier and Crawley New Yard • Working with Routes and customers to establish and benchmark walking route use and condition
11	**Timetable Review** O/R: Timetable Improvements to closely reflect capability of trains and capacity of network required on busier network	• Continuation of CP5 work to review path usage and remove unused paths and agree strategic capacity • Work with FOC's to more closely align Train Slots in the Timetable with Access Rights in the TAC, and remove unused rights where there is no corresponding Train Slot • Work with the Route, System Operator and FOC's/TOCs where in upcoming major timetable re-casts the available capacity may be less than contracted rights, the new Thameslink/GTR and Southeastern timetables for the Southeast Route • Work with System Operator and customers to review opportunities to improve average speed origin-destination • Review with System Operator and customers suitability of current systems to capture network constraints and traction capability (Loads Book, Timing Loads, Lengths)
12	**Digital Railway** O: Successful introduction of Digital Railway offers potential for growth.	Act as internal client on behalf of Freight to build sympathetic capability for freight traffic needs.
13	**Upgrades and Disruptive Possessions** R: Major upgrade and S&C renewals including High Output will require significant disruptive access	• Champion requirements of FOCs and Freight End Users so that services can operate as required during disruptive possessions including availability of diversionary routes and timely provision of capacity studies to identify train service capability

CP6 Plan

Section	Key Themes	Strategy	Specifics	Owner	Timescale
Safety	Lost Time Incidents	Reduce LTIs through concentration on Network Rail yard infrastructure, connecting sidings and walking routes conditions.	• Published rolling programme of joint health and safety visits with customers (FOCs/TOCs) to agreed sites • Complete review of authorised walking routes/crew change locations per customer • Subject to funding, a programme of improvements will be specified and implemented • 'Go Look See' with customer within two weeks of any reportable customer LTI event on network infrastructure	FNPO Operations and Safety Manager/ SRFM	Initial Programme was published in 2018/19 and agreed then annually during CP6
	Freight Train derailments	Reduce freight train derailments through concentration on Network Rail yard and sidings infrastructure.	• Published rolling programme of joint health and safety visits with customers to agreed sites • End Customer Forum to be implemented to share issues of concern around connection points and maintenance either side of boundary point • Subject to funding, a programme of improvements will be specified and implemented	FNPO Operations and Safety Manager/ SRFM	Initial Programme was published in 2018/19 and agreed then annually during CP6
	FNPO SPADs	Reduce freight SPADS by collaborative working	• SPAD Forum to be implemented with FOCs to share learning and best practice	FNPO Operations and Safety Manager	Creation of Forum. Meeting regularity proposed quarterly
Performance	Right time departure performance at key hubs and terminals	Use Strategic Freight Corridors to focus delivery Measuring Right Time Departures from terminals at the start of the journey	• Local Working Groups (eg SE Freight Performance Improvement Group) • Use of Control Rooms and Visualisation at major sites • Re-brief Freight Strategy – 'Freight Delivery Matters' and linkage between RTD and FDM delivery	SRFM/ FNPO Performance Manager	Existing Working Groups to continue into CP6. Quarterly FNPO review of terminal engagement
	Measuring FDM and FDM-R	Focus on defined key routes: - Asset Performance - Asset Resilience - Effective contingency plans	• Target FDM-R Route target for end CP6 of 91.0% • Input to Route CP's for consistent application of freight contingency arrangements • FSDM input to incident recovery real-time to build consistency • Asset Reviews with Route Asset teams to share traffic forecasts and asset challenges with SRFM • Influence at RSPG to define future asset strategy in terms of renewals to support freight growth	SRFM/FNPO Performance Manager	Annual target setting during CP6. Periodic review of FDM-R delivery and key influencers
	Joint Freight Performance Improvement Strategies	Agreed joint strategy with each FOC including details of plans to reduce each delay area	• Complete plan annually with each FOC concentrating on primary delay categories • Agreed industry information share • Regular reviews against plan with each Route and FOC customer	FNPO Performance Manager/CRE	Joint Strategy Plan per Operator to be published annually during CP6 and reviewed quarterly

Section	Key Themes	Strategy	Specifics	Owner	Timescale
Capacity & Capability	Identifying future capacity and capability needs.	Bring together all freight capacity plans: • Route Studies • SFN • Customer specific	• All future project specifications to include a specific output level for freight services, reflecting the SFN specifications and forecast future traffic requirements. • Future Capability needs assessment to be undertaken – RA, Gauge, HAW – future plans for improvement to meet capacity requirements • Interactive maps for Gauge, RA to be created and maintained • Continued support for longer, heavier trains programme	Project Sponsor/SRFM FNPO Head of Strategic Capability/ FNPO Head of Network Management	Future capability programme definition by May 2019 and delivery per strategic route
	Review existing capability constraints	Undertake Capability Review	• Improved gauge and operational flexibility on key freight corridors • Robust gauge cleared diversionary routes • Transparent network capability per route for customers	SRFM/ FNPO Head of Strategic Capability/ FNPO Head of Network Management	Existing capability constraints review definition by May 2019 and delivery per strategic route
	Freight Train Average Speed	Undertake Average Speed Review	• Establish framework for average speed measurement and improvement • Work with Stakeholders to target specific flows and services • Annual plan in connection with annual timetable change	FNPO Head of Performance/ FNPO Head of Strategic Capability/ FNPO Head of Network Management	Measurement framework to be agreed by industry May 2019. Flows to be agreed for annual TT change
	Connections to new terminals and SRFIs	Facilitate connections to the network and associated capacity	• Work with FOC's, Freight End Users and Developers to identify potential new connections, including development of SRFI's • Information share of prospective sites via RSPG • Facilitate new network connections e.g. (Route TBC) • Identify potential sites (new connections, bringing out of use infrastructure back into use and increased use of lineside loading) to facilitate growth, e.g. (Route TBC) for aggregates • Advice to System Operator of future sites and flows to understand timetable and capacity impact • Timetable studies for major terminal developments, e.g. SRFI's	SRFM/ FNPO Business Development Managers	Forward programme of FEU and Developer engagement to be agreed annually during CP6. Freight Developments Register to be held by SRFM for review at RSPG quarterly.
	Delivery of agreed CP6 freight enhancement programme	Continuation of Strategic Freight Network funding and industry governance group	• Promotion of potential freight projects and enhancement schemes • Prioritise funding to best meet demand and facilitate growth • Align SFN proposals with Route and National proposals to deliver a coherent forward strategy which best meets overall requirements	FNPO Head of Freight Development/ System Operator	Ongoing
	Consideration of incremental freight improvements in all schemes	Structured review process with Route planners and Sponsors	• Work with FOC's and System Operator to identify opportunities for incremental freight enhancements as part of the development of enhancement and renewals proposals, e.g. faster entrance/exit speeds into loops and through crossovers. • Defined and consistent engagement process to be agreed with Route Planning team and Sponsors	SRFM/ System Operator	Defined engagement process and inputs to be in place with Route Strategy by June 2019

Section	Key Themes	Strategy	Specifics	Owner	Timescale
Network Availability	Engineering plans that meet both FNPO customer and Route needs.	Regular and co-ordinated freight input into • Engineering Access Statements • Access Planning Requests	Engineering plans that are; • Transparent • co-ordinated • consistent across Routes • planned well in advance and • take into consideration contingency arrangements for long distance services	SRFM/ FNPO Capability and Planning Manager	Annual review of process/requirements between FNPO and Engineering Planning from May 2019 incorporating end to end Engineering Access process
Freight Asset Management Plans	Effective asset management arrangements for yards and sidings infrastructure	Create a joint understanding of maintenance responsibility, traffic level changes and asset condition	• Enable Asset Management and Engineering teams to plan the targeted maintenance and renewals requirement of each site • Ensure appropriate standards in use at each location.	SRFM/ Route COO/ RAM	Biannual review of yard and sidings maintenance priorities / traffic flows
	Review of Locomotive and Heavy Axle Weight (HAW) track and structure restrictions	Establish potential/cost for removal of restrictions	• Input into track/structures renewals and maintenance plans	SRFM/ Route COO/ RAM	Review definition and programme. Delivery per strategic route to be programmed
	Review Freight Only lines and other infrastructure	Understand the potential to reduce Operations Maintenance & Renewals costs	• Review based on existing & predicted future use • Input into track/structures/maintenance plans • Outputs to be agreed with customers/ORR	SRFM/ Route COO/ RAM	Delivery of initial opportunities. Agreed Action Plan through CP6 per Route
	Removal of TSRs / PSRs in timely fashion	Establish removal plan recognising freight impact	• Work with the Route teams to identify the impact of speed restrictions on freight services and work collaboratively to remove them	SRFM/ Route COO/ RAM	Ongoing periodic review of performance impact of TSRs to be agreed per Route

Wales Route & Freight & National Passenger Operators (FNPO) Route

This summary sets out how the Wales and FNPO routes will work together to deliver the Route Strategic Plan for Wales. It outlines existing FNPO activity, and then describes the impact of the plans and aspirations of FNPO customers to grow and develop their businesses. It summarises what Network Rail needs to do to deliver these strategies and how, in doing so, efficiencies can be identified and realised.

National Passenger Operators:
CrossCountry is a regular user of Wales route and key issues include right time improvement for services arriving and departing Cardiff, as well as operational resilience around Cardiff.

Charter trains also operate across Wales Route, especially at weekends, to a variety of leisure destinations being hauled by both standard and heritage steam and diesel locomotives. This leisure market is expected to grow during CP6.

Challenges and Opportunities

No	Key Challenges, Risks and Opportunities	What we plan to do
1	**Aggregate Growth** O: Volume growth from quarries in Wales and South West, with additional growth triggered by HS2 construction phase R: Infrastructure not able to cope with traffic demand	• Explore opportunities for longer and heavier trains maximising loco capability • Support the introduction of new wagons that maximise payload/length ratio • Support Terminal and Yard developments when identified • Support introduction of 'pop-up' terminals, bringing out of use infrastructure back into use and increased use of lineside loading • Develop the inbound movement of aggregate and spoil from Cardiff Docks • Work with stakeholders to assess the feasibility of bringing Mostyn Docks back into use.
2	**Domestic & Deep Sea Intermodal Growth** O: Volume growth from Ports / Terminals (Felixstowe, London Gateway, Southampton, Liverpool) will feed into Wentloog R: Train paths and SRT discrepancies with longer, heavier trains R: Gauge enhancement to Wentloog does not go ahead	• Work with customers to maximise opportunities to increase length of trains • Increase Average Journey Speed origin to destination • Recognised Diversionary routes with adequate capability, review of the Vale of Glamorgan to see if any improvement feasible beyond W6 • Explore the opportunity for a terminal development on the Llanwern site in conjunction with Tata
3	**Commodity Traffic Growth** O: Tata to source more coal from UK sources O: Growth of finished steel to EU via rail O/R: Coal burn at Uskmouth may be replaced by Biomass O: Steel traffic increase as Liberty Steel expansion continues including inbound scrap movement if arc furnaces reinstalled R : Cwmbargoed coal traffic could be impacted by Transport for Wales strategy or by failure to renew Planning Permission	• Explore opportunities for longer and heavier trains maximising loco capability • Terminal / Yard developments to support traffic growth where possible • Ensure heavy freight requirements are incorporated into Cardiff Metro plans • Work with stakeholders to assess feasibility of re-instating rail link into Liberty site in Newport , alongside the initiative to lease the complete Uskmouth branch Line • Work with Tata and ABP to re-establish a rail link to Port Talbot Docks
4	**Franchise changes** R: Refranchising of TOC in Route seeks greater capacity on shared lines	• Retain adequate capacity, capability and flexibility for existing and forecast freight • Review Impact on possession strategy from new flows • Review stabling plans for new rolling stock / change of locations
5	**Construction projects** O: Opportunity for spoil and waste out and aggregate and other commodities in to support construction O: Site clean-up at Port Talbot may generate spoil movement opportunity	• Work with FOCs and End-customers to offer solutions to demands of major projects e.g. M4 relief road at Newport, Swansea Bay Tidal Barrier • Terminal / Yard developments ('pop-up' terminals / lineside loading potential) e.g. Swansea Burrows

No	Key Challenges, Risks and Opportunities	What we plan to do
6	**SRFI Terminal Development** O: SRFI terminal development supports intermodal growth especially addressing demand for inland terminals C: Securing of sufficient capacity to support SRFI developments through planning and into use	• Work with Developers to understand SRFI proposals progression through planning • Offer NR support to proposals when adequate strategic fit and capacity • Work with System Operator to support funded early stage timetable work for SRFI developers
7	**End User-customer service** O: Closer working with FEU's enables greater understanding of customer priorities for future (e.g. Tata, Celsa and Liberty House)	• Work with end-customers to develop business growth and support modal shift to rail • Work with end-customers to strengthen service delivery and support • Work with FOCs to investigate wagonload possibilities (shared services) for multiple customers
8	**Review of redundant and unused assets** O: Following traffic changes in CP5 and structural change in energy market, opportunity exists to review size and organisation of non-passenger network	• Identify opportunities to reduce maintenance costs and remove unneeded infrastructure • Regularise the status of freight assets (actual v published) • Explore potential to transfer ownership of redundant lines / assets to secure better opportunities for redevelopment
9	**Yards and sidings infrastructure** R: Yard and Siding Infrastructure asset condition is critical to avoid derailment events and customer LTI's	• Working with Routes and customers to review asset condition on regular basis, • Working with Routes and customers to establish and benchmark walking route use and condition • Liaise with DBC to focus on critical interfaces at Margam and Llanwern
10	**Timetable Review** O/R: Timetable Improvements to closely reflect capability of trains and capacity of network required on busier network	• Continuation of CP5 work to review path usage • Work with System Operator and customers to review opportunities to improve average speed origin-destination • Review with System Operator and customers suitability of current systems to capture network constraints and traction capability (Loads Book, Timing Loads, Lengths)
11	**Digital Railway** O: Successful introduction of Digital Railway offers potential for growth on busiest corridors	• Act as internal client on behalf of freight to build sympathetic capability for freight traffic needs

CP6 Plan

Section	Key Themes	Strategy	Specifics	Owner	Timescale
Safety	Lost Time Incidents	Reduce LTIs through concentration on Network Rail yard infrastructure, connecting sidings and walking routes conditions.	• Published rolling programme of joint health and safety visits with customers (FOCs/TOCs) to agreed sites, including Cardiff Tidal Pengam, East Usk, Margam Knuckle Yard and Llanwern • Complete review of authorised walking routes/crew change locations per customer • Subject to funding, a programme of improvements will be specified and implemented • 'Go Look See' with customer within two weeks of any reportable customer LTI event on network infrastructure	FNPO Operations and Safety Manager/ SRFM	Initial Programme was published in 2018/19 and agreed then annually during CP6
	Freight Train derailments	Reduce freight train derailments through concentration on Network Rail yard and sidings infrastructure.	• Published rolling programme of joint health and safety visits with customers to agreed sites • End Customer Forum to be implemented to share issues of concern around connection points and maintenance either side of boundary point • Subject to funding, a programme of improvements will be specified and implemented	FNPO Operations and Safety Manager/ SRFM	Initial Programme was published in 2018/19 and agreed then annually during CP6
	FNPO SPADs	Reduce freight SPADS by collaborative working	• SPAD Forum to be implemented with FOCs to share learning and best practice	FNPO Operations and Safety Manager	Forum created. Meeting regularity quarterly.
	Level Crossing	Improve Safety at Road and Rail Interface	• Undertake risk assessment at Waterton Level Crossing Bridgend to finalise improvement requirements • Implement recommendations from risk assessment – potentially to install barriers	Safety Manager Wales Route / SRFM	Risk assessment to be completed quarterly
Performance	Right time departure performance at key hubs and terminals	Use Strategic Freight Corridors to focus delivery Measuring Right Time Departures from terminals at the start of the journey	• Local Working Groups (e.g. S.Wales corridor) • Use of Control Rooms and Visualisation at major sites (e.g. Margam Knuckle Yard) • Re-brief Freight Strategy – 'Freight Delivery Matters' and linkage between RTD and FDM delivery	SRFM/ FNPO Performance Manager	Existing Working Groups to continue into CP6. Quarterly FNPO review of terminal engagement
	Measuring FDM and FDM-R	Focus on defined key routes: - Asset Performance - Asset Resilience - Effective contingency plans	• Target FDM-R Route target for end CP6 of 94.4% • Input to Route CP's for consistent application of freight contingency arrangements • FSDM input to incident recovery real-time to build consistency • Asset Reviews with Route Asset teams to share traffic forecasts and asset challenges with SRFM • Influence at RSPG to define future asset strategy in terms of renewals to support freight growth	SRFM/FNPO Performance Manager	Annual target setting during CP6. Periodic review of FDM-R delivery and key influencers
	Joint Freight Performance Improvement Strategies	Agreed joint strategy with each FOC including details of plans to reduce each delay area	• Complete plan annually with each FOC concentrating on primary delay categories • Agreed industry information share • Regular reviews against plan with each Route and FOC customer	FNPO Performance Manager/CRE	Joint Strategy Plan per Operator to be published annually during CP6 and reviewed quarterly

Section	Key Themes	Strategy	Specifics	Owner	Timescale
Capacity & Capability	Identifying future capacity and capability needs.	Bring together all freight capacity plans: • Route Studies • SFN • Customer specific	• All future project specifications to include a specific output level for freight services, reflecting the SFN specifications and forecast future traffic requirements. • Future Capability needs assessment to be undertaken – RA, Gauge, HAW – future plans for improvement to meet capacity requirements • Interactive maps for Gauge, RA to be created and maintained • Continued support for longer, heavier trains programme	Project Sponsor/SRFM SRFM/ FNPO Head of Strategic Capability/ FNPO Head of Network Management	Future capability programme definition by May 2019 and delivery per strategic route
	Review existing capability constraints	Undertake Capability Review	• Improved gauge and operational flexibility on key freight corridors • Robust gauge cleared diversionary routes, for example for containerised traffic departing Margam • Transparent network capability per route for customers	SRFM/ FNPO Head of Strategic Capability/ FNPO Head of Network Management	Existing capability constraints review definition by May 2019 and delivery per strategic route
	Freight Train Average Speed	Undertake Average Speed Review	• Establish framework for average speed measurement and improvement • Work with Stakeholders to target specific flows and services • Annual plan in connection with annual timetable change	FNPO Head of Performance/ FNPO Head of Strategic Capability/ FNPO Head of Network Management	Measurement framework to be agreed by industry May 2019. Flows to be agreed for annual TT change
	Connections to new terminals and SRFIs	Facilitate connections to the network and associated capacity	• Work with FOC's, Freight End Users and Developers to identify potential new connections, including development of SRFI's • Information share of prospective sites via RSPG • Facilitate new network connections where required • Identify potential sites (new connections, bringing out of use infrastructure back into use and increased use of lineside loading) to facilitate growth, e.g. Liberty House connection on the Birdport Branch line • Advice to System Operator of future sites and flows to understand timetable and capacity impact • Timetable studies for major terminal developments, e.g. SRFI's	SRFM/ FNPO Business Development Managers	Forward programme of FEU and Developer engagement to be agreed annually during CP6. Freight Developments Register to be held by SRFM for review at RSPG quarterly.
	Delivery of agreed CP6 freight enhancement programme	Continuation of Strategic Freight Network funding and industry governance group	• Promotion of potential freight projects and enhancement schemes • Prioritise funding to best meet demand and facilitate growth • Align SFN proposals with Route and National proposals to deliver a coherent forward strategy which best meets overall requirements	FNPO Head of Freight Development/ System Operator	Ongoing

Section	Key Themes	Strategy	Specifics	Owner	Timescale
Capacity & Capability	Consideration of incremental freight improvements in all schemes	Structured review process with Route planners and Sponsors	• Work with FOC's and System Operator to identify opportunities for incremental freight enhancements as part of the development of enhancement and renewals proposals, e.g. faster entrance/exit speeds into loops and through crossovers. • Defined and consistent engagement process to be agreed with Route Planning team and Sponsors • Look for opportunities within the Cardiff Metro development to enhance freight's opportunities	SRFM/ System Operator	Defined engagement process and inputs to be in place with Route Strategy by May 2019
Network Availability	Engineering plans that meet both FNPO customer and Route needs.	Regular and co-ordinated freight input into • Engineering Access Statements • Access Planning Requests	Engineering plans that are; • Transparent and well understood • co-ordinated • consistent across Routes • planned well in advance and • take into consideration contingency arrangements for long distance services	SRFM/ FNPO Capability and Planning Manager	Annual review of process/requirements between FNPO and Engineering Planning from June 2019 incorporating end to end Access process
Freight Asset Management Plans	Effective asset management arrangements for yards and sidings infrastructure	Create a joint understanding of maintenance responsibility, traffic level changes and asset condition	• Enable Asset Management and Engineering teams to plan the targeted maintenance and renewals requirement of each site • Ensure appropriate standards in use at each location. • Ensure that changes in market demand are communicated	SRFM/ Route COO/ RAM	Biannual review of yard and sidings maintenance priorities / traffic flows
	Review of Locomotive and Heavy Axle Weight (HAW) restrictions	Establish potential/cost for removal of restrictions	• Input into track/structures renewals and maintenance plans	SRFM/ Route COO/ RAM	Review definition and programme. Delivery per strategic route to be programmed.
	Review Freight Only lines and other infrastructure	Understand the potential to reduce OMR.	• Review based on existing & predicted future use • Input into track/structures/maintenance plans • Outputs to be agreed with customers/ORR • Close scrutiny on the impact of Valley coalfields decline e.g. Cwmgrach and Hirwaun branch lines • Gaerwen to Amlwch branch status to be reviewed, also the Waterton branch	SRFM/ Route COO/ RAM	Delivery of initial opportunities report by July 2019. Agreed Action Plan through CP6 per Route
	Removal of TSRs / PSRs in timely fashion	Establish removal plan recognising freight impact	• Continue to work with the Route teams to identify the impact of speed restrictions on freight services and work collaboratively to remove them	SRFM/ Route COO/ RAM	Periodic review of performance impact of TSRs to be agreed by Route

Wessex Route & Freight & National Passenger Operators (FNPO) Route

This summary sets out how the Wessex and FNPO routes will work together to deliver the Route Strategic Plan for Wessex. It outlines existing FNPO activity, and then describes the impact of the plans and aspirations of FNPO customers to grow and develop their businesses. It summarises what Network Rail needs to do to deliver these strategies and how, in doing so, efficiencies can be identified and realised.

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National Passenger Operators:
CrossCountry is a regular user of Wessex route and key issues include right time arrivals from Basingstoke, animal incursions and TSR management including timely removal

Charter trains also operate across Wessex Route, especially at weekends, to a variety of leisure destinations being hauled by both standard and heritage steam and diesel locomotives. This leisure market is expected to grow during CP6

Challenges and Opportunities

No	Key Challenges, Risks and Opportunities	What we plan to do
1	**Aggregate Growth** O: Volume growth from quarries in Mendips and Leicestershire to S and SE R: Infrastructure not able to cope with traffic demand	• Explore opportunities for longer and heavier trains maximising loco capability • Facilitate new wagons that maximise payload/length ratio • Support Terminal and Yard developments whenever identified, in particular those which could service the London market • Support introduction of 'pop-up' terminals, bringing out of use infrastructure back into use and increased use of lineside loading
2	**Domestic & Deep Sea Intermodal Growth** O: Volume growth from Southampton R: Train paths and SRT discrepancies with longer, heavier trains	• Work with customers to maximise opportunities to increase length of trains • Complete the Southampton Train lengthening project launched in CP5 • Increase Average Journey Speed origin to destination • Recognised Diversionary routes with adequate capability • Support any inland terminal developments – e.g. DIRFT 3, Four Ashes, Port Salford, Parkside
3	**Gauge establishment** C: Establishment of recognised diversionary routes for gauge critical traffic	• Documented diversionary routes for core intermodal flows • Explore third party funding opportunities • Review of RT3973 provision to more closely align with traffic flows – reduced duplication
4	**Commodity Traffic Growth** O: Automotive growth from BMW Oxford via Southampton R: Brexit impact could affect the Automotive market	• Explore opportunities for longer and heavier trains maximising loco capability • Support Terminal / Yard developments to facilitate growth • Support introduction of 'pop-up' terminals, bringing out of use infrastructure back into use and increased use of lineside loading • Work with FOCs and Freight End Users to deliver new network connections and necessary capacity and capability, or bring out of use infrastructure back into use
5	**Logistics and Mail Opportunity** O: Potential mail growth on main corridors and premium logistics developments	• Explore opportunities for business growth with existing and potential new customers

No	Key Challenges, Risks and Opportunities	What we plan to do
6	**Construction projects / HS2** O: Opportunity for spoil and waste out and aggregate and other commodities in to support construction	• Work with FOCs and End-customers to offer solutions to demands of major projects • Work with customers to manage the impact of major projects on their business (HS2) • Terminal / Yard developments ('pop-up' terminals / lineside loading potential)
7	**SRFI Terminal Development** O: SRFI terminal development supports intermodal growth especially addressing demand for inland terminals C: Securing of sufficient capacity to support SRFI developments through planning and into use	• Work with Developers to understand SRFI proposals progression through planning • Offer NR support to proposals when adequate strategic fit and capacity • Work with System Operator to support funded early stage timetable work for SRFI developers
8	**Infrastructure enhancements / electrification** R: Lack of a robust diversionary route at W10 gauge into Wales and Western	• Support the Western scheme to examine feasibility of creating a robust diversionary route for W10 traffic.
9	**End User-customer service** O: Closer working with FEU's enables greater understanding of customer priorities for future (e.g. Tarmac)	• Work with end-customers to develop business growth and support modal shift to rail • Work with end-customers to strengthen service delivery and support
10	**Review of redundant and unused assets** O: Following traffic changes in CP5 and structural change in energy market, opportunity exists to review size and organisation of non-passenger network	• Identify opportunities to reduce maintenance costs and remove unneeded infrastructure • Regularise the status of freight assets (actual v published) • Explore potential to transfer ownership of redundant lines / assets to secure better opportunities for redevelopment
11	**Yards and sidings infrastructure** R: Yard and Siding Infrastructure asset condition is critical to avoid derailment events and customer LTI's	• Working with Routes and customers to review asset condition on regular basis, • Working with Routes and customers to establish and benchmark walking route use and condition
12	**Timetable Review** O/R: Timetable Improvements to closely reflect capability of trains and capacity of network required on busier network	• Continuation of CP5 work to review path usage and remove unused paths and agree strategic capacity • Work with FOC's to more closely align Train Slots in the Timetable with Access Rights in the TAC, and remove unused rights where there is no corresponding Train Slot • Work with the Route, System Operator and FOC's/TOCs where in upcoming major timetable re-casts the available capacity may be less than contracted rights, e.g. (Route TBC) • Work with System Operator and customers to review opportunities to improve average speed origin-destination • Review with System Operator and customers suitability of current systems to capture network constraints and traction capability (Loads Book, Timing Loads, Lengths)
13	**Digital Railway** O: Successful introduction of Digital Railway in CP7 offers potential for growth on busiest corridors	• Act as internal client on behalf of Freight for any preparatory work undertaken

CP6 Plan

Section	Key Themes	Strategy	Specifics	Owner	Timescale
Safety	Lost Time Incidents	Reduce LTIs through concentration on Network Rail yard infrastructure, connecting sidings and walking routes conditions.	• Published rolling programme of joint health and safety visits with customers (FOCs/TOCs) to agreed sites including Southampton / Redbridge and Hinksey • Complete review of authorised walking routes/crew change locations per customer • Subject to funding, a programme of improvements will be specified and implemented • 'Go Look See' with customer within two weeks of any reportable customer LTI event on network infrastructure	FNPO Operations and Safety Manager/ SRFM	Initial Programme was published in 2018/19 and agreed then annually during CP6
	Freight Train derailments	Reduce freight train derailments through concentration on Network Rail yard and sidings infrastructure.	• Published rolling programme of joint health and safety visits with customers to agreed sites • End User Customer Forum to be implemented to share issues of concern around connection points and maintenance either side of boundary point • Subject to funding, a programme of improvements will be specified and implemented	FNPO Operations and Safety Manager/ SRFM	Initial Programme was published in 2018/19 and agreed then annually during CP6
	FNPO SPADs	Reduce freight SPADS by collaborative working	• SPAD Forum to be implemented with FOCs to share learning and best practice	FNPO Operations and Safety Manager	Creation of Forum. Meeting regularity quarterly.
Performance	Right time departure performance at key hubs and terminals	Use Strategic Freight Corridors to focus delivery Measuring Right Time Departures from terminals at the start of the journey	• Local Working Groups (e.g. Port of Southampton, Automotive) • Use of Control Rooms and Visualisation at major sites (e.g. Southampton) • Re-brief Freight Strategy – 'Freight Delivery Matters' and linkage between RTD and FDM delivery	SRFM/ FNPO Performance Manager	Existing Working Groups to continue into CP6. Quarterly FNPO review of engagement
	Measuring FDM and FDM-R	Focus on defined key routes: Asset Performance Asset Resilience Effective contingency plans	• Target FDM-R Route target for end CP6 of 93.6% • Input to Routes for consistent use of contingency arrangements • FSDM input to incident recovery real-time to build consistency • Asset Reviews with Route Asset teams to share traffic forecasts and asset challenges with SRFM • Influence at RSPG to define future asset strategy in terms of renewals to support freight growth	SRFM/FNPO Performance Manager	Annual target setting during CP6. Periodic review of FDM-R delivery and key influencers
	Joint Freight Performance Improvement Strategies	Agreed joint strategy with each FOC including details of plans to reduce each delay area	• Complete plan annually with each FOC concentrating on primary delay categories • Agreed industry information share • Regular reviews against plan with each Route and FOC customer	FNPO Performance Manager/CRE	Joint Strategy Plan per Operator to be issued annually in CP6 & reviewed quarterly

Section	Key Themes	Strategy	Specifics	Owner	Timescale
Capacity & Capability	Identifying future capacity and capability needs.	Bring together all freight capacity plans: • Route Studies • SFN • Customer specific	• All future project specifications to include a specific output level for freight services, reflecting the SFN specifications and forecast future traffic requirements. • Future Capability needs assessment to be undertaken – RA, Gauge, HAW – future plans for improvement to meet capacity requirements • Interactive maps for Gauge, RA to be created and maintained • Continued support for longer, heavier trains programme	Project Sponsor/SRFM/ FNPO Head of Strategic Capability/ FNPO Head of Network Management	Future capability programme definition by May 2019 and delivery per strategic route
	Review existing capability constraints	Undertake Capability Review	• Improved gauge and operational flexibility on key freight corridors • Robust gauge cleared diversionary routes • Transparent network capability per route for customers • Continue to push for SFN 775m implementation	SRFM/ FNPO Head of Strategic Capability/ Head of Network Management	Existing capability constraints review definition by May 2019 and delivery per strategic route
	Connections to new terminals and SRFIs	Facilitate connections to the network and associated capacity	• Work with FOC's, Freight End Users and Developers to identify potential new connections, including development of SRFI's • Information share of prospective sites via RSPG • Facilitate new network connections e.g. (Route TBC) • Identify potential sites (new connections, bringing out of use infrastructure back into use and increased use of lineside loading) to facilitate growth, e.g. (Route TBC) for aggregates • Advice to System Operator of future sites/flows to understand timetable/capacity impact. . Timetable studies for major terminal developments, e.g. SRFI's	SRFM/ FNPO Business Development Managers	Forward programme of FEU and Developer engagement to be agreed annually during CP6. Freight Developments Register to be held by SRFM for review at RSPG quarterly.
	Delivery of agreed CP6 freight enhancement programme	Continuation of Strategic Freight Network funding and industry governance group	• Promotion of potential freight projects and enhancement schemes • Prioritise funding to best meet demand and facilitate growth • Align SFN proposals with Route and National proposals to deliver a coherent forward strategy which best meets overall requirements	FNPO Head of Freight Development/ System Operator	Ongoing
	Consideration of incremental freight improvements in all schemes	Structured review process with Route planners and Sponsors	• Work with FOC's and System Operator to identify opportunities for incremental freight enhancements as part of the development of enhancement and renewals proposals, e.g. faster entrance/exit speeds into loops and through crossovers • Defined and consistent engagement process to be agreed with Route Planning team and Sponsors	SRFM/ System Operator	Defined engagement process and inputs to be in place with Route Strategy by June 2019

Section	Key Themes	Strategy	Specifics	Owner	Timescale
Network Availability	Engineering plans that meet both FNPO customer and Route needs.	Regular and co-ordinated freight input into • Engineering Access Statements • Access Planning Requests	Engineering plans that are; • Transparent and understood • co-ordinated • consistent across Routes • planned well in advance and • take into consideration contingency arrangements for long distance services	SRFM/ FNPO Capability and Planning Manager	Annual review of process/requirements between FNPO and Engineering Planning from May 2019 incorporating end to end Access process
Freight Asset Management Plans	Effective asset management arrangements for yards and sidings infrastructure	Create a joint understanding of maintenance responsibility, traffic level changes and asset condition	• Enable Asset Management and Engineering teams to plan the targeted maintenance and renewals requirement of each site • Ensure appropriate standards in use at each location.	SRFM/ Route COO/ RAM	Biannual review of yard and sidings maintenance priorities / traffic flows
	Review of Locomotive and Heavy Axle Weight (HAW) track and structure restrictions	Establish potential/cost for removal of restrictions	• Input into track/structures renewals and maintenance plans	SRFM/ Route COO/ RAM	Review definition and programme. Delivery per strategic route to be programmed.
	Review Freight Only lines and other infrastructure	Understand the potential to reduce OMR.	• Review based on existing & predicted future use • Input into track/structures/maintenance plans • Outputs to be agreed with customers/ORR	SRFM/ Route COO/ RAM	Delivery of initial opportunities report by July 2019. Agreed Action Plan through CP6 per Route
	Removal of TSRs / PSRs in timely fashion	Establish removal plan recognising freight impact	• Continue to work with the Route teams to identify the impact of speed restrictions on freight services and work collaboratively to remove them.	SRFM/ Route COO/ RAM	Ongoing periodic review of performance impact of TSRs to be agreed per Route

Western Route & Freight & National Passenger Operators (FNPO) Route

This summary sets out how the Western Route and FNPO routes will work together to deliver the Route Strategic Plan for Western. It outlines existing FNPO activity, and then describes the impact of the plans and aspirations of FNPO customers to grow and develop their businesses. It summarises what Network Rail needs to do to deliver these strategies and how, in doing so, efficiencies can be identified and realised.

National Passenger Operators:
CrossCountry is a regular user of Western route and key issues include right time departures from Bristol Parkway, weather resilience and trespass and fatality incidents

Charter trains also operate across Western Route, especially at weekends, to a variety of leisure destinations being hauled by both standard and heritage steam and diesel locomotives. This leisure market is expected to grow during CP6.

Challenges and Opportunities

No	Key Challenges, Risks and Opportunities	What we plan to do
1	**Aggregate Growth** O: Volume growth from quarries in Mendips and Wales to SE and Anglia O: Aggregate for export via Avonmouth O: Reactivation of rail connected quarries e.g. Tytherington R: Infrastructure not able to cope with traffic demand	• Explore opportunities for longer and heavier trains maximising loco capability • Facilitate new wagons that maximise payload/length ratio • Support terminal / yard developments e.g. proposed Southall Campus • Support introduction of 'pop-up' terminals, bringing out of use infrastructure back into use and increased use of lineside loading • Explore opportunities for new capacity
2	**Domestic & Deep Sea Intermodal Growth** O: Volume growth from Southampton will feed through Western R: Train paths and SRT discrepancies with longer, heavier trains	• Work with customers to maximise opportunities to increase length of trains • Look for opportunities to increase Average Journey Speed origin to destination •
3	**Gauge establishment** C: Establishment of recognised diversionary routes for gauge critical traffic	• Recognised Diversionary routes with adequate capability, completing the GRIP1 work started in CP5 on Bradford Junction to Bathampton Junction • Review of RT3973 provision to more closely align with traffic flows – reduced duplication
4	**Commodity Traffic Growth** O: New aviation fuel terminal at Colnbrook O: Increased movements from BMW Oxford via Southampton Docks O: Higher tonnages of steel shipped to EU from Wales will transit Western Route R: Brexit impact could affect commodity traffic adversely	• Explore opportunities for longer and heavier trains maximising loco capability • Develop new flow from Grain to Colnbrook • Look for opportunities to free-up capacity following the decline of Avonmouth coal • Support introduction of 'pop-up' terminals, bringing out of use infrastructure back into use and increased use of lineside loading • Work with FOCs and Freight End Users to deliver new network connections and necessary capacity and capability, or bring out of use infrastructure back into use
5	**Logistics and Mail Opportunity** O: Potential mail growth on main corridors and premium logistics developments	• Explore opportunities for business growth with existing and potential new customers

No	Key Challenges, Risks and Opportunities	What we plan to do
6	**Franchise changes / Crossrail** R: Refranchising of TOC in Route seeks greater capacity on shared lines R: Development of Crossrail will increase capacity demands on the most congested part of the Route	• Retain adequate capacity, capability and flexibility for existing and forecast freight • Review Impact on possession strategy from new flows • Review stabling plans for new rolling stock / change of locations
7	**Infrastructure enhancements / electrification** O: Greater capacity/opportunity following enhancement (eg. East West Rail on Western and LNW) R: Loss of Capacity following timetable change (eg. Crossrail on Western)	• East/West Rail provision for gauge and freight diversions • MML Electrification – risk from faster trains? • Support Route forums (RSPG etc) to influence scope and secure freight benefit following scheme delivery
8	**Construction projects / HS2** O: Opportunity for spoil and waste out and aggregate and other commodities in to support construction	• Work with DfT, HS2 Ltd, FOCs and End-customers to offer solutions to demands of major projects • Work with customers to manage the impact of major projects on their business (HS2) • Terminal / Yard developments ('pop-up' terminals / lineside loading potential) • Work with FOCs and Freight End Users to resolve any conflicts with existing freight facilities • Work with FOCs and Freight End Users to deliver new network connections and necessary capacity, or bring out of use infrastructure back into use
9	**SRFI Terminal Development** O: SRFI terminal development supports intermodal growth especially addressing demand for inland terminals C: Securing of sufficient capacity to support SRFI developments through planning and into use	• Work with Developers to understand SRFI proposals progression through planning • Offer NR support to proposals when adequate strategic fit and capacity • Work with System Operator to support funded early stage timetable work for SRFI developers • Reactivate and market Slough Strategic Freight Site
10	**End User-customer service** O: Closer working with FEU's enables greater understanding of customer priorities for future (e.g. Mendip Rail)	• Work with end-customers to strengthen service delivery and support • Work with end-customers to develop business growth and support modal shift to rail
11	**Review of redundant and unused assets** O: Following traffic changes in CP5 and structural change in energy market, opportunity exists to review size and organisation of non-passenger network	• Identify opportunities to reduce maintenance costs and remove unneeded infrastructure • Regularise the status of freight assets (actual v published) • Explore potential to transfer ownership of redundant lines / assets to secure better opportunities for redevelopment
12	**Yards and sidings infrastructure** R: Yard and Siding Infrastructure asset condition is critical to avoid derailment events and customer LTI's	• Working with Routes and customers to review asset condition on regular basis, • Working with Routes and customers to establish and benchmark walking route use and condition
13	**Timetable Review** O/R: Timetable Improvements to closely reflect capability of trains and capacity of network required on busier network	• Continuation of CP5 work to review path usage • Work with System Operator and customers to review opportunities to improve average speed origin-destination • Review with System Operator and customers suitability of current systems to capture network constraints and traction capability (Loads Book, Timing Loads, Lengths)
14	**Digital Railway** O: Successful introduction of Digital Railway offers potential for growth on busiest corridors	• Act as internal client on behalf of Freight to build sympathetic capability for freight traffic needs

CP6 Plan

Section	Key Themes	Strategy	Specifics	Owner	Timescale
Safety	Lost Time Incidents	Reduce LTIs through concentration on Network Rail yard infrastructure, connecting sidings and walking routes conditions.	• Published rolling programme of joint health and safety visits with customers (FOCs/TOCs) to agreed sites including Acton, Westbury, Southall and Brentford • Complete review of authorised walking routes/crew change locations per customer • Subject to funding, a programme of improvements will be specified and implemented • 'Go Look See' with customer within two weeks of any reportable customer LTI event on network infrastructure	FNPO Operations and Safety Manager/ SRFM	Initial Programme was published in 2018/19 and agreed then annually during CP6
	Freight Train derailments	Reduce freight train derailments through concentration on Network Rail yard and sidings infrastructure.	• Published rolling programme of joint health and safety visits with customers to agreed sites • End Customer Forum to be implemented to share issues of concern around connection points and maintenance either side of boundary point, in particular covering the quarries at Whatley and Merehead • Subject to funding, a programme of improvements will be specified and implemented	FNPO Operations and Safety Manager/ SRFM	Initial Programme was published in 2018/19 and agreed then annually during CP6
	FNPO SPADs	Reduce freight SPADS by collaborative working	• SPAD Forum to be implemented with FOCs to share learning and best practice	FNPO Operations and Safety Manager	Creation of Forum. Meeting regularity proposed quarterly

Section	Key Themes	Strategy	Specifics	Owner	Timescale
Performance	Right time departure performance at key hubs and terminals	Use Strategic Freight Corridors to focus delivery Measuring Right Time Departures from terminals at the start of the journey	• Local Working Groups (e.g. Mendip Rail, Acton Yard) • Use of Control Rooms and Visualisation at major sites (e.g. Merehead) • Re-brief Freight Strategy – 'Freight Delivery Matters' and linkage between RTD and FDM delivery	SRFM/ FNPO Performance Manager	Existing Working Groups to continue into CP6. Quarterly FNPO review of terminal engagement arrangements
	Measuring FDM and FDM-R	Focus on defined key routes: - Asset Performance - Asset Resilience - Effective contingency plans	• Target FDM-R Route target for end CP6 of 94.0% • Input to Route CP's for consistent application of freight contingency arrangements • FSDM input to incident recovery real-time to build consistency • Asset Reviews with Route Asset teams to share traffic forecasts and asset challenges with SRFM • Influence at RSPG to define future asset strategy in terms of renewals to support freight growth	SRFM/FNPO Performance Manager	Annual target setting during CP6. Periodic review of FDM-R delivery and key influencers
	Joint Freight Performance Improvement Strategies	Agreed joint strategy with each FOC including details of plans to reduce each delay area	• Complete plan annually with each FOC concentrating on primary delay categories • Agreed industry information share • Regular reviews against plan with each Route and FOC customer, in particular targeting A2F improvement at the Eastern end of the Western Route where the greatest congestion occurs.	FNPO Performance Manager/CRE	Joint Strategy Plan per Operator to be published annually during CP6 and reviewed quarterly
Capacity & Capability	Identifying future capacity and capability needs.	Bring together all freight capacity plans: • Route Studies • SFN • Customer specific	• All future project specifications to include a specific output level for freight services, reflecting the SFN specifications and forecast future traffic requirements. • Future Capability needs assessment to be undertaken – RA, Gauge, HAW – future plans for improvement to meet capacity requirements • Interactive maps for Gauge, RA to be created and maintained • Continued support for longer, heavier trains programme	Project Sponsor/SRFM SRFM/ FNPO Head of Strategic Capability/ FNPO Head of Network Management	Future capability programme definition by May 2019 and delivery per strategic route
	Review existing capability constraints	Undertake Capability Review	• Improved gauge and operational flexibility on key freight corridors • Robust gauge cleared diversionary routes • Transparent network capability per route for customers	SRFM/ FNPO Head of Strategic Capability/ FNPO Head of Network Management	Existing capability constraints review definition by May 2019 and delivery per strategic route

Section	Key Themes	Strategy	Specifics	Owner	Timescale
Capacity & Capability	Freight Train Average Speed	Undertake Average Speed Review	• Establish framework for average speed measurement and improvement • Work with Stakeholders to target specific flows and services, key target is the waste flow from London to Severn Beach • Annual plan in connection with annual timetable change	FNPO Head of Performance/ FNPO Head of Strategic Capability/ FNPO Head of Network Management	Measurement framework to be agreed by industry May 2019. Flows to be agreed for annual TT change
	Connections to new terminals and SRFIs	Facilitate connections to the network and associated capacity	• Work with FOC's, Freight End Users and Developers to identify potential new connections, including development of SRFI's • Information share of prospective sites via RSPG • Facilitate new network connections if required • Identify potential sites (new connections, bringing out of use infrastructure back into use and increased use of lineside loading) to facilitate growth, e.g. (Route TBC) for aggregates • Advice to System Operator of future sites and flows to understand timetable and capacity impact • Timetable studies for major terminal developments, e.g. SRFI's	SRFM/ FNPO Business Development Managers	Forward programme of FEU and Developer engagement to be agreed annually during CP6. Freight Developments Register to be held by SRFM for review at RSPG quarterly.
	Delivery of agreed CP6 freight enhancement programme	Continuation of Strategic Freight Network funding and industry governance group	• Promotion of potential freight projects and enhancement schemes • Prioritise funding to best meet demand and facilitate growth • Align SFN proposals with Route and National proposals to deliver a coherent forward strategy which best meets overall requirements	FNPO Head of Freight Development/ System Operator	Ongoing
	Consideration of incremental freight improvements in all schemes	Structured review process with Route planners and Sponsors	• Work with FOC's and System Operator to identify opportunities for incremental freight enhancements as part of the development of enhancement and renewals proposals, e.g. faster entrance/exit speeds into loops and through crossovers. • Defined and consistent engagement process to be agreed with Route Planning team and Sponsors	SRFM/ System Operator	Defined engagement process and inputs to be in place with Route Strategy by July 2019

Network Availability	Engineering plans that meet both FNPO customer and Route needs.	Regular and co-ordinated freight input into
		• Engineering Access Statements
		• Access Planning Requests
			• Engineering plans that are;
			  • Transparent
			  • co-ordinated
			  • consistent across Routes
			  • planned well in advance and
			  • take into consideration contingency arrangements for long distance services
				SRFM/ FNPO Capability and Planning Manager	Annual review of process/requirements between FNPO and Engineering Planning from May 2019 incorporating end to end Access process

Appendix G Supporting strategies

Human Resources

Objectives

The FNPO People Strategy forms part of our "Better Every Day Plan". This has been aligned to the National People Strategy theme of 'great people', 'great place to work' and 'high performance'. It also links into the priorities that have been identified going forward into CP6, these being structured around the five key People Must Wins; Strategic Workforce Planning, Talent and Succession Management, Agility, including D&I and Flexibility, Culture Transformation and Line Manager Capability and Leadership Skills. This in turn supports the delivery of a safe and reliable railway; while allowing for the activities necessary to engage, recruit, reward, recognise and retain our people and people managers. By defining specific areas to focus on, this strategy can be adapted and adopted flexibly as it matures within FNPO.

Strategic workforce planning

Strategic workforce planning is more important than ever before. The skills required are constantly adapting, for example, with the introduction of devolution and Digital Railway; and as such we must address the skills level gap which has been identified within the industry. This will enable us to meet the necessary performance level and operational needs of FNPO (e.g., the right number of people, with the right skills and capabilities at the right time). There needs to be a clear view of the numbers of people, the locations where they will be needed, and the skills sets they will require to perform the roles we have now, and in the future. Analysis needs to be far enough ahead to give us time to recruit develop and retrain the people to fill the roles.

Talent & succession management

The Talent Matrix is used to identify people with key skills and high potential in order to drive business performance across FNPO by developing, deploying, engaging and retaining talent. The purpose of this is to identify potential and develop individuals into their next role or provide sufficient challenges to retain them at their existing level. Personal Development Plans (PDPs) are used to document their development goals. This provides a pipeline of staff with the required skills that FNPO will need in the future.

Succession plans are the key control to confirm the resource pipeline for key roles in FNPO. It enables HR and line management to identify and address resource gaps for future requirements. This is by recruitment or longer term projects to attract candidates that can be developed into those roles.

Agility, Diversity & Inclusion and Flexibility

FNPO's activities align with Network Rail's vision to be an open, diverse and inclusive organisation. Achieving this will make us more receptive to new ideas, creativity and innovation, and help us to be more transparent and accessible. FNPO has a structured diversity and inclusion strategy which includes collaboration internally within Network Rail and the wider rail industry. This includes work to improve the health and wellbeing of our employees as well as further improving the gender diversity within FNPO. FNPO also has a focus on agile and flexible working which enables attraction and retention of a diverse and inclusive workforce.

Culture transformation and LEAN

Integrating continuous improvement into the business will help to increase collaboration and share best practice, resulting in greater innovation and more efficient ways of working whilst focusing on our customers' and creating more capacity to deliver strategic priorities / Must Wins. Within FNPO, we are striving to embed continuous improvement in all aspects of the business, including the employees' life cycle from Recruit, Reward, Recognise, Retain and Relate (Engage). We recognise that with opportunity and change comes risk, however change is possible when we involve our people from the outset. With strong leadership; and to anticipate and meet these risks, we should engage and communicate effectively with our employees and their trades unions.

Line manager capability and leadership skills.

Line manager capability and leadership skills are central to the successful implementation of the FNPO People Strategy. Leaders have a crucial part to play, not only in the consistent demonstration of leadership behaviours and leading by example with both customers and employees, but in the day-to-day management of people and operations and in the implementation of HR policies. It's therefore important that proper consideration is given to the way line managers are selected, developed and managed on an ongoing basis.

Appendix H List of supporting annexes

Annex 1: Change log – see Sharepoint site

Annex 2: Long term scorecard – see pages 6 –10.

Appendix I Glossary of terms

None specific to FNPO RSP.