

# Contents

VERSION CONTROL	4	2.1 Introduction	19	
		2.2 Extent of network	20	
CHAPTER 1 - GENERAL INFORMATION	5	2.2.1 Limits	20	
		2.2.2 Connecting Railway Networks	20	
1.1 Introduction	5			
	_	2.3 Network Description	21	
1.2 Purpose of the Network Statement	7	2.3.1 Track typologies	22	
4.2.Lengt Assessed	0	2.3.2 Track gauges	22	
1.3 Legal Aspects	8	2.3.3 Stations and nodes	22	
1.3.1 Legal Framework	8	2.3.4 Loading Gauge	23	
1.3.2 Legal status and liability	12	2.3.5 Axle Weight Limits	25	
1.3.3 Appeals procedure	13	2.3.6 Line Gradients	28	
1.4 Structure of the Network Statement	13	2.3.7 Maximum Line Speed	28	
1.4 Structure of the Network Statement	13	2.3.8 Maximum Train Lengths	28	
1.5 Validity Period, Updating and Publishing	14	2.3.9 Power Supply	29	
1.5.1 Validity Period	14	2.3.10 Signalling Systems	29	
1.5.2 Updating	14	2.3.11 Traffic Control Systems	30	
1.5.3 Publishing	14	2.3.12 Communication Systems	31	
1.5.5 1 45.151.1119		2.3.13 Train Control Systems	32	
1.6 Contacts	15			
		2.4 Traffic restrictions	33	
1.7 Cooperation Between European Infrastructure Managers/Allo	cation	2.4.1 Specialised Infrastructure	33	
Bodies	17	2.4.2 Environmental restrictions	33	
1.7.1 Rail Freight Corridors	17	2.4.3 Dangerous Goods	34	
1.7.2 RailNetEurope and Other International Cooperation	17	2.4.4 Tunnel restrictions	34	
		2.4.5 Bridge restrictions	34	
CHAPTER 2 – INFRASTRUCTURE	19	2.5 Availability of the infrastructure	34	

#### OFFICIAL

2.6 Infrastructure development	35	4.3.1 General Principles	49
		4.3.2 Deadlines and Information Provided to Applicants	49
CHAPTER 3 - ACCESS CONDITIONS	36	4.4 Impacts of Framework Agreements	50
3.1 Introduction	36	4.5 Path Allocation Process	51
2.2.Company Appears Domining and a	26	4.5.1 Annual Timetable Path Requests	51
3.2 General Access Requirements	36	4.5.2 Late Annual Timetable Path Requests	53
3.2.1 Conditions for Applying for Capacity	41	4.5.3 Ad-Hoc Path Requests	53
3.2.2 Conditions for Access to the Railway Infrastructure	41	4.5.4 Coordination Process	53
3.2.3 Licences	42	4.5.5 Dispute Resolution Process	55
3.2.4 Safety Certificate	42		
3.2.5 Insurance	43	4.6 Congested Infrastructure	56
3.3 Contractual Arrangements	43	4.7 Exceptional Transports and Dangerous Goods	57
3.3.1 Framework Agreement	43	in Endeptional Hampforts and Danigerous Coods	
3.3.2 Contracts with RUs	44	4.8 Rules After Path Allocation	57
3.3.3 Contracts with non-RU applicants	44	4.8.1 Rules for Path Modification by the applicant	57
		4.8.2 Rules for Path Alteration by the IM	58
3.4 Specific Access Requirements	44	4.8.3 Non-Usage Rules by the applicant	58
3.4.1 Rolling Stock Acceptance	44	4.8.4 Rules for Cancellation by the applicant	58
3.4.2 Staff Acceptance	46	nor mande for carreen at our by the approant	
3.4.3 Exceptional Transport	46		
3.4.4 Dangerous Goods	47	CHAPTER 5 - SERVICES AND CHARGES	59
3.4.5 Test Trains and Other Special Trains	48	E47 ( ) ( )	F.(
		5.1 Introduction	59
CHAPTER 4 – CAPACITY ALLOCATION	49	5.2 Charging Principles	59
4.1 INTRODUCTION	49	5.3 Minimum Access Package and Charges	59
		5.4 Additional Services and Charges	69
4.2 General Description of the Process	49	er	0.
4.3 Reserving Canacity for Temporary Canacity Restrictions	49	5.5 Ancillary Services and Charges	69
4 2 KESELVING CODACITY FOR LEMBORARY CADACITY KESTRICTIONS	49		

# OFFICIAL

5.6 Financial Penalties and Incentives	70	7.3.1 Common provisions	7
5.6.1 Penalties for Path Modification	70	7.3.2 Passenger Stations	7
5.6.2 Penalties for Path Alteration	70	7.3.2.1 General Information	7
5.6.3 Penalties for Non-Usage	70	7.3.2.2 Services	7
5.6.4 Penalties for Path Cancellation	71	7.3.2.3 Service Facility Description	7
5.6.5 Incentives/Discounts	71	7.3.2.4 Charges	7
		7.3.2.5 Access Conditions	78
5.7 Performance Scheme	71	7.3.2.6 Capacity Allocation	78
= 0.01 · .01		7.3.3 Freight Terminals	7
5.8 Changes to Charges	72	7.3.4 Marshalling Yards and Train Formation Facilities, including Shunt	ing
E O Pilling Arrangements	72	Facilities	7
5.9 Billing Arrangements	12	7.3.5 Storage Sidings	7
		7.3.6 Maintenance Facilities	7
CHAPTER 6 – OPERATIONS	<b>73</b>	7.3.7 Other Technical Facilities, including Cleaning and Washing Facilit	ies 80
		7.3.8 Maritime and Inland Port Facilities	8
6.1 Introduction	73	7.3.9 Relief Facilities	8
		7.3.10 Refuelling Facilities	8
6.2 Operational Rules	73		
6.3 Operational Measures	74	GLOSSARY	82
6.3.1 Principles	74		
6.3.2 Operational Regulation	74	ANNEX 1 - ROUTE CAPABILITY GRADIENTS	0.0
6.3.3 Disturbances	74	ANNEX 1 - ROUTE CAPABILITY GRADIENTS	89
0.010 2.000.000			
6.4 Tools for Train Information and Monitoring	75	ANNEX 2 - SCHEDULE OF TIMETABLING PROCESS	90
CHAPTER 7 – SERVICE FACILITIES	77	ANNEX 3 - EXTENT OF ELECTRIFICATION ACROSS THE	
		NETWORK	92
7.1 Introduction	77	METWORK	34
7.2 Service Facility Overview	77		
7.3 Service Facilities Managed by the Infrastructure Manager	77		

# **Version Control**

Version	Date	Description of Change
0.1	20 August 2021	Consultation Document
1.0	04 November 2021	Publication Document
1.1	10 January 2022	Inclusion of information to section 4.6 Congested Infrastructure

# Chapter 1 - General Information

#### 1.1 Introduction

Network Rail Infrastructure Limited (Network Rail) owns, operates, maintains and develops the main rail network in Great Britain (GB). This includes the railway tracks, signalling and electrification systems, bridges, tunnels, level crossings and viaducts. The Network Statement is produced in accordance with Directive 2012/34/EU and The Railways (Access, Management and Licensing of Railway Undertakings) Regulations 2016 (as amended) (referred to in this Network Statement as "The Access, Management and Licensing Regulations").

Following publication of the William-Shapps Plan for Rail, work has commenced to develop plans for a new body, Great British Railways. A small team has been created within Network Rail to support the transition from Network Rail into a single accountable body which will transform the delivery of the railways in Great Britain. Current arrangements will be subject to review and change. This includes the charges, incentives and performance regime from 1 April 2024 when the next control period commences.

In response to the global COVID-19 pandemic, national lockdown restrictions were introduced by the UK Government on 23 March 2020. Whilst these restrictions have been eased during the course of 2021, COVID-19 continues to have a significant impact on society and business. At the start of the pandemic Network Rail invoked a preexisting business continuity plan. Train planning teams were vacated from corporate office to best protect our workforce in line with Government guidelines. At this stage normal operating procedures, including Informed Traveller work was suspended to focus on the receipt, processing and publication of contingency timetables. We

currently anticipate recovery to T-9 weeks by the end of this year, applying to services that operate from early March 2022. This has been agreed with train and freight operating companies to enable a more agile approach to the May 2022 timetable change.

## Operating Model

The rail network is divided into five regions: Eastern, North West & Central, Scotland's Railway, Southern and Wales & Western. These regions support 15 routes responsible for day to day delivery of performance, maintenance and renewals. This new structure was introduced from June 2019 to drive greater benefits for passengers and freight users and to be a company that is easy to engage with and a dependable partner.

Our five regions are supported by one service function, System Operator, and six network functions: Technical Authority, Route Services Directorate, Human Resources, Chief Financial Officer's Directorate, Communications and Property. The System Operator provides a whole-system, long term view informed by detailed knowledge gained from planning and timetabling the network, and from the industry-wide interfaces it has with customers, funders, regions and routes.





#### The Office of Rail and Road

We are accountable to the Office of Rail and Road (ORR), the rail regulator in Great Britain, for compliance with regulatory obligations, including those under our <a href="Network Licence">Network Licence</a> and <a href="Station Licence">Station Licence</a>. These authorise us to operate the main rail network and major stations (as listed in the station licence schedule).

ORR is the railway industry's economic and safety regulator and is independent of government, but accountable to parliament. Any railway undertaking (RU) wanting to operate trains on the network must, among other things, have a track access contract with us which has been approved by ORR. RUs may apply directly to ORR for access to the network in circumstances where, for whatever reason, an agreement is not reached as regards the terms of access. RUs may also be required to enter into station and depot access agreements. The access arrangements are explained in more detail in Section 2.

On 17 June 2021, ORR formally initiated the Periodic Review 2023 – the process by which funding and outputs for the five year period from 1 April 2024 to 31 March 2029 will be set.

We work closely with other industry stakeholders that include the passenger and freight RUs using the network, the <u>Department for Transport (DfT)</u>, <u>Merseytravel</u>, <u>Transport for Greater Manchester</u>, <u>Transport for London (TFL)</u>, <u>Transport for Wales (TfW)</u> and <u>Transport Scotland (TS)</u>, all of whom specify and fund various rail services, and the <u>Rail Delivery Group (RDG)</u>.

#### 1.2 Purpose of the Network Statement

The Network Statement's objective is to inform applicants, the authorities and other interested parties about our infrastructure, and the terms and conditions for allocation of capacity and use.

The Network Statement presents the services that we offer, with information regarding where they are accessible, how the allocation of services functions, which charges apply, and the conditions that apply for gaining access to the services.

By publishing this information in the form of a Network Statement we aim to make it available to all current and potential RUs in a fair and non-discriminatory manner.

Whilst primarily concerned with information relating to the main rail network, the objective of the Network Statement also extends to the provision of further information regarding railway facilities that link to our network. The extent of this information is subject to the level of detail supplied to us by the relevant facility owners and operators when requested. In the cases where we are not responsible for the management of certain service facilities, the related information contained in this Network Statement is not binding.

We are a member of <u>RailNetEurope</u> (<u>RNE</u>), which encourages its members to adopt a common document structure for their respective Network Statements so as to provide standards of user-friendliness and customer orientation, and to assist those who need to consult more than one statement for their intended operations. Where appropriate to do so, the document structure suggested by RNE has been followed in preparing this Network Statement.

The role and activities of RNE are explained in more detail in <u>Section 1.7.2</u>.

#### 1.3 Legal Aspects

# 1.3.1 Legal Framework

The legal framework of the GB rail industry is primarily governed by the Railways Acts 1993 and 2005, the Railways and Transport Safety Act 2003, and a range of secondary legislation including the Railways (Access, Management and Licensing of Railway Undertakings) Regulations 2016 (as amended).

The 2016 Regulations were amended by The Railways (Access, Management and Licensing of Railway Undertakings) (Amendments etc.) (EU Exit) Regulations 2019 (SI 2019/518) and by The Railways (Safety, Access, Management and Interoperability) (Miscellaneous Amendments and Transitional Provision (EU Exit) Regulations 2019 (SI 2019/1310). However, the requirements for production of a Network Statement was not amended and Regulation 13 of the 2016 Regulations sets out the requirements in relation to developing and publishing a Network Statement:

1. The Infrastructure Manager (IM) shall, after consultation with the interested parties, develop and publish a Network Statement which shall be obtainable against payment of a fee which shall not exceed the cost of publication of that statement. The Network Statement shall be published in at least two official languages of the Union (European Union). The content of the Network Statement shall be made available free of charge in electronic format on the web portal of the Infrastructure Manager and accessible through a common web portal. That web portal shall be set up by the Infrastructure Managers in the framework of their co-operation in accordance with Articles 37 and 40.

- 2. The Network Statement shall set out the nature of the infrastructure which is available to RUs, and contain information setting out the conditions for access to the relevant railway infrastructure. The Network Statement shall also contain information setting out the conditions for access to service facilities connected to the network of the Infrastructure Manager and for supply of services in these facilities or indicate a website where such information is made available free of charge in electronic format. The content of the Network Statement is laid down in Annex IV of the Directive.
- 3. The Network Statement shall be kept up to date and amended as necessary.
- 4. The Network Statement shall be published no less than four months in advance of the deadline for requests for infrastructure capacity.

This and other detailed requirements relating specifically to the production and content of the Network Statement are provided in Regulation 13 of the Access, Management and Licensing Regulations. Additional requirements relating to conditions for rail infrastructure capacity are set out in (GB) Regulation 2015/10 (as amended), procedures and criteria regarding framework agreements for the allocation of capacity are set out in (GB) Regulation 2016/545 (as amended) and provisions relating to the calculation of the cost that is directly incurred as a result of operating a train service are set out in Regulation 2015/909.

In respect of (1) above a French language version of the Network Statement can be found on <u>our website</u>. We participate in RNE and its Network Statement Working Group to co-ordinate the development of Network Statement specifications. The RNE common web-portal can be found here: <a href="http://www.rne.eu/organisation/network-statements/">http://www.rne.eu/organisation/network-statements/</a>.

In respect of (2) above, the provisions on access to service facilities and rail-related services are set out in <u>Regulation 2017/2177</u> and conditions for access to service facilities can be found in <u>Section 7.3.2.5</u> of this Network Statement.

The Second Railway Package was adopted by the European Commission in 2004 and updated by the technical pillar of the Fourth Railway package (through amendments to the Directives and repeal and replacement of Regulation (EC) No 881/2004). Its aim is to create a legally and technically integrated European railway area. The Second Railway Package was implemented in the UK in 2006 by <a href="The Railways">The Railways</a> and Other Guided Transport Systems (Safety) Regulations 2006 (ROGS).

ORR has published guidance on ROGS on its <u>website</u> which provides an overview of the regulatory requirements for managing safety on the railways, tramways and other guided transport systems.

The regulations require the Infrastructure Manager and most RUs to maintain a Safety Management System (SMS) and hold a safety certificate or authorisation indicating the SMS has been accepted by ORR. The regulations also put in place a duty of co-operation across all RUs and IMs; arrangements are in place to co-operate with other transport operators in the shared management of system safety. This includes both advising RUs and other IMs of proposed infrastructure changes which might affect the safety of their operation and responding to consultation requests from third parties concerning their proposed changes.

ROGS has been amended by <u>The Railways and Other Guided Transport Systems (Safety) (Amendment) Regulations 2013</u>.1 The amendments are mainly concerned with:

- assigning an 'entity in charge of maintenance' ('ECM') to a railway vehicle and making sure that the entity in charge of maintenance is registered on the National Vehicle Register ('NVR')
- introducing a formal maintenance system for an entity in charge of maintenance.

Each ECM must ascertain that, through a system of maintenance, a vehicle for which is it responsible is safe to run on the mainline railway. The system of maintenance is the maintenance of a vehicle in accordance with:

- the maintenance file for that vehicle
- applicable maintenance rules
- applicable National Technical Specification Notice (NTSN).

The main effect of these amendments was to replace the safety verification regime with the application of Commission Regulation (EC) No 352/2009 on the adoption of a common safety method on risk evaluation and assessment (CSM-RA). On 2 September 2013 the Commission adopted the Regulation 402/2013 on the CSM for risk assessment that repeals Regulation 352/2009. This CSM was amended in 2015 by Commission Implementing Regulation (EU) 2015/1136 of 13 July 2015 amending Implementing Regulation (EU) No 402/2013 on the common safety method for risk evaluation and assessment.

<sup>1</sup> The assessment is to establish that the SMS meets the requirements of the ROGS and the provisions adopted by an applicant must meet the requirements that are necessary for a safe operation.

As an IM, we maintain and develop the infrastructure and have arrangements in place to verify the safety of new or changed infrastructure before it is placed in service where such projects are deemed significant under the CSM-RA. The determination of significance is carried out by Network Rail Assurance Panel (NRAP). The CSM-RA is applied by project teams and its application is independently assessed by Assessment Bodies.

Other regulations transposing the Second Railway Package include:

<u>The Railways (Interoperability) Regulations 2006</u>; (since superseded); and <u>The Railways (Access to Training Services) Regulations 2006</u>.

The Third Railway Package of measures, adopted in September 2007, opened up international passenger services within the EU to competition. Furthermore, it required the certification of drivers operating locomotives and trains on the railway system in the community and regulated passengers' rights and obligations. The Train Drivers' Directive was implemented in March 2010 by <a href="The Train Driving Licences and Certificates Regulations 2010">The Train Driving Licences and Certificates Regulations 2010</a>. The Regulation on Passengers' Rights and Obligations Regulations entered into force on 3 December 2009, and was implemented through <a href="SI 2009/2970">SI 2009/2970</a>.

The 'technical pillar' of the Fourth Railway Package was adopted in June 2016 and is designed to reduce the technical obstacles that differing national standards and procedures create for rail operators and rolling stock manufacturers, including reforms of the safety certification, vehicle and ERTMS authorisation process. The package of legislation consists of Directives (EU) 2016/797 on interoperability, 2016/798 on railway safety, and Regulation 2016/796 establishing the EU Agency for Railways. Member states (including the UK), are required to transpose the Fourth railway package 'technical pillar' into national law by 31 October 2020.

#### Interoperability Legislation

The aim of rail technical interoperability legislation is to create a rail system that allows the safe and uninterrupted movement of trains which accomplish the required level of performance through the harmonising technical interfaces and specifications throughout the EU.

The <u>Interoperability Directive (2008/57/EC)</u> as amended sets out a number of essential requirements to be met for interoperability, which include safety, reliability and availability, health, environmental protection and technical compatibility, along with others specific to certain sub-systems.

The Interoperability Directive 2008/57/EC entered into force in June 2008, and the UK transposed these requirements through the <u>Railways (interoperability) Regulations 2011</u>, as amended by The Railways (interoperability) (Amendment) Regulations <u>2013</u>, <u>2014</u> and <u>2015</u>, which came into force on 16 January 2012. This replaces provisions in the Railways (Interoperability) Regulations 2006.

The (recast) Interoperability Directive (EU) 2016/797 on the interoperability of the rail system within the European Union, was adopted in June 2016 and is one of three legislative acts adopted under the Fourth railway package. Directive 2016/797 further extends the scope rail interoperability across the EU, introducing a new process for European vehicle authorisation, ERTMS trackside approval and revision of several NTSNs. While Commission Delegated Decision (EU) 2017/1471 sets out the specific objectives for each NTSN in accordance with (EU) 2016/797.

Provisions set out in the (recast) Interoperability Directive (EU) 2016/797 only apply once a Member State has transposed the Directive into national law. Member states (including the UK), were

required to transpose the (EU) 2016/797 into national law by 31 October 2020.

Further information on interoperability legislation is available from the <u>Department for Transport website</u> and <u>ORR website</u>.

#### National Technical Specification Notice (NTSN)

Following the UK leaving the EU the industry used the current TSI's and created a suite of mandatory NTSNs that will be managed by RSSB, these define the technical specifications required to underpin those essential requirements and harmonise the technical and operational characteristics of the rail network.

The NTSNs apply to various structural and functional sub-systems, some of which are referred to as 'transversal', covering more than one sub-system.

Our adoption of the NTSNs is a key element of compliance with the Railways (Interoperability) Regulations 2011. In order to underpin this importance, several initiatives have been put in place so that the Interoperability Regulations and NTSNs are applied in a consistent way to relevant projects. The Governance for Railway Investment Projects (GRIP) now contains specific references to key aspects of the Interoperability Regulations as an aid to their timely application.

The Railway Interoperability Regulations mandate that the Infrastructure Owner must have the ability to produce an export of its infrastructure data, meeting the Register of Infrastructure data specification (Commission Implementing regulation (EU) 2019/777 repealing implementing decision 2014/880 EU), within 28 days of a request by an applicant for authorisation or an approved body

Data meeting the RINF data specification can be used for consideration at the design processes for rolling stock sub systems,

enabling technical compatibility assessment for fixed installations, monitoring interoperability status of the UK railway network and assessing route compatibility for planned trains. It provides an overview of general compatibility, though the RU, Vehicle Manufacturer or other authorised users will need to undertake more detailed assessments prior to a vehicle being cleared to operate on a new route.

For more information about the RINF, please contact:

Asset Information Services Network Rail The Quadrant:MK Elder Gate Milton Keynes MK9 1EN

Tel: +44 (0) 1908 781 000

Email: RINFdataenquiries@networkrail.co.uk

#### A summary of the NTSNs:

**Control, Command and Signalling (CCS) NTSN** relates to the train control and train protection systems. The target technology of this NTSN is European Rail Traffic Management System (ERTMS) but there is also an implication for the existing 'Class B' systems. <u>Section 2.3</u> outlines the ERTMS and Class B systems currently in use on the network.

Energy (ENE) NTSN relates to the power supply and contact systems for providing energy to trains. The target technology for this NTSN is 25kV AC OLE systems but the NTSN makes provision for the 750v DC third rail contact system adopted in parts of the UK. Section 2.3 provides an overview of the electrification systems currently in use on the network.

**Infrastructure (INF) NTSN** defines the characteristics relating to gauge clearance, including the clearance between trains and platforms in stations, and of the distances provided between adjacent tracks and technical requirements for track components.

Safety in Railway Tunnels (SRT) and Persons with Reduced Mobility (PRM) NTSNs relate to the safety characteristics of tunnels and the provision of facilities at stations and on trains to enable accessibility for mobility-impaired persons respectively.

NTSNs, Rolling Stock Freight Wagons (WAG) NTSN and Rolling Stock Locomotives and Passenger Carriages (LOC & PAS) NTSNs have less significance to the infrastructure and railways systems work we undertake, but there are some aspects of interfaces, particularly under the LOC & PAS NTSN, of which we must be mindful.

The Operations and Traffic Management (OPE) NTSN is being considered in the development of our Traffic Management system.

#### Telematic Application for Freight and Passengers

Telematics are the technologies used to transmit information over long distances. In rail, telematic systems are used to track freight and passenger services.

Telematics Applications for Freight (TAF) NTSN arises from Commission Regulation (EU) 1305/2014 as amended by Commission Implementing Regulations (EU) 2018/278 and (EU) 2019/778. The regulation repeals Commission Regulation (EC) 62/2006, amended by Regulation (EC) 280/2013.

The purpose of TAF NTSN is to keep track of consignments and to determine when deliveries to customers will be made. This is achieved through messages passed between IMs and RUs that convey the status of trains at all stages from path request through to actual train running. Telematics Applications for Passenger (TAP) NTSN is mandated under EU Regulation 454/2011, as amended by

- Commission Regulation (EU) 665/2012;
- Commission Regulation (EU) 1273/2013;
- Commission Regulation (EU) 2016/527; and most recently,
- Commission Implementing Regulations (EU) 2019/775.

The aim is to facilitate free passenger movement through the exchange of timetable and ticketing information between EU rail companies and ticket vendors. The provision of customer information during journeys is also a part of TAP NTSN.

Further information about the TAF TAP NTSNs can be found on our website, or the DFT website

# 1.3.2 Legal status and liability

The provision of a Network Statement fulfils a legal requirement and is intended as a source of information for current and potential customers. It has no contractual force. However, where a RU enters into a track access contract with us, the track access contract will give contractual force to documents such as the Network Code, Engineering Access Statement and Timetable Planning Rules which are referenced within this Network Statement.

The Network Statement has been prepared for the benefit of existing and potential customers, to comply with the requirements of the Access, Management and Licensing Regulations. It is intended to be informative, but customers (both existing and potential) should not place reliance on any item of information contained in it without first verifying with us the extent to which it is appropriate to do so.

We cannot accept responsibility for the content of any external websites referred to within or for any discrepancies in the translation of this Network Statement.

#### 1.3.3 Appeals procedure

The Network Statement refers to various documents which carry their own appeal procedures. The Network Code is a set of rules codifying rail industry procedures in relation to operation of the main rail network. It is incorporated in, and so forms part of, the track access contracts by which RUs are granted permission to use the network (access rights). RUs have a right to challenge decisions made in relation to functions under Part D of the Network Code as to timetabling, the Engineering Access Statement and the Timetable Planning Rules. Such challenges are heard by the relevant panel established under the Access Dispute Resolution Rules, which are appended to the Network Code; with a subsequent right of appeal to ORR should this be necessary. Further information on the Network Code can be found at Section 3.1.

The Access, Management and Licensing Regulations also provide applicants with rights of appeal. These appeal rights apply if the applicant considers that it has been unfairly treated, discriminated against, or is in any other way aggrieved concerning the matters outlined in Regulation 32(2). They can apply to a decision by the IM, a terminal or port owner, a service provider or a RU. Guidance on how to appeal is included within Chapter 5 of ORR's guidance on the Access. Management and Licensing Regulations.

The right of appeal is to ORR, which has published guidance on its approach in considering such <u>appeals</u>. Where the subject matter of an appeal is such that it could have been dealt with through directions by ORR under the <u>Railways Act 1993</u>, then that will be deemed the

appropriate procedure. In other cases, ORR would generally expect to adopt a similar approach as in relation to the Railways Act procedure.

If an applicant for allocation of infrastructure capacity is aggrieved regarding decisions concerning the Network Statement, including the information that has been (or in an applicant's view should be) included in it, there is a right of appeal to ORR. We invite anyone who has concerns regarding this Network Statement to raise them with us in the first instance, in order that we may consider how those concerns may be accommodated.

Please contact <u>networkstatement@networkrail.co.uk</u> to do this.

#### 1.4 Structure of the Network Statement

The structure of this Network Statement follows the 'Network Statement Common Structure and Implementation Guide', adopted by European Infrastructure Managers that are members of RailNetEurope (see Section 1.7.2), on the basis of the applicable legal framework. The document is revised annually, and the most recent version is available on the website. The goal of this Common Structure is that all applicants and interested parties can find the same information at the same place in the Network Statement of other countries.

The Network Statement is thus structured in seven chapters constituting the main document and appendixes giving further details:

- Chapter 1 gives general information about the Network Statement and contacts
- Chapter 2 describes the main technical and functional characteristics of the railway network
- Chapter 3 describes access conditions

- Chapter 4 sets out the procedure for the allocation of the train paths
- Chapter 5 refers to the charging of the provided services as well as incentive schemes.
- Chapter 6 describes the traffic management procedures including the procedures to be followed in the event of incidents.
- Chapter 7 provides an overview of the service facilities connected to the Infrastructure Manager's network.

#### 1.5 Validity Period, Updating and Publishing

### 1.5.1 Validity Period

The Access, Management and Licensing Regulations require us as an IM to publish a Network Statement four months before the deadline for applications for infrastructure capacity (the Priority Date for the relevant timetable). Consequently, in the context of the GB allocation process, the 2023 Network Statement is for use for capacity requests for the 2023 timetable year (12 December 2023 to 11 December 2024).

The 2024 Network Statement, valid for capacity requests for the 2024 timetable, will be published in October 2022.

#### 1.5.2 Updating

The Network Statement will be updated on our website as it may be necessary to include any additional information or reflect significant changes throughout the year. Where reasonable we will update the connected facilities details (see Section 5.2) as information is supplied to us from the relevant facility service providers. We will consult on an updated version of the Network Statement once a year, usually between July and October. It should be noted that once the Network 14

Statement has been downloaded (see Section 1.5.3), it will fall outside any change control process.

Many of the documents referenced by the Network Statement (such as the <u>Network Code</u>, <u>Engineering Access Statement</u> and <u>Timetable</u> <u>Planning Rules</u>) are subject to their own version control processes. The updated versions of these documents will be available through the weblinks we have provided within this document.

#### 1.5.3 Publishing

The Network Statement facilitates access to further information by means of web-links or contact details, in addition to the information set out within it, therefore it is only published in an electronic format.

The Network Statement is written in English and published in both French and English on our website where it is available free of charge in electronic format. It will be kept up to date with any changes, and it will be made clear where updating has taken place (by way of version control).

We have taken care to make sure that both the English and French versions of the Network Statement are aligned, however, in the event of inconsistencies or interpretation difficulties between versions, the English version prevails.

For future versions of the Network Statement, we would be pleased to receive views on structure, content and presentation. Please contact <a href="mailto:networkstatement@networkrail.co.uk">networkstatement@networkrail.co.uk</a> with any comments.

#### 1.6 Contacts

The main points of contact for existing customers for regular business issues should continue to be the relevant Customer Relationship Executive in line with current arrangements.

For passenger track access for prospective non-franchised passenger RUs please contact Henry Bates, Head of Performance and Customer Relationship Management

Network Rail Waterloo General Offices LondonSE1 8SW

Email: <u>Henry.Bates@networkrail.co.uk</u>

For new freight customers, please contact:

Guy Bates, Head of Freight Development Network Rail 1 Eversholt Street London NW1 2DN

Email: guy.bates@networkrail.co.uk

Please note that operators of track-mounted plant machines (known colloquially as 'yellow plant'), who wish to gain access to the network in order to gain access to another party's adjoining network (for example, to transit from Network Rail infrastructure to London Underground Limited) in order to undertake engineering work that is not conducted on our behalf, need to follow the same procedures indicated in this Network Statement as would a freight customer in order to conduct such operations.

For queries about the Operational Planning Production Schedule (timetabling), please contact:

Matthew Allen, Head of Timetable Production

Network Rail

The Quadrant:MK

Milton Keynes MK9 1EN

Email: Matthew.ALLEN@networkrail.co.uk

For queries about the New Working Timetable and the Applicable Working Timetable please contact:

Working Timetable Team

Network Rail

The Quadrant: MK

Milton Keynes

MK9 1EN

Email: NRT-WTT@networkrail.co.uk

For queries about compatibility, please contact:

David Galloway

Head of System Compatibility

Network Rail

The Quadrant:MK

Elder Gate

Milton Keynes

MK9 1EN

Email: <u>david.galloway@networkrail.co.uk</u>

#### **OFFICIAL**

# Other GB railway organisations

Access Disputes Committee Floor One, Mimet House 5a Praed Street London W2 1NJ

http://www.accessdisputesrail.org/

Department for Transport Great Minster House 33 Horseferry Road London SW1P 4DR http://www.dft.gov.uk/

Merseytravel
1 Mann Island
Liverpool
L3 1BP
http://www.merseytravel.gov.uk

Office of Rail and Road 25 Cabot Square London E14 4QZ

http://orr.gov.uk/

Rail Delivery Group 200 Aldersgate Street London EC1A 4HD

http://www.raildeliverygroup.com/

Rail Safety and Standards Board

The Helicon
1 South Place
London
EC2M 2RB

http://www.rssb.co.uk/

Transport for Greater Manchester
2 Piccadilly Place
Manchester
M1 3BG
http://www.tfgm.com/

Transport for London Windsor House 42-50 Victoria Street

London SW1H 0TL

https://tfl.gov.uk

Transport for Wales South Gate House Wood Street

Cardiff CF10 1EW

http://gov.wales/topics/transport/transport-for-wales

Transport Scotland Buchanan House 58 Port Dundas Road

Glasgow G4 0HF

http://www.transportscotland.gov.uk/

Rail Freight Group 7 Bury Place London WC1A 2LA http://www.rfq.org.uk/

HS1 Limited
5<sup>th</sup> Floor, Kings Place
90 York Way
London N1 9AG
<a href="http://www.highspeed1.co.uk/">http://www.highspeed1.co.uk/</a>

HS2 Limited Two Snowhill Snow Hill Queensway Birmingham B4 6GA

http://www.hs2.org.uk/

# 1.7 Cooperation Between European Infrastructure Managers/Allocation Bodies

# 1.7.1 Rail Freight Corridors

In 2010 the European Parliament and the Council laid down rules for the establishment of a European rail network for competitive freight, consisting of international freight corridors.

The aim is to achieve reliable and good quality railway freight services to be able to compete with other modes of transport.

The main objective to initiate Regulation 913/2010/EU (hereinafter "the Regulation") was to improve the services provided by IMs to international freight operators.

Several initiatives have contributed to the creation of the corridors' concept: the 1st railway package, the TEN-T (Trans-European Transport Network) programme, cooperation among Member States (MS) and IMs within the framework of ERTMS, and the deployment of TAF NTSN (for Telematics Applications for Freight).

Through the regulation the European Union would like to act in the following main areas corresponding to the process of harmonisation:

- improving coordination among IMs,
- improving the conditions of access to infrastructure,
- guaranteeing freight trains' adequate priority,
- and improving intermodally along the corridors.

In order to reach these goals, the European Union designated nine international rail freight corridors (RFC) in the EU rail network. The detailed description of the Rail Freight Corridor to which we are linked, RFC North Sea-Mediterranean, can found on the following website:

http://www.rfc-northseq-med.eu/en

# 1.7.2 RailNetEurope and Other International Cooperation

Network Rail is a member of RailNetEurope (RNE), which is an organisation of European railway Infrastructure Managers and Allocation Bodies (IMs/ABs) as well as rail freight corridors. RNE facilitates international railway business by developing harmonised international business processes in the form of templates, handbooks, and guidelines, as well as IT tools. You can find more information about RNE on <a href="http://www.rne.eu/organisation/rne-approach-structure/">http://www.rne.eu/organisation/rne-approach-structure/</a>

#### **ONE Europe - ONE Service**

RNE has established a One Stop Shop (OSS) contact point for every member country. Each customer can choose its favoured OSS contact point for all its needs regarding international rail services.

From the initial questions related to network access to international path requests and performance review after a train run – all these issues and more are handled by one contact point for the whole international train journey at the customers' convenience. Customers of RNE Members who run international rail services can therefore make use of the RNE OSS's bundle of services:

- A network of contact points guiding customers through the whole range of procedures: gaining network access, planning of efficient international rail transport, international train path management (ITPM) and performance review after train operation. Response times have been standardised at a customer-friendly level – the attainment of these service levels is currently being tested.
- OSS experts drawn from sales and timetabling merge their expertise in these fields to serve customers together with the OSS contact points.
- IT tools that further assist applicants by giving price estimates for rail infrastructure use, by coordinating international train path ordering and supply processes, and by tracking & tracing international trains in real time.

The list of OSS contact persons and further information is available at: <a href="http://www.rne.eu/organisation/oss-c-oss/">http://www.rne.eu/organisation/oss-c-oss/</a>

Our OSS contact is:

Steve Rhymes

Head of Network Management

Network Rail

1 Eversholt Street

London NW1 2DN

Email: Steve.Rhymes@networkrail.co.uk

For further information on our work with RNE and European and international co-operation generally, our contact is:

Steve Davey

General Counsel (Group & Europe)

Network Rail

1 Eversholt Street

London NW1 2DN

Email: Steve.Davey@networkrail.co.uk

# Chapter 2 – Infrastructure

#### 2.1 Introduction

Under the terms of our network licence, we are only funded to undertake activities designated as 'Permitted Business'. Permitted Business is defined within the Network Licence as 'Network Business' and 'Permitted Non-Network Business'. Permitted Non-Network Business is defined as any business other than the network business and the exploitation of land (which includes the disposal of land within the meaning of Condition 7), of the type transferred to the licence holder pursuant to the Railtrack Transfer Scheme. Network Business is further defined as the business of providing and operating the licence holder's network, including the maintenance, renewal, replacement, improvement, enhancement and development of the network; and any ancillary service related to the business.

In order to undertake network business a periodic review process is followed which determines the requirements that need to be delivered in a five-year period. The current Control Period (CP6) runs from 1 April 2019 to 31 March 2024.

We are responsible for maintaining and improving the railway infrastructure on the main line network, including:

- bridges
- drainage
- earthworks
- electrification systems (overhead line and conductor rail)
- level crossings
- signalling systems

- track
- tunnels
- viaducts.

The successful delivery of our asset management responsibilities must be consistent with the reasonable requirements of stakeholders. Further information on asset management, including our asset management policy and strategy, can be accessed at:

https://www.networkrail.co.uk/running-the-railway/looking-after-the-railway/asset-management/

#### **Further information**

Detailed information and data about the infrastructure is contained in the Sectional Appendix, which is described in <u>Section 2.3</u>.

The Sectional Appendix contains detailed data about the infrastructure of the main rail network, comprising running lines (but not necessarily sidings) on a line of route basis, usually in diagrammatic or tabular form. There are several references to tables within the Sectional Appendix as sources of detailed information in the following section.

In addition, we have the ability to export infrastructure data in line with the EU Register of Infrastructure specification as specified in the European Commission Implementing Decision 2019/777 (RINF Decision). The main purpose of RINF specified data is to provide transparency on the characteristics of the network. The information can be used for planning purposes in designing new trains and for assisting with the assessment of compatibility of trains with routes before the start of operation. See Section 3.4.1 for more information.

Data meeting the RINF specification can be considered for the design processes for rolling stock sub systems, enabling technical compatibility

assessment for fixed installations, monitoring interoperability status of the UK railway network and assessing route compatibility for planned trains. It is intended to provide an overview of general compatibility, though the RU, Vehicle Manufacturer or other authorised users will need to undertake more detailed assessments prior to a vehicle being cleared to operate on a new route.

For more information about the RINF, please contact:

Asset Information Services Network Rail The Quadrant:MK Elder Gate Milton Keynes MK9 1EN

Tel: +44 (0) 1908 781 000

Email: RINFdataenquiries@networkrail.co.uk

#### 2.2 Extent of network

#### **2.2.1 Limits**

The Network Statement covers the entire railway infrastructure that we own and operate and defined as the main rail network in Section 1.1. It also includes some information on connecting infrastructure such as freight sidings, depots and rail-connected ports. Broadly, we own and operate the mainline railway network in England, Scotland and Wales. The network is divided into five regions and 15 operating routes, as described in Section 1.1. The majority of this network is usually available for normal traffic operations, except during periods of maintenance and renewal (which are both covered by the Engineering Access Statement described further in Section 4.3.2) and subject to the allocation of capacity for these purposes (as described in Section 4.3.2), 20

though some minor lines may be deemed to be 'out of use' (including temporary situations) and may only be accessed by special arrangements. Some lines of the network are closed overnight due to the overnight closure of their signal boxes. The Timetable Planning Rules (which contain information on route opening hours in Section 2.2) are published on our website.

We are also the owner of rail infrastructure and assets on the Isle of Wight, but we have leased them to First MTR South Western Trains Limited (although the Island Line brand has been retained) the entire railway land, infrastructure and assets on the island for a cumulative period of 45 years, commencing 1 April 1994. This is a vertically-integrated railway: Island Line is responsible for all railway operations and maintenance of the infrastructure.

Further details regarding the individual routes can be found on <u>our</u> website.

#### 2.2.2 Connecting Railway Networks

Our infrastructure, the main rail network, is connected to the railway infrastructure owned and/or operated by:

- HS1 the railway between St Pancras International in London and the Channel Tunnel which connects with the international high speed routes to Paris and Brussels. It should be noted that the Network Statement produced by HS1 Limited deals with this route. HS1's Network Statement can be accessed at: <a href="https://highspeed1.co.uk/regulatory/key-regulatory-documents">https://highspeed1.co.uk/regulatory/key-regulatory-documents</a>
- Eurotunnel at a boundary point between Dollands Moor and the UK portal of the Channel Tunnel. The Channel Tunnel constitutes the only fixed rail link between Great Britain and other European networks. Eurotunnel's Network Statement can

be accessed at: <a href="http://www.eurotunnelgroup.com/uk/eurotunnelgroup/com/uk/eurotunnelgroup/com/uk/eurotunnelgroup/com/uk/eurotunnelgroup.com/uk/eurotunne

- London Underground Limited, in relation to the London Underground system.
- Crossrail Central Operating Section a largely tunnelled urban network that links our network in the east and west via central London. Its Network Statement can be accessed at: <a href="https://tfl.gov.uk/corporate/publications-and-reports/crossrail-central-operating-section">https://tfl.gov.uk/corporate/publications-and-reports/crossrail-central-operating-section</a>
- Rail for London, a division of Transport for London, in relation to the East London Line.
- Nexus (Tyne and Wear Passenger Transport Executive), in relation to the Tyne and Wear Metro.
- Heathrow Airport Holdings Limited. Its Network Statement can be accessed at: <a href="https://www.heathrow.com/company/about-heathrow/rail-regulation">https://www.heathrow.com/company/about-heathrow/rail-regulation</a>
- Transport for Greater Manchester, in relation to Manchester Metrolink.
- Stagecoach, in relation to the Stagecoach Supertram network.
   Additional information can be found on the <u>South Yorkshire</u>
   <u>Passenger Transport Executive's website.</u>
- Amey Infrastructure Wales Limited in relation to the Cardiff Valley Lines in South Wales. Its Network Statement can be accessed at: <a href="https://tfwrail.wales/about-us/metro/core-valley-lines-infrastructure-manager">https://tfwrail.wales/about-us/metro/core-valley-lines-infrastructure-manager</a>
- Associated British Ports, Hutchison Ports UK and other port authorities.
- numerous 'heritage' railways, often operating in the leisure sector.

- numerous third party industrial railways or sidings.
- various private freight terminals. Please refer to <u>Section 7.3.3</u> for details.

The Network Statements of other European IMs can be downloaded from the RNE website. Please see the following link: <a href="http://www.rne.eu">http://www.rne.eu</a>

#### 2.3 Network Description

The operational configuration and physical attributes of our railway infrastructure is described in the Sectional Appendix, which is required to be made available (in whole or part) to those accessing the railway infrastructure. It also contains any special instructions required to amplify the Rule Book in respect of operations at specific locations. Some RUs choose to take one copy of each relevant Sectional Appendix and use it to create their own atlas by adding relevant commercial information.

The Sectional Appendix is available as a printed document or can be viewed electronically in a format which contains the latest weekly amendments via the National Electronic Sectional Appendix (NESA). Further information regarding access to NESA can be found at:

https://www.networkrail.co.uk/industry-commercialpartners/information-operating-companies/national-electronicsectional-appendix/

The dynamic nature of our infrastructure requires a regular stream of amendments, all of which must be made available to those in receipt of an Appendix. These are contained in the Weekly Operating Notice (WON) and then further collated into the Periodical Operating Notice (PON) which is issued every quarter. Copies of both documents are supplied electronically to those who have secured access rights or upon demand.

To obtain electronic copies of PONs and WONs, or to request a printed version at cost to requester, please contact <a href="mailto:planningpublications@networkrail.co.uk">planningpublications@networkrail.co.uk</a>.

General queries regarding these documents can be progressed by contacting the <u>Publications Team</u>.

# 2.3.1 Track typologies

The definitive source of reference material for the various track typologies – single track, double track/multiple track etc. is Table A of the National Electronic Sectional Appendix.

#### 2.3.2 Track gauges

The main rail network operates to one nominal standard track gauge of 1435 mm.

#### 2.3.3 Stations and nodes

There are 2,509 stations on the main rail network, nearly all of which we own. We also manage 20 of the largest stations:

- Birmingham New Street
- Bristol Temple Meads
- Clapham Junction
- Edinburgh Waverley
- Glasgow Central
- Guildford
- Leeds City
- Liverpool Lime Street
- London Bridge
- London Cannon Street

- London Charing Cross
- London Fuston
- London King's Cross
- London Liverpool Street
- London Paddington
- London St. Pancras International (Midland Road)
- London Victoria
- London Waterloo (excluding Waterloo East)
- Manchester Piccadilly
- Reading

The remaining stations, whilst mostly owned by Network Rail, are leased to RUs, usually franchised passenger operators.

The stations that we do not own are:

- Adrossan Harbour
- Aylesbury Vale Parkway
- Bromsgrove
- Coleshill Parkway
- Corfe Castle
- Dunrobin Castle
- Ebbsfleet International
- Fishguard Harbour
- Horwich Parkway
- Prestwick International
- Southend Airport
- Stranraer Harbour
- Stratford International
- Warwick Parkway

For further information relating to these stations please contact our Head of Station and Depot Access.

<u>Section 7.3.2.1</u> describes these arrangements in more detail. Distances between stations and other principal nodes, such as junctions, can be derived from Table A of the Sectional Appendix, see <u>Section 2.3.1</u>.

Details about the maximum length of train that may be accommodated at a station can also be found in the Sectional Appendix. The exact table that carries this information differs by route publication.

#### 2.3.4 Loading Gauge

#### Loading gauge – freight vehicles

The physical dimensions of a railway vehicle and its load can be defined as conforming to one of a series of height and width profiles or standard freight gauges. These gauges can also be applied to a given route, for the purpose of ensuring that a railway vehicle will not come into contact with a lineside or overline structure, such as station platforms, canopies, overhead power supplies (catenaries), overbridges or tunnels.

Particular wagon and load combinations may actually be larger than the published gauge of a route with regard to key and critical dimensions. In these situations, following bespoke analysis, a particular combination may be able to run as an 'out of gauge' load to be moved by rail.

This analysis may require a special survey of the route in question to verify the currently available clearances, and the train may need to be operated at a reduced speed. In exceptional cases there may also be restrictions on trains using adjacent lines while the 'out of gauge' load

is moving. For further information about the gauge capability of the network please refer to the data tables in the <u>Annual Return</u>.

Our website also contains guidance for obtaining access to the definitive source of detailed information regarding the gauge of the network – the National Electronic Sectional Appendix – see <u>Section 2.3.1</u>.

#### Freight loading gauges on the main rail network

The maximum standard gauge profile for each route varies, reflecting the constraints on rail vehicle size caused by lineside and overline structures. Detail of the freight loading gauge for each route section is given in the Sectional Appendix – see Section 2.3.1. Historically, Britain's railways were constructed by separate companies, often to differing loading gauges. A set of defined loading gauge standards have been adopted for freight vehicles. Railway wagons built to the basic loading gauge (W6A) and currently in operation are capable of operating on virtually any route on the national rail network. For advice on new build (or modified) wagons see Section 3.4.1 of this statement. The larger loading gauges tend to have greater headroom, to enable intermodal flat wagons to carry tall containers and swap bodies on certain routes. The following table provides some illustrative examples of the application of wagon and load conditions within these standard gauges. Full details and definition of the standard freight gauges currently in use in GB are set out in Railway Group Standard GE/RT8073 (Issue 44 – December 2020; 'Requirements for the Application of Standard Vehicle Gauges'. The nomenclature W6 is generally taken to include the W6A profile (modified for third rail). The gauges W6A, W7, W8 and W9 are broadly incremental (i.e. the smaller-numbered gauges 'nest' inside the larger-numbered ones); however, W10, W11 and W12 do not (e.g. W9 does not fit completely inside W10).

When new or modified freight locomotives and wagons are being brought onto the network it is important not to make assumptions regarding the extent to which Standard Gauges may be relied upon. Further information regarding the Standard Gauges (including Locomotive Gauge) can be found in Railway Group Standard. GE/RT8073 (Issue 3) which is available on the RSSB's website.

Examples of load conditions within standard gauges						
Unit	Container			Container		
Width Wagon	8'			2500mm		
Туре	FEA	IFA	IKA	FEA	IFA	IKA
Maximum Unit Height	Feet, inches			mm		
W6A	8'	8'	8'6"	2402	2448	2568
W7	8'	8'	8'6"	2402	2448	2585
W8	8' 6"	8'6"	9'	2638	2673	2793
W9	9'	9'	9'6"	2725	2770	2896
W10	9' 6"	9'6"	9'6"	2896	2896	2896

#### Loading gauge – passenger vehicles

Modern passenger vehicles are built by a wide range of manufacturers to differing generic profiles and therefore these vehicles are cleared on a route-by-route basis as part of their acceptance onto the network. The gauging of passenger vehicles also has to take account of the stepping distances between station platforms and trains. Detail of the passenger train loading gauge clearance is given by train and vehicle class for each route section in the Sectional Appendix – see Section 2.3.1.

#### 2.3.5 Axle Weight Limits

In Great Britain, the rules for determining the Route Availability (RA) value of a vehicle are set out in the GERT8006 (Route Availability Number for Assessment of Compatibility between Rail Vehicles and Underline Bridges). The technical requirements for determining that the static load characteristics of a vehicle are compatible with underline bridges are set out in RIS-8706-INS (Route Level Assessment of Technical Compatibility between Rail Vehicles and Underline Bridges). Both of these standards are accessible through RSSB's website.

Axle weight limits and equivalent evenly distributed vehicle loadings which the current network can carry vary according to the engineering characteristics for each route, particularly for underline bridge and viaduct structures. Axle weight limits and equivalent distributed vehicle loadings are classified into RA values between 1 and 10.

Depending on the total and distributed load effects of the vehicle, including effects produced by the spacing of axles in the vehicle and uneven vehicle loading, the maximum vehicle weight may need to be reduced so that the load effects from the vehicle (including payload) do not exceed the relevant RA value.

Maps indicating these groupings for current permitted traffic flows are contained in the Route Specifications and may be accessed by the following link:

## https://www.networkrail.co.uk/running-the-railway/long-term-planning/

The maps provide a broad indication of the predominant capability on each strategic route section. The Route Specifications are not intended to be live operational documents and enquirers should refer to the Sectional Appendix to ensure that any data being used is the latest available information. Where the contents of the Route Plans or the 25

Sectional Appendix in relation to this capability give rise to a need for clarification, enquiries should be made to the contact points given in Section 1.6.

A more detailed expression of the RA for each operational route section is contained in the Sectional Appendix. The table on the next page gives examples of load conditions within standard gauge.

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Examples of load conditions within standard gauges	RA
Two-axle vehicle - Gross Laden Weight (tonnes)	
Up to 27.9t	1
Over 27.9t and up to 30.4t	2
Over 30.4t and up to 33.0t	3
Over 33.0t and up to 35.5t	4
Over 35.5t and up to 38.1t	5
Over 38.1t and up to 40.6t	6
Over 40.6t and up to 43.1t	7
Over 43.1t and up to 45.7t	8
Over 45.7t and up to 48.2t	9
Over 48.2t and up to 50.8t	10
Four-axle vehicle (2 x two-axle bogies) - Gross Laden Weight (tonnes)	
Up to 66.0t	3
Over 66.0t and up to 71.1t	4
Over 71.1t and up to 76.2t	5
Over 76.2t and up to 81.2t	6
Over 81.2t and up to 86.3t	7
Over 86.3t and up to 91.4t	8
Over 91.4t and up to 96.5t	9
Over 96.5t and up to 101.6t	10

The RA detailed in the Sectional Appendix is valid for the permissible speed given in the Sectional Appendix (taking account of the permissible speed at each bridge) in conjunction with the following:

- the speed corresponding to the greater of any standard differential speeds (the greater of any standard differential speeds is set out in GERT8000-SP (Speeds) available on the RSSB's website)
- the maximum RA for freight traffic at 75mph is RA8
- capability stated as RA9 or RA10 is for a maximum speed of 60mph (50mph on Kent, Sussex and Wessex Routes) and where speeds in excess of 60mph (50mph on Kent, Sussex and Wessex Routes) up to 110mph are permitted the capability is RA8 and where speeds in excess of 110mph up to a maximum of 125mph are permitted the capability is RA7

For permissible speeds indicated by letters in the Sectional Appendix in Table A, for new vehicles and changes to the operation of existing vehicles the RA is limited to:

- RA5 for HST differential speed
- RA3 for MU/DMU/EMU differential speeds
- RA1 for SP differential speeds
- vehicle/route technical compatibility for EPS speeds (typically outside the limits of validity of the RA system) is given on an individual basis for each vehicle type on the specific routes stated in the Sectional Appendix.

For passenger multiple units and locomotives with maximum permitted speeds equal to or in excess of 100mph and freight traffic with maximum permitted speeds in excess of the criteria set out for RA8 to

RA10 above, additional checks are required to confirm the compatibility of vehicles and underline bridges. This is due to the risk of potentially excessive dynamic effects including resonance arising from such rail traffic. More information about the additional checks required in these circumstances is set out in RIS-8706-INS (Route Level Assessment of Technical Compatibility between Rail Vehicles and Underline Bridges), available on the RSSB's website. Early consultation with us is recommended in such cases.

Early consultation with us is recommended when considering options for new vehicles or operations that exceed the RA of lines or the limits of validity of the RA System. These limits are set out in GERT8006.

Heavy Axle Weight (HAW) services are those which operate in exceedance of a route section's published RA in the Sectional Appendix – they are permitted on the network at the discretion of Network Rail through a dispensation process, and typically operate at RA9 or RA10 (as the Network is predominantly RA8). Dispensations are most commonly limited to 24 months and are often subject to operating restrictions, which are detailed on the necessary RT3973/HAW exceptional load form. Further guidance on HAW dispensations and exceptional load forms can be obtained from our Access Coordinators. The capability of track to carry traffic is dependent on its construction and the maintenance, which is prescribed through the asset policies and is aligned to the traffic demands of the route. There are some routes where an increase in tonnage can be accommodated only with a prior increase in maintenance and renewal activity. Timescales associated with such work can range from several months in cases where increased maintenance is required through to several years where longer term work on structures is required. With this in mind, potential users of the network are encouraged to discuss their requirements with us at the earliest possible opportunity.

The guidance also explains that it is important not to confuse total tonnage capability (which refers to the total volume of freight that a route may carry) with RA (which determines the axle loading of individual trains).

#### 2.3.6 Line Gradients

The gradients on a route will have a direct effect on the power to weight ratio necessary to operate a train effectively and efficiently. Gradients on the main line network may be as steep as 1 in 37. In such cases additional locomotives may be required on occasion to assist heavy freight trains. Some loss of performance may be experienced across all vehicle types, but this will be accommodated in section timings. Short extent gradients up to 1:25 occur in very specific locations (such as Farringdon at 1:29 and other station approaches) due to surrounding non-railway infrastructure. There is no evidence of these conditions affecting historic services, however, the effect on drawbar load and traction performance should be considered by the proposers of future services.

Line gradients for each route section are established at the time of a route's construction. A summary map showing prevailing gradients on each route, classified according to severity, is provided in <u>Annex 1</u>

#### 2.3.7 Maximum Line Speed

Each route section is governed by speed limits: normal, raised and wrong direction working. Different limits may be imposed for different types of passenger and freight trains. In some cases, in order to minimise potential damage to the track and structures, a special freight heavy axle weight speed restriction may apply over and above the restrictions for other types of trains. We are reducing the number of locations where such restrictions apply. Permissible speeds will also be 28

governed by other factors, including the capabilities of the signalling or the nature of the track. Permissible speeds impact mostly on freight trains to varying degrees, and this is taken into consideration when constructing a timetable.

The permitted speeds per line for each route section are contained in Table A of the Sectional Appendix, see Section 2.3.1.

#### 2.3.8 Maximum Train Lengths

The maximum length at which a train may operate is usually determined by infrastructure parameters such as length of sections between signals, length of loops or sidings that may be required to recess a slower train for a faster one to pass, ability to hold a train at a junction without detriment to other movements and the length of platforms and lines at terminals.

Permitted passenger train lengths are published in the Timetable Planning Rules – see <u>Section 4.5.4</u>.

During the train planning processes described in <u>Section 4</u> (capacity allocation) it may be possible to identify opportunities to run longer trains which exceed the normal parameters (which are known as 'Operating Constraints'). This particularly applies to the operation of freight trains.

We will use all reasonable endeavours to facilitate operations that maximise the traction capability of the train and allow the above parameters to be exceeded where this can be done without importing undue risk of delay to the operation of others. This may dictate the need to apply other limitations as to the allocation of a train path (such as by time of day, so as to avoid busy periods).

Permitted freight train lengths are published in the Freight Train Loads Books (FTLBs). See <u>Section 6.2</u>.

Passenger train lengths may be limited by safety requirements at stations with short platforms or may require (in the case of trains with power operated doors) a capability for selective door operation. The RU is responsible for managing these safety risks.

When we renew and enhance the network, we consult with stakeholders in order to identify effective opportunities to improve the infrastructure to accommodate longer trains.

# 2.3.9 Power Supply

The supplies of power for electrics trains is divided into three groups:

- 25kV AC overhead supply, provided through overhead wires (catenary), collected by a pantograph on the locomotive or carriage roof
- 1500V DC overhead supply, provided through overhead wires (catenary), collected by a pantograph on the locomotive or carriage roof
- 750V DC third rail supply, provided by a third rail running alongside the running lines, collected by shoes fitted to the locomotive or carriage bogies.

Regenerative braking is supported by both the 25kV AC and 750V DC electrification systems (but not universally).

For freight services, trains may switch between locomotives at major hubs, such as between diesel and electric locomotives. Therefore, whether the points of origin and destination are electrified need not be a major constraint upon operation by electric traction. Indeed, third rail and overhead power supplies are normally excluded from freight 29

terminals on safety grounds. In such cases, diesel shunting locomotives may be required to pull trains to and from the electrified main line network, or electric locomotives may be allowed to reverse trains into a terminal using an electrified spur. This leaves the wagons beyond the electrified network, allowing for safe access by terminal operators and cranes.

A national scale map showing the general extent of electrification of the network is provided in <u>Annex 3</u>. Further details of upcoming electrification works can be found within our <u>Enhancements Delivery</u> Plan.

#### 2.3.10 Signalling Systems

The rail network is controlled by a variety of signalling systems ranging from traditional mechanical systems, through electro-mechanical installations, to electronic and digital types. Mechanical systems are controlled from traditional signal boxes and by their nature, are limited to a small area of control. Electrically powered systems can operate points and signals over considerable distances by means of remotecontrol systems. The extent of control for powered systems varies considerably and often depends on the age of the installation. A number of systems are often re-controlled to larger control centres to increase the area of control.

The type of signalling, and the spacing between signals, determines the capacity of a section of route and may impact the speed trains can run at.

The signals themselves on principal routes are either colour-light or semaphore signals. Train positions are determined by means of track circuits or axle counters. On some routes, train detection may be limited and movements controlled by means other than lineside signals.

The purpose of signalling systems is to run trains safely and efficiently. The signalling systems gathers information about the position and destination of trains and the status of the railway, processes that information, and sets points and signals accordingly. Safe control of train movements is governed by various principles depending on the technology in use. The principal types of system are:

- Track circuit block
- Absolute block.

Other types of block systems currently in use include:

- Flectric token block
- Radio electronic token block
- Tokenless block
- One train working
- 'No signaller' token working

NESA Table A provides details of the system in use on individual sections. Information on how to request access to NESA can be found on <u>our website</u>.

#### **Traffic Management Systems**

A variety of technologies are used to route trains and reflect the age of the signalling as well as timetable and control needs. Digital computer-based train control and routing systems have been in use since the 1980s. Whilst most of these systems have the ability to set routes automatically, their functionality is limited. Traffic management systems which are currently being implemented, manage large areas of the railway and are able to route trains more strategically. They enable timetable and operational plans to be altered in real-time and provide

decision-support facilities to operators. Signalling systems still ensure trains are run safely and carry out the routing required.

#### European Rail Traffic Management System (ERTMS)

Radio-based signalling in the form of European Train Control System (ETCS) Level 2 is in passenger operation on the Cambrian Lines, the core section of Thameslink and is being deployed on the Western Route. In this system, trains report their location via radio to a central processing system which determines what train movements are safe and communicates that information to individual trains, again by radio. Authorities to move are passed directly to the driver in the cab without the need for lineside signals although lineside signals may be retained for operational and migration purposes. Communications between the central processing centre and trains is by GSM-R (see below). ETCS is Network Rail's preferred train control system going forward and plans for its deployment are being agreed with the wider industry.

Further information on our signalling systems can be found on <u>our website</u>.

#### 2.3.11 Traffic Control Systems

Traffic control is exercised through a network of Route Control Offices. The National Operations Centre also exists that provides an overview of the control function. Controllers take action in relation to current train running and in response to incidents and emergencies to mitigate the impact of any disruptive events. In some cases, train and freight operating companies' control staff are co-located in these control offices to enable more integrated working.

The Total Operations Processing System (TOPS) is a legacy computer system that monitors train movements in real-time on the network. Many reports on movements are derived automatically through the

signalling systems but some manual reporting is required. Train Consists for freight trains contain essential information about the composition of trains, including vehicles being conveyed, weights and lengths, and any special information about dangerous goods. The operator inputs the Train Consists detail into the TOPS before its departure and the consist remains 'live' in the TOPS until the train reaches its destination.

Train movement information in TOPS is compared with information about a train's schedule through a sub-system called TRUST to provide current train running information to other systems (including Customer Information Systems) and controllers. TRUST is also used to identify the source of delays to trains and, through an attribution process, the causes of delay are recorded for subsequent performance analysis.

These systems are likely to be superseded by newer technology.

#### 2.3.12 Communication Systems

Railway telecommunications systems provide services used in safe train movement authorisation, direct operation of the railway and passenger information. The railway telecommunications network consists of:

- Voice and Data Transmission systems including network management systems
- Operational voice communications (e.g. fixed lineside telephone systems, Level Crossing Public Emergency Telephone Systems, train borne and hand portable radio GSM-R)
- Cabling (e.g. fibre and copper cabling) and cable route
- Telephone exchanges
- Driver Only Operation CCTV and mirrors
- Station Information and Surveillance Systems (Customer Information Systems, Public Address and security CCTV)

- Security systems (e.g. firewalls, security systems and security operations centre)
- Business fixed and mobile voice and data networks and systems.
- Data centres

The telecoms corporate network links all Network Rail's offices, sites and data centres together to enable user access to corporate IT systems and capabilities. The corporate telecoms services include office telephony, call centre services, LAN, WAN and Wi-Fi which has been upgraded over 2020/21 to cater for the wireless first initiative and increased bandwidth to cater for Microsoft Teams usage in the workplace.

The corporate network is also used to interconnect corporate IT systems with railway operational systems.

Below is a brief explanation of our transmission systems and operational voice communication systems:

#### FTN – Fixed Transmission Network (SDH)

The FTN is a national communications transmission network based on SDH (Synchronous Digital Hierarchy) technology which is used as the communication bearer to carry operational traffic such as GSM-R, Signalling transmission, SCADA transmission, axle counters and operational voice systems. The platform was designed and delivered within the FTN/GSM-R programme with a primary purpose of carrying the GSM-R traffic from the trackside masts back to the core platforms in Stoke and Didcot. In addition, the platform has been used to carry signalling and SCADA data back to the relevant central locations (Infrastructure Control Centre). The asset-base and technology is now reaching life expiry and will require renewal in the near future.

#### FTNx – Fixed Transmission IP Network

The FTNx is a national communications transmission network based on DWDM (Dense Wave Division Multiplexing) utilising OTN (Optical Transport Network) technology and IP/MPLS (Internet Protocol/ Multiprotocol label switching) technology which is used as the communication bearer to carry operational traffic such as GSM-R, signalling transmission, SCADA transmission, axle counters, CCTV, corporate and operational voice systems. The platform utilises next-generation industry standardised technology (ethernet) to carry transmitted traffic from the trackside to various end-locations (ICC). The FTNx transmission network has been built and designed to replace the FTN (Fixed Transmission Network) network over a period of time and to deliver additional capacity, capability and improved service offerings via next-generation COTS technology and enabling the foundations of a Digital Railway.

The network has been designed to carry and support the latest Time Division Duplex (TDD) mobile services and their clocking requirements. The FTNx core and aggregation network is certified to NIS-D security requirements.

#### **GSM-R**

GSM-R is a national radio system used for communication between drivers and signallers using 2G mobile radio network technology. It allows signalling staff to address drivers of individual trains based on train head code and provides the Railway Emergency Call and group call features which broadcasts to all trains in pre-defined areas to alert them to incidents or operational circumstances that affect them. Drivers may also create similar Railway Emergency Calls in the event of an emergency that threatens the operational safety of other vehicles. GSM-R also supports ETCS providing the radio data link

connection to the on board equipment. Early ETCS installations such as Cambrian, were provided using a circuit switched solution. During 2021, the network will complete the upgrade to enable GPRS for the data links.

GSM-R, an essential subsystem of ERTMS, is mandated by the EC CCS NTSN. (European Commission – Control Command and Signalling).

#### Radio Electronic Token Block (RETB)

RETB is a signalling system that is transmitted over a telecoms radio network covering the West Highland Line and Far North Line. The radio system also provides the voice communication (similar to GSM-R).

# Station UHF Radio Systems

UHF radio systems provide communications for site specific applications such as station management or in the case of marine radio to interface with public boat traffic.

#### 2.3.13 Train Control Systems

Shunting locomotives specifically confined to marshalling yards may be exempted from train control systems.

#### AWS – Automatic Warning System

AWS is a mandatory system fitted in driving cabs on locomotives, Driving Van Trailers (DVTs), multiple-units and on-track machines. It provides a visual and audible reminder to the driver of:

- a 'warning' or 'clear' signal indication, or
- certain specific permanent or temporary speed restrictions.

Failure of the driver to acknowledge AWS warning indications will automatically apply the train brakes.

#### **TPWS – Train Protection Warning System**

TPWS is a mandatory automatic system fitted in every driving cab on locomotives, DVTs, multiple-units and on-track machines, which is designed to:

- initiate a brake application should the train pass selected signals at danger or approach selected signals at danger too fast
- initiate a brake application should the train approach buffer stops too fast
- initiate a brake application where a train approaches certain permanent speed restrictions too fast.

#### ATP – Automatic Train Protection

ATP is the system utilised on specific sections of the network to provide absolute train control in the event of a driver failing to control the train in accordance with the permitted speed or in the absence of a movement authority. It is only fitted on certain trains operating on the Great Western Main Line and the Chiltern line. Further expansion of ATP is not envisaged as this functionality will be provided by the future ETCS implementation.

#### 2.4 Traffic restrictions

Information relating to general restrictions is covered in Table D of the Sectional Appendix. This deals with each of the route sections as set out in Table A of the same Sectional Appendix (see <u>Section 2.3</u>).

#### 2.4.1 Specialised Infrastructure

Particular sections of our infrastructure may be designated for use by specified types of rail service and may give priority to that specified type in the allocation of infrastructure capacity. This is subject to

certain matters as set out in Regulation 25 of the Access, Management and Licensing Regulations. The purpose of such a designation is to enable priority to be given to the specified type of rail service, even though there may be other types of rail service which conform to the characteristics necessary to use that infrastructure. The identification of characteristics of rail service that may be precluded from using sections of infrastructure is not in itself such a designation.

There are two sections of the network which are designated as specialised infrastructure:

- High Marnham test track
- Old Dalby test track.

In each case the facility has been subject to specific investment to enable it to serve as a testing facility for new and modified vehicles for the benefit of the rail industry. In order to safeguard the primary purpose of these test tracks the normal arrangements for network access do not apply and special charges are made for access to reflect the special services provided. All access is granted subject to availability on a 'first come, first served' basis at the point of application. Applications for access are made to the facility manager via our Retail Innovation and Development Centre.

#### RIDC.RIDC@networkrail.co.uk

#### 2.4.2 Environmental restrictions

The operation of trains on the main rail network is subject to the requirements of UK environmental and related law, including statutory nuisance such as noise and fumes, and deposit of waste from train toilets, with which we, and RUs, are required to comply. The discharge of waste from train toilets is prohibited on the rail network. A small

number of existing Charter Operators have an exemption until 31 March 2023 whilst retro fitment of retention tanks is completed.

Section 122 of the Railways Act 1993 also provides a level of statutory authority as a defence to actions in nuisance and certain other legal proceedings.

#### 2.4.3 Dangerous Goods

The Working Manual for Rail Staff (Pink Pages) document sets out the circumstances and conditions for the movement of dangerous goods consignments by rail. The following permanent restriction is in force:

A train conveying Dangerous Goods may not pass through the Severn Tunnel at the same time as any other train. This restriction can impact on timetable capacity through the tunnel. This restriction applies to a c.4½ mile section of the network. The tunnel is located between Pilning (Avon) and Newport (South Wales). An alternative route is available via Gloucester.

#### 2.4.4 Tunnel restrictions

Table A of the Sectional Appendix lists each tunnel structure giving its precise location and length. Examples of specific tunnel restrictions in force are shown below:

Trains hauled by certain locomotive types may not pass through Tankersley Tunnel (South Yorkshire) due to limited clearances. The structure is located between Meadowhall and Barnsley (South Yorkshire). An alternative route to this tunnel is available via Swinton (South Yorkshire).

Trains worked by diesel traction may not normally pass through the underground sections of the electrified Merseyrail system, due to the limited ventilation system and risk of fire.

Full details of restrictions are contained in the Sectional Appendix. The infrastructure is subject to change through planned renewal and enhancement activity, which can impact on the need for tunnel restrictions. See <u>Section 2.3</u> for further information.

## 2.4.5 Bridge restrictions

Information relating to general restrictions on route availability is covered in Table D of the Sectional Appendix. These deal with each of the route sections as set out in Table A of the same Sectional Appendix. The infrastructure is subject to change through planned renewal and enhancement activity, which can impact on the need for bridge restrictions, see <u>Section 2.3</u> for further information.

# 2.5 Availability of the infrastructure

Infrastructure availability is affected by the restrictions required for the purpose of maintenance, renewal and enhancement works, which are set out in the <u>Engineering Access Statement (EAS)</u>. Further information regarding the EAS is included within <u>Section 4.3.2</u>.

The EAS describes the rules regulating the arrangements for engineering access to the rail network.

It sets out the location, number, dating and duration of possession access (restrictions of use) we require to deliver inspection, maintenance, renewal and enhancement work activities to the infrastructure.

Sections 1 to 3 of the EAS set out the national process for negotiating and securing engineering access to the rail network.

Sections 4 to 7, the bulk of the EAS document, contain route-specific details of our engineering access opportunities and requirements.

#### 2.6 Infrastructure development

The rail network must constantly change to meet the needs of our customers and other stakeholders; this includes developing and growing the network to deliver new benefits to passengers and freight users. For example COVID-19 has refocussed the need to think about resilience and reliability, as much as growing capacity.

Infrastructure enhancements programmes are progressed through a pipeline approach with incremental investment decision points, which aligns to the recommendations of the Bowe review. This approach creates a rolling programme of investment, focused on outcomes that provide benefits for passengers, freight users and the economy and moves investment in enhancements away from a rigid 5-year funding cycle. For DfT funded projects, more details of how this works are set out in the Rail Network Enhancements Pipeline (RNEP) publication. This document also sets out which programmes are in the relevant lifecycle stages.

The purpose of a pipeline approach is to progress projects which will deliver the best outcomes for passengers and taxpayers. Projects are subject to business case and affordability reviews at key stages of their lifecycle and not every project that starts development will necessarily reach delivery and finish. Only projects which are committed in the delivery phase are funded through to completion. These projects are published in Network Rail's Enhancements Delivery Plan which is updated quarterly.

For projects earlier in the lifecycle, DfT publish updates to the RNEP setting out which stage of the lifecycle each project or proposal is at.

In Scotland similar processes are in place for the planning and funding of rail improvement projects by Transport Scotland and these are articulated in the <u>Rail Enhancements & Capital Investment Strategy</u>.

# Chapter 3 - Access Conditions

#### 3.1 Introduction

Chapter 3 of this Network Statement describes the terms and conditions related to access to the railway infrastructure that we manage. These terms and conditions also apply to any parts of rail freight corridors that pass through the railway infrastructure that we manage.

#### 3.2 General Access Requirements

We are the facility owner of the main rail network in Great Britain. Access to our network is principally governed by the Railways Act 1993 (as amended), and by the Access, Management and Licensing Regulations 2016 (as amended). This regime also covers networks outside the main rail network, to the extent that they have not been exempted.

Under the Railways Act 1993, anyone seeking access to the rail network in order to operate trains requires a track access contract with the relevant 'facility owner', granting permission to use that facility. We are the facility owner of the main rail network in Great Britain.

Stations and light maintenance depots are treated as separate facilities. If a RU requires access to a station or light maintenance depot, it will need to enter into an access contract with the facility owner. Although we are the landlord for most of the stations and light

maintenance depots in Great Britain, we are not the facility operator, except for 20 major stations (as listed in <u>Section 2.3.3</u>).

Most stations and light maintenance depots are leased to and operated by one or other of the passenger train operating companies, who act as the facility owner, although some are owned and operated by non-train operators (such as Southend Airport station), specialist train maintenance companies or FOCs.

Under the Railways Act 1993, applicants may only enter into a contract with a facility owner for permission to use that owner's railway facility with ORR's approval. If these contracts (and amendments to them) are not approved by ORR where that is required by law, they are invalid.

Where the parties have not been able to agree on the terms of a new contract, or a subsequent amendment to an existing contract where the applicant is seeking increased use of access to the network, the applicant may ask ORR to issue directions requiring the facility owner to enter into or amend the contract as determined by ORR.

We will guide applicants seeking access to the main rail network through both the track access application process, and the station and depot access process, where access is sought.

The access regime under the Railways Act 1993 does not apply to all access contracts. Some railway facilities, including many of those that we do not operate as part of the main rail network, have been exempted by ORR or the DfT<sup>2</sup>. However, the Access, Management and Licensing Regulations provide RUs with the right to access railway infrastructure for the purpose of the operation of any type of rail freight service or passenger service. They also create a presumption of

<sup>2</sup> For example, many freight terminals and depots, as well as non-Network Rail networks, were exempted by <u>The Railways</u> (Class and Miscellaneous Exemptions) Order 1994.

access and provide the right for a railway applicant to apply for access to a range of services and facilities to operate these services. The Access, Management and Licensing Regulations accordingly open up access on a non-discriminatory basis to a range of previously exempted facilities, such as terminals and ports, marshalling yards and storage sidings, unless a viable alternative under market conditions exists.

Our <u>Stakeholder Relations Code of Practice</u> includes a guide for new and potential train operators (including aspirant open access operators), which outlines how we will work with potential customers to develop a track access contract.

ORR has also developed a guide to help prospective operators entitled 'Starting Main Line Train operations: A guide to the regulatory framework' for potential train operators.

In order to be able to secure access to and operate on the main rail network, whether for domestic or international traffic, it is necessary for an applicant to fulfil the requirements set out in the remainder of this Chapter.

# Industrial locomotive operation

Simplified arrangements apply to facilitate the operation of industrial locomotives to undertake shunting movements over a limited extent of network sidings or freight only lines. Further information can be obtained from:

Ben lee, Senior Engineer

Network Rail

Derby Trent House

Email: ben.lee@networkrail.co.uk

Please refer to <u>section 7.3.4</u> for further information on marshalling yards and train formation facilities, including shunting facilities.

There are a range of documents setting out general commercial conditions and rules in respect of access to the network. Key documents are described below.

#### **Network Code**

The Network Code is a common set of rules that is incorporated by reference into each track access contract. The track access contract governs the legal relationship between us and each train operator that uses our infrastructure. The Network Code does not create any contractual relationship between train operators but it should be noted that, in the event that there is a conflict of interpretation between the Network Code and the track access contract, the Network Code prevails. Any undertaking that is party to a track access contract is subject to meeting all the obligations within the Network Code.

The purpose of the Network Code is to provide mechanisms by which parties can make regulated changes to:

- the working timetable
- the rolling stock that a train operator wishes to operate
- the infrastructure
- the Network Code itself.

It also provides mechanisms to:

- establish procedures relating to environmental damage
- establish a performance monitoring system
- establish procedures in the event of operational disruption
- establish procedures to change Access Rights.

The Network Code can be found, together with other related information, on <u>our website</u>.

#### Performance Data Accuracy Code

The Performance Data Accuracy Code (PDAC) is incorporated into the Network Code (Part B) and encompasses defined standards of accuracy of performance data. It is used in connection with the performance monitoring system, which assesses the respective responsibilities for delays to and cancellations of trains. The system feeds into contractual arrangements and processes which encourage performance improvement and the minimisation of disruption.

The PDAC can be found on the Delay Attribution Board website at:

### http://www.delayattributionboard.co.uk/index.htm

# Delay Attribution Principles and Rules

The Delay Attribution Principles and Rules document is incorporated into the Network Code (Part B) and provides guidance for the consistency of application and approach by all parties involved in the process of delay attribution. This enables accurate records to be kept of the causes of delay to and cancellation of train services resulting from incidents occurring across the main rail network. The document supports the need for management information as well as the requirement for parties to be compensated accordingly for delays experienced.

The Delay Attribution Principles and Rules can be found on the Delay Attribution Board website at:

http://www.delayattributionboard.co.uk/index.htm

#### **Access Dispute Resolution Rules**

The <u>Access Dispute Resolution Rules</u> are annexed to the Network Code and set out how disputes under track, station and light maintenance depot access contracts are resolved. Further information can be found in <u>Section 4.5.5</u>.

#### Railway Operational Code

The purpose of the <u>Railway Operational Code</u> (ROC) is to sustain the operation of train services on the network and restore operation of the network following disruption.

# **Access Rights Policy**

We have developed our <u>Access Rights Policy</u> in consultation with rail industry partners through its work with RDG. It sets out how we will deal with requests for the sale of access rights from those who seek to use the network, and, in particular, how those rights will be specified. The document sets out the background to the policy, the principles which are reflected in it and outlines other existing regulatory obligations and mechanisms which are applicable in considering requests for access to the network.

The Access Rights Policy has a number of Principles that Network Rail will follow when selling rights:

# **Freight Contract Principles**

- Network Rail recognises the need for short-term planning in the current timetable for traffic "start-up" ahead of agreeing firm rights/windows;
- Network Rail will start from a position of windows based rights which will include its desired flex; and
- Specificity to be based on demonstrable need.

# **Passenger Contract Principles**

- Network Rail will start from a position of quantum rights which will include timing load and calling pattern;
- Where parts of the network are predominantly utilised by a single operator Network Rail will usually only agree quantum rights for that operator;
- Where parts of the network are predominantly utilised by more than one operator Network Rail will consider agreeing additional specification;
- Any additional specification must be justified;
- There is a strong presumption that, if the operator should elect to seek it, Network Rail will usually only offer one of journey time protection or interval protection; and
- Justification for additional characteristics demonstrable need.

# Our Access Rights Policy:

- sets out an access rights framework that is simple, clear and understandable with an alignment of objectives that gives confidence to the industry, users and taxpayers;
- provides train operators with the certainty and assurances they require to run their businesses and meet their contractual commitments through consistency in decision making;
- enables changes to train services and timetables that make the most effective and efficient use of capacity in the overall interests of users and service providers;
- prevents sub-optimal use of network capacity that could also introduce avoidable performance risks and potentially lead to claims of undue discrimination; and

 provides greater flexibility to optimise use of the network, particularly as it gets busier and infrastructure projects come to fruition.

#### **East Coast Main Line**

The East Coast Main Line is subject to a special access policy. Since ORR's directions on 12 May 2016 for future rights on the East Coast Main Line, Network Rail has taken the approach to manage additional rights in such a way to protect the delivery of those future rights directed.

Where a Train Operator or Freight Operator has firm rights for their East Coast Main Line baseline as of the ORR directions on 12 May 2016, any new East Coast Main Line rights above that baseline are subject to a case by case review to see if the new East Coast Main Line rights affect the future rights directed on the East Coast Main Line. Until the future rights directed are in place on the East Coast Main Line, this access rights policy will remain in place. Further information on the ORR's decision in relation to the East Coast Main Line can be found on ORR's website.

#### **Access Contracts**

All such access contracts are subject to approval by ORR; if not approved, the contracts will be legally invalid. ORR has published a range of model access contracts, as well as guidance on the approval process. The model contracts have been published on the basis that ORR encourages, and expects, their use. Where the contracting parties wish to depart from a model contract, they must explain the reasons for this.

Sections 17, 18, 22 and 22A of the Railways Act 1993 relate to access contracts:

Section 17: <a href="http://www.legislation.gov.uk/ukpga/1993/43/section/17">http://www.legislation.gov.uk/ukpga/1993/43/section/17</a>

Section 18: <a href="http://www.legislation.gov.uk/ukpga/1993/43/section/18">http://www.legislation.gov.uk/ukpga/1993/43/section/18</a>

Section 22: <a href="http://www.legislation.gov.uk/ukpga/1993/43/section/22">http://www.legislation.gov.uk/ukpga/1993/43/section/22</a>

Section 22A <a href="http://www.legislation.gov.uk/ukpga/1993/43/section/22A">http://www.legislation.gov.uk/ukpga/1993/43/section/22A</a>

Model track access contracts can be found on **ORR's website**:

Model station access contracts for the below can be found on <u>ORR's</u> website:

- For stations operated by Network Rail:
  - Station access contract for passenger services
  - Station access contract for freight services
  - Station access contract for charter passenger services
  - Station access contract for the purposes of diversionary access
- For stations operated by other passenger train operators:
  - Station access contact for passenger services (single station)
  - Station access contract for passenger services (multiple stations)
  - Station access contract for freight services
  - Station access contract for charter passenger services
  - Station access contract for the purposes of diversionary access

The model light maintenance depot access contracts can be found on ORR's website:

 Light maintenance depot access contract for access to a passenger service operator's depot  Depot access contract for access to a passenger service operator's depot by a non-train operating beneficiary using the services of a third party train operator

#### General Approvals

ORR has also issued a number of general approvals in relation to certain types of access contract (and subsequent amendments to them). General approvals prospectively allow parties to enter into certain types of access contracts without the need for ORR's specific approval. The following general approvals have been published on ORR's website.

- Passenger Access (Short Term Timetable and Miscellaneous Changes) General Approval
- <u>Passenger Access (Model Charter Track Access Contract) General</u>
   <u>Approval</u>
- Connection Contracts General Approval
- General Approval for freight track access contracts
- Facility Access General Approval
- General Approval for stations
- General Approval for depots

#### Access guidance

ORR has published guidance that sets out its approach to regulating track access. This includes:

- guidance for the <u>approval of track access contracts</u>
- criteria and procedures for the <u>approval of station access</u> <u>agreements</u>
- criteria and procedures for the <u>approval of depot access</u> agreements

 policy on the <u>approval of track access options</u>, under which future access to a railway facility may be secured.

RUs seeking access to and use of other facilities connected to the main rail network should refer to <u>Section 7</u>, in particular as regards details of additional and ancillary services.

# 3.2.1 Conditions for Applying for Capacity

The timetabling process (governed by Part D of the Network Code) is open to anyone who is a party to the Network Code by virtue of having a track access contract, or anyone who proposes in good faith to enter into such a track access contract and has agreed to be bound by Part D. Such a person does not need otherwise to satisfy the requirements referred to in Section 3.2.2 below to participate in the timetabling process, though those requirements will need to be satisfied before actual use of the train paths takes place. Following an approach from a current or potential RU we will advise on the likelihood of train paths being available on the relevant part of the network for the RU to operate a service. This will be based on the active timetable in operation at the time. If such train paths are available or are likely to become available, we will guide the RU through the timetabling process.

RUs normally participate directly in the timetabling process. However, a RU (or potential RU or other holder of access rights) may engage a third party (such as another RU or an independent consultancy) to make its requests for train paths. Where an operator of international services makes use of the 'OSS' arrangements offered by another European IM or RNE (see Section 1.7.3) then that IM acts on its behalf within the GB timetabling process.

Under the Access, Management and Licensing Regulations an applicant who has been granted capacity by the IM, either through a framework agreement specifying the characteristics of the infrastructure granted or specific infrastructure capacity in the form of a train path, cannot trade that capacity with another applicant or transfer it to another undertaking or service.

One exception, which applies only where one RU is replacing another in the provision of transport services to a third party for the carriage of goods, is a process within <u>Part J7 of the Network Code</u> for the surrender and reallocation of access rights.

Any person who trades in capacity contrary to the provisions stated above shall not be entitled to apply for capacity for the period of the working timetable to which the allocation of capacity transferred relates.

# 3.2.2 Conditions for Access to the Railway Infrastructure

Anyone wishing to operate trains on the main rail network must satisfy the relevant legal requirements. The principal requirements include:

- holding a <u>train operator's licence</u> or licence exemption see
   Section 3.2.3
- establishing and maintaining a safety management system that meets the requirement of ROGS and holding the appropriate safety certificates for intended operations. – see <u>Section 3.2.4</u>
- having appropriate insurance see <u>Section 3.2.5</u>
- being party to a track access contract

Compatibility consultation also needs to be completed for all rolling stock operating on the network. The rolling stock compatibility guidelines are discussed at <u>Section 3.4.1</u>.

#### 3.2.3 Licences

It is an offence to act as the operator of a train in GB without holding a licence or a licence exemption granted by ORR under the Railways Act 1993. However, where a person is seeking to act as the operator of a passenger train or freight train that falls within the scope of the Licensing of Railway Undertakings Regulations as amended by the Access, Management and Licensing Regulations, then a Railway Undertaking licence is normally required together with a Statement of National Regulatory Provisions (SNRP). Applications for licences and SNRPs, or exemptions should be made to ORR's Licensing Team (for ORR's full contact details, please see Section 1.6).

As a result of the United Kingdom leaving the European Union, any licences that were issued in an EU country will only be valid in GB until 31 January 2022. Please see the Department for Transport's website at: <a href="https://www.gov.uk/guidance/rail-transport-domestic-and-cross-border-operations#operator-licences">https://www.gov.uk/guidance/rail-transport-domestic-and-cross-border-operations#operator-licences</a>.

Railways Act licences (and the SNRPs of Railway Undertaking licence holders) would normally include among other obligations:

- membership of RSSB
- membership of RDG
- joining in the rail industry arrangements for allocation of liabilities and claims handling
- having an environment & sustainability policy which aligns with DfT's Rail Environment Policy (REP) and contains operational objectives and management arrangements to meet the REP's requirements
- ticketing (passenger licences only)
- insurance (see Section 3.2.5)

#### 3.2.4 Safety Certificate

Anyone seeking to operate a train in GB will be required to establish and maintain an appropriate safety management system and should hold a safety certificate meeting the requirements of the <u>Railways and Other Guided Transport Systems (Safety) Regulations 2006</u> (ROGS).

Subject to compatibility, Part A of the EU safety certificate is recognised for such purposes whilst Part B is required to operate in GB and is granted by ORR. Applications for a safety certificate under the ROGS should be made to ORR and copied to affected parties including Network Rail. EU established operators running a domestic-only service in GB, with a Part A safety certificate issued in the EU before 31 January 2020, are able to use these certificates until 31 January 2022 or until they expire, whichever is earlier.

Please visit ORR's website for more details:

http://ORR.gov.uk/what-and-how-we-regulate/health-and-safety/regulation-and-certification

http://ORR.gov.uk/what-and-how-we-regulate/health-and-safety/regulation-and-certification/rogs/safety-certificates-and-authorisation

Rolling stock and staff competence are dealt with in <u>Section 3.4.1</u> and <u>Section 3.4.2</u>, respectively.

Further information, including guidance documentation and details on how to make an application can be found on ORR's website at:

http://ORR.gov.uk/what-and-how-we-regulate/health-and-safety/regulation-and-certification.

#### 3.2.5 Insurance

A train operator's licence, or SNRP, will contain requirements for insurance against third party liabilities. The current default minimum of indemnity insurance is set at £155m cover per incident as required by ORR's general approval (see below); however, a variation to the general approval may be agreed where appropriate on application to ORR.

The general approval can be downloaded from ORR's website.

# 3.3 Contractual Arrangements

### 3.3.1 Framework Agreement

A Framework Agreement for the purposes of the Access, Management and Licensing Regulations specifies the characteristics of the infrastructure capacity allocated to an applicant over a period of time exceeding the duration of a single working timetable period. It does not specify train paths in detail but provides an assurance that suitable capacity will be available to meet the commercial needs of the applicant.

Train paths and train slots are explained in more detail within the <u>Glossary</u>.

In Great Britain, the function of Framework Agreements is fulfilled by track access contracts for access to the main rail network.

We are permitted to enter into bi-lateral agreements with RUs and others to develop infrastructure enhancements, although if such an agreement were to include rights to use a railway facility (such as the main rail network) then it would need to be approved by ORR, as a track access contract. The Railways Act 1993 provides for the possibility of such rights to take the form of either the normal grant of rights or of an

access option. The basis for ORR approval is set out in the <u>track access</u> <u>guidance</u> that is published on its website.

Further information on track access and how to apply for this access can be found on ORR's website at:

#### http://ORR.gov.uk/what-and-how-we-regulate/track-access

Links to model track access contracts and station and light maintenance depot access contracts are provided in <u>Section 3.2.1</u>.

Before concluding a new framework agreement or extending or increasing the framework capacity of an existing framework agreement, we shall take into account in addition to our <u>Access Rights Policy</u>, the following:

- (a) securing optimum use of available infrastructure capacity, including the use of other networks, taking account of planned capacity restrictions;
- (b) the legitimate commercial needs of the applicant where the applicant has demonstrated that it has the actual intention and ability to use the capacity requested in the framework agreement;
- (c) the needs of passengers, the freight sector and investors, including State entities and other public and private entities;
- (d) ensuring non-discriminatory access to infrastructure and taking into account the availability of the related facilities and services supplied in these facilities as far as this information is made available to the infrastructure manager;
- (e) the funding of the infrastructure manager and the future development of the network;
- (f) promoting efficiency in the operation of infrastructure and as far as possible related facilities, including planned maintenance, enhancement and renewals;

- (g) the capacity requirements of international rail freight corridors;
- (h) ensuring proportionate, targeted, transparent, fair and sufficiently resourced management of the network;
- (i) previous failure, if any, to use framework capacity and the reasons for that failure as set out in Article 11(2) and (3) of this Regulation;
- (j) the priority criteria applying to the path allocation in the timetabling procedure, as referred to in Access, Management and Licensing Regulations and declarations of congested infrastructure;
- (k) if applicable, the need to ensure the long-term financial performance of public transport provided under a public service contract.

#### 3.3.2 Contracts with RUs

RUs seeking access to the network must enter into a track access contract to cover the full scope of the intended operations before those operations may begin. This is required to deliver the minimum access package as set out in the Access, Management and Licensing Regulations, in relation to the main rail network. RUs seeking access to stations or light maintenance depots that they do not operate themselves will need to enter into separate access contracts with the relevant station or depot facility owner (unless those facilities are exempt from the access provisions of the Railways Act 1993 by virtue of The Railways (Class and Miscellaneous) Exemptions Order 1994). All such access contracts are subject to approval by ORR; if not approved, the contracts will be legally invalid. ORR has published a range of model access contracts, as well as guidance on the approval process. The model contracts have been published on the basis that ORR encourages, and expects, their use. Where the contracting parties wish to depart from a model contract, they must explain the reasons for this.

Sections 17, 18, 22 and 22A of the Railways Act 1993 relate to access contracts:

Section 17: <a href="http://www.legislation.gov.uk/ukpga/1993/43/section/17">http://www.legislation.gov.uk/ukpga/1993/43/section/17</a>

Section 18: <a href="http://www.legislation.gov.uk/ukpga/1993/43/section/18">http://www.legislation.gov.uk/ukpga/1993/43/section/18</a>

Section 22: <a href="http://www.legislation.gov.uk/ukpga/1993/43/section/22">http://www.legislation.gov.uk/ukpga/1993/43/section/22</a>

Section 22A: http://www.legislation.gov.uk/ukpga/1993/43/section/22A

A model track access contract for connection contract (for connecting facilities to our network – see also the Connection Contracts General Approval 2014) can found on <u>ORR's website</u>.

#### 3.3.3 Contracts with non-RU applicants

A non-RU seeking access to the network must enter into a Freight Customer Contract. This permits freight customers, for example logistics companies, seeking to secure track access rights but not operate a train themselves. Guidance can be found on ORR's website at: <a href="https://orr.gov.uk/">https://orr.gov.uk/</a> data/assets/pdf\_file/0003/27327/model-freight-customer-contracts-march-2019.pdf.

# 3.4 Specific Access Requirements

#### 3.4.1 Rolling Stock Acceptance

Any party wishing to introduce a new vehicle onto the main rail network or make a change to the operation or engineering of an existing vehicle must consider the effect of this on all other RUs and on the IM. To aid RUs in the discharge of this duty, we engage in compatibility consultation processes which provide a structured mechanism for assessing and agreeing any capacity, safety, regulatory and commercial

issues that exist between the RU, the IM, and other RUs. Consultation is required for:

- (a) introduction of new rail vehicles
- (b) extension of route(s) for existing vehicles
- (c) substantial alterations to vehicles
- (d) addition of vehicles with route clearance to vehicles permitted under a track access contract.

There are two processes involved:

- A demonstration of compatibility between a vehicle and the routes over which a RU wishes to operate it, as per <u>Railway</u> <u>Industry Standard RIS-8270-RST</u>, resulting in a Summary of Compatibility
- Vehicle Change (<u>Part F of the Network Code</u>) which deals with the commercial issues associated with the introduction of new vehicles, or new routes for existing vehicles.

We are obliged to consult and publish network change proposals that have an effect on the operation of the network or on the trains that operate on the network.

In all the cases (a - d) outlined above, the vehicle change process must be completed. The demonstration of compatibility process is required only where the introduction of a new train, change to a train with potential to affect compatibility with infrastructure or other RUs, or the extension of route(s) for existing types of trains is planned.

In addition to this, RUs must arrange for new vehicles to be assessed to prove that they are compliant with all relevant standards and specifications including Technical Specifications for Interoperability and Notified National Technical Rules as part of their authorisation (by

ORR); provision of this evidence facilitates an efficient compatibility assessment.

Further information on the authorisation process can be found on ORR's website.

Full details on rolling stock compatibility and change processes (including the timetable for completion of the process) can be found on our website, as part of our 'Stakeholder Relations Code of Practice - Introducing new vehicles or changes to vehicles' document:

https://www.networkrail.co.uk/industry-commercialpartners/information-operating-companies/stakeholder-code-practice/

An important consideration for the introduction of new rolling stock is its dynamic fit within the loading gauge of the network – that is, the physical space provided above rail level by structures such as tunnels, bridges and platforms.

Information regarding loading gauge is available in engineering standards and the Sectional Appendix. However, owing to the complexity of the subject, any party considering introducing new or modified vehicles is advised not to rely solely on written sources to guide their design. It is essential that they make early contact to discuss their plans and seek guidance from our Gauging Team from us.

When new or modified freight locomotives and wagons are being brought onto the network it is important not to make assumptions regarding the extent to which standard gauges may be relied upon. Further information regarding <u>standard gauges</u> and <u>gauging process in general</u> can be found on the <u>RSSB website</u>.

Further information regarding interoperability, ORR's role as the National Safety Authority and the authorisations it grants can be found

on <u>ORR's website</u> and the <u>DfT's website</u> regarding Interoperability and standards.

We have our own test track and innovation centre with facilities that can assist with many aspects of new vehicle testing and introduction – see:

https://www.networkrail.co.uk/industry-commercial-partners/research-development-technology/ridc/

Network Rail also produces the Strategic Capacity Statement, which details the strategic paths that are identified for potential future use on key routes on Network Rail infrastructure.

The Secretary of State appointed Network Rail Infrastructure Limited as the registration entity, who is responsible for maintaining the National Vehicle Register (NVR). When a vehicle is placed into service for the first time, the registration holder is responsible for notifying details of the ECM to the registration entity.

The ROGS 2013 introduced a requirement that no person may place in service or use a vehicle on the mainline railway unless that vehicle has an ECM assigned to it, and that ECM is registered as such in the NVR. If you are not sure whether a vehicle has an ECM assigned to it, please contact the Registration Entity.

NVR Registration Entity, Network Rail, The Quadrant:MK, Elder Gate, Milton Keynes MK9 1EN Tel: +44 (0) 1908 781 346

Email: NVR@networkrail.co.uk

#### 3.4.2 Staff Acceptance

RUs and IMs are responsible for ensuring that staff that are involved with or affect the movement of trains are competent to perform their duties. The competence requirements that are described and mandated in Railway Group Standards, which are supported by Approved Codes of Practice and Guidance Notes, are devised and published by the Rail Safety and Standards Board (for contact details, please see Section 1.6) and are available on its website.

ORR has published guidance on developing and maintaining staff competence.

#### Train Driving Licences

<u>European Commission Directive 2007/59/EC (on the certification of train drivers) (the Directive)</u> was transposed into domestic legislation by the <u>Train Driving Licences and Certificates Regulations 2010 (TDLCR)</u> which entered into force in March 2010.

The requirement to hold licences and certificates issued in accordance with TDLCR has come into effect for new cross-border and domestic drivers. Existing drivers (both cross-border and domestic) are required to hold their licence and certificate by 29 October 2018.

The application and authorisation process is managed by ORR, further details can be found on its website.

#### 3.4.3 Exceptional Transport

Special conditions of travel need to be applied to certain vehicles or loads because of their size, weight or other unusual features. These conditions may include speed restrictions, train marshalling restrictions and/or special instructions for passing trains on adjoining lines, and are

determined individually by comparing the consignment with the characteristics of the route over which it is to travel.

In Great Britain, the operational rules for special transport are set out in Railway Industry Standard RIS-3781-TOM with requirements for the operation of freight trains and the conveyance of dangerous goods by any train. The standards GERT8000 and RS524 provide a list of dangerous goods and their United Nations Numbers which are accessible through RSSB's website at: <a href="http://www.rssb.co.uk">http://www.rssb.co.uk</a>.

This requires us, in conjunction with the RU, to:

- a) determine a route which enables the traffic to pass;
- b) determine what conditions of travel have to be applied;
- c) organise production of a Special Train Notice for the movement; and
- d) engage the services of a competent loads inspector if appropriate.

The Working Manual sets out how the special conditions are determined and managed.

The documentation required to permit an exceptional load to travel on the network is an 'Exceptional Load Form' (reference: RT3973). These are described in the Working Manual. The RT3973 form is needed not only to permit exceptional loads to travel. It is also necessary for the regular transit of most vehicles with their loads in the following categories (which encompass the majority of loaded freight trains):

- heavy axle weights (over the weight specified by the RA of the route) – RT3973/HAW
- containers and swap bodies RT3973/CON
- nuclear flask trains (loaded or discharged) RT3973/NUC

 other exceptional loads requiring signaller intervention not covered by above types of form – RT3973/EXL.

The <u>Freight Documentation Support</u> team hold a register of every valid RT3973 form and are the first point of contact when communicating with the RUs. The team manage issuing out and administration of RT3973 forms as well as converting RT3973/EXL forms into Conditions of Travel for usage by signallers for X-Headcode trains.

Please see also Section 2.3.4 regarding loading gauge, Section 4 regarding capacity allocation process and Section 7 for details of other services provided by the IM.

RNE has a process for international RUs to supply the OSS (see Section 1.7.3) with technical data to establish with IMs the special conditions to be applied, and to agree either to accept the consignment into a compatible train path or to provide a specially-designed train path.

#### 3.4.4 Dangerous Goods

These are goods which are capable of posing a risk to health, safety, property and the environment during carriage by rail and are classified according to the Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). Amended and supplemented requirements are set out in Annex II to EU Directive 2008/68/EC and to the Convention concerning International Carriage by Rail.

The national regulations are The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2012 (see <a href="http://www.hse.gov.uk/cdg/regs.htm">http://www.hse.gov.uk/cdg/regs.htm</a>), and <a href="the Carriage of Dangerous Goods: Approved Derogations and Transitional Provisions">http://www.hse.gov.uk/cdg/regs.htm</a>), and <a href="the Carriage of Dangerous Goods: Approved Derogations and Transitional Provisions">http://www.hse.gov.uk/cdg/regs.htm</a>), and <a href="the Carriage of Dangerous Dangerous Goods: Approved Derogations and Transitional Provisions</a> which refer to RID for much of the detailed requirements. Both sets of regulations apply to participants in the transport chain including IMs and RUs.

Various Railway Group Standards and documents deal with dangerous goods and complement these regulations. This includes the <u>Working Manual For Rail Staff – Handling & Carriage of Dangerous Goods</u> In addition, Part E of the Network Code requires notification where a RU proposes to transport materials on the main rail network that are likely to cause environmental damage in the event of escape.

Dangerous goods are transported by those RUs whose general safety management system arrangements have been approved by ORR through the safety regime (ROGS). See Section 1.3 for more information on ROGS.

The movement of dangerous goods traffic by rail is undertaken in both train load formations and mixed freight load formations, both subject to certain controls derived from the regulations and standards mentioned above.

We co-operate with RUs by taking all reasonable actions for the safe and secure movement of dangerous goods traffic.

For details on the process for allocating capacity for the transport of dangerous goods, see chapter 4.7 and for the relevant services see chapter 5 and chapter 7. Please also see Section 5.4 for details of the person to contact regarding applications to move dangerous goods,

#### 3.4.5 Test Trains and Other Special Trains

All Special trains are managed in-line with Network Rail Group Standards and national frameworks which governs operational and security requirements. This is managed through the Principal Train Operations and Dangerous Goods Specialist.

For advice on Special Trains please contact:

Simon Wilkinson

Principle Train Operations and Dangerous Goods

Network Rail

The Quadrant:MK

Elder Gate

Milton Keynes

MK9 1EN

Email: Simon.wilkinson@networkrail.co.uk

# Chapter 4 – Capacity Allocation 4.1 Introduction

We are responsible for the overall timetabling process on our part of the GB rail network. RUs provide us with details of the trains they wish to run on the network, and we co-ordinate these capacity requests into a working timetable.

RUs have specific rights to be allocated capacity, these are set out in a Schedule (usually Schedule 5) to each track access contract. Provision is also made for those who aspire to obtain a track access contract to have access to capacity information. This is to assist them in obtaining the necessary track access contract and train slots in the timetable (see Section 3.2.1).

#### Template form for requests for capacity

We have developed a template form which can be used by RUs when making Capacity Requests which can be found on <u>our website</u>.

# 4.2 General Description of the Process

How capacity is allocated is set out in <u>Part D of the Network Code</u>, Condition 2 (please see <u>Section 3.2.1</u>).

Where international train slot requests are concerned, RNE has provided for a harmonised timetabling process across Europe. RNE's handbook sets out how RUs and other applicants can request and obtain international train slots. Information is available via the RNE website at:

http://www.rne.eu/sales-timetabling/timetabling-calender/

Customers with international train slot requests may also take advantage of the OSS arrangements described in <u>Section 1.7.3</u> and referenced in the Network Code Part D.

# 4.3 Reserving Capacity for Temporary Capacity Restrictions

### 4.3.1 General Principles

Please refer to <u>section 4.2</u> for details of the capacity allocation process, the coordination procedure that applies and place of publication.

#### 4.3.2 Deadlines and Information Provided to Applicants

Information relating to traffic restrictions is covered in Table D of the Sectional Appendix. This deals with each of the route sections as set out in Table A of the same Sectional Appendix (see Section 2.3).

As part of the timetable production process set out in <u>Part D of the Network Code</u>, we produce <u>the Engineering Access Statement</u> which sets out the times when we could or will take possession of the line, referred to as 'Restrictions of Use'.

Rule changes are consulted annually for each Timetable period. For the December Timetable this starts at D-64 (17 September 2021). Version 1 is issued as a draft at D-59 (22 October 2021) and Version 2 issued as a final version at D-44 (4 February 2022), in readiness for the start of the timetable development process at D-40 (4 March 2022). For the May timetable a Version 3 is issued as a draft at D-59 (1 April 2022), with Version 4 issued as a final version at D-44 15 July 2022). RUs comment to us on Versions 1 and 3. We consider these comments and decide whether to include amendments in Versions 2 or 4.

Decisions are taken in accordance with the decision criteria of <u>Condition</u> <u>D4.6 of the Network Code</u>. Most decisions are subject to a right of appeal.

### **Engineering Access Statement**

The Engineering Access Statement sets out the rules regulating the arrangements for access to the various parts of the main rail network, when affected by inspection, maintenance, renewal and other works.

The Engineering Access Statement consists of two parts. The first part is a short National Overview; which sets out the planning rules, for the primary benefit of those who require engineering (as opposed to train) access to the network. The second part contains route-specific information and provides details of planned surrender of use of the network due to maintenance, renewal and enhancement work. The contents can be summarised as follows:

- Section 1 Introduction to the document and processes within.
- Section 2 Glossary of terms, helping users to understand terminology and acronyms used.
- Section 3 Guidelines for Granting Possessions, sets out what information is required when requesting a possession, how to request late notice possessions and dates for submissions.
- Section 4 Standard Possession Opportunities, set out, for the benefit of those requiring access to the line for inspection, maintenance and renewal, those times when there are no trains planned to run in the working timetable or when the working timetable supports trains running over a reduced number of lines, and when, therefore, access is usually available.
- Section 5 Strategic Maintenance, sets out details of engineering activity which is planned on a cyclical basis

- (activities that are repeated at planned regular intervals) and may require some changes to trains contained in the working timetable.
- Section 6 describes the introduction of the Access Impact process to be followed to enable agreement between Network Rail and Timetable Participants for delivering Capacity Study requests relating to the Engineering Access Statement.
- Section 7 Register of Disruptive Possessions, sets out details of the temporary closure of parts of the network required to deliver maintenance, renewals and project works which will impact on trains contained in the working timetable. Details include dates, times, locations, lines affected in respect of possessions, temporary speed restrictions, temporary methods of working and any other restrictions of use.

The <u>Engineering Access Statement</u> is published on our website as part of the 'Operational Rules'.

#### 4.4 Impacts of Framework Agreements

A Framework Agreement (or track access contract) is an agreement between Network Rail and a RU which specifies the capacity to which the RU is entitled (access rights) for a period in excess of one year. Access rights can be firm or contingent. The New Working Timetable, as described in Section 4.5.1 must be consistent with the exercised firm rights of RUs, provided that they have been exercised at or before the relevant Priority Date. We must also attempt to accommodate all access proposals supported by contingent rights but firm rights always take priority. If it is not possible to accommodate all access proposals then train slots will be allocated in the following priority order, as set

out in Part D4.2 of the Network Code, subject to us exercising our flexing rights:

- Firstly to firm access rights exercised at the priority date which cover the whole of the timetable period, together with any rights which we have for Network Services
- Secondly to firm access rights exercised at the priority date which cover part of the timetable period including those where the RU is expected to obtain new firm rights covering the remainder of the timetable period
- Thirdly to contingent rights or any expectation of rights exercised at the priority date
- Fourthly to any access proposals submitted after the priority date, and Strategic Slots in the Strategic Capacity Statement.

#### Framework Capacity Statement

Potential applicants need transparency concerning the allocated framework capacity and the remaining indicative capacity on a line. In accordance with domestic legislation SI 2016/545 (as amended by the EU Exit regulations SI 2019/518 and SI 2019/1310), a Framework Capacity Statement has been published which indicates the cumulative effect of capacity allocated through track access contracts on various parts of the network. We are currently working with RUs to revise the format of this Statement and expect to publish the new format during 2022; updates are published alongside the latest Statement.

The requirements concerning the proportion of framework capacity that shall be used by the parties to the framework agreements is outlined in <u>Part J of the Network Code</u>,

#### 4.5 Path Allocation Process

# 4.5.1 Annual Timetable Path Requests

So that timetable changes occur on the same day across Europe, our annual timetable starts on the Sunday immediately after the second Saturday in December. This is known as the Principal timetable. A new updated timetable is published each May. This is known as the Subsidiary timetable.

The 2023 Principal timetable runs from Sunday 11 December 2022 to Saturday 20 May 2023, and the Subsidiary timetable runs from Sunday 21 May 2023 to Saturday 9 December 2023.

The key dates for the production of the 2023 Principal Timetable (December 2021 change date) are set out in <u>Annex 2</u>.

Following the priority date (Friday 4 March 2022 for the Principal timetable and Friday 6 August 2021 for the Subsidiary timetable), few work for a period of 14 weeks to construct the New Working Timetable. We seek to deliver the RUs' aspirations but must construct the timetable in accordance with the priorities and Decision Criteria which are set out in Part D of the Network Code. These decision criteria specify our obligation to define how we determine allocation priorities in accordance with Regulation 29 (3) of the Access, Management and Licensing Regulations. The New Working Timetables for 2023 will be published on 10 June 2022 and 18 November 2022. RUs have a right of appeal if they are dissatisfied with our decisions.

#### Future access options

A Framework Agreement (for this purpose, a track access option) can be entered into with us by a body seeking access to the main rail network at some future stage to operate trains for which specific infrastructure

must be provided (e.g. additional passing places on a single line) before the services in question can operate. Such commitments (either provided wholly or jointly by us or the body seeking such access) will be subject to ORR's approval of the option agreement in question. Such approval will have regard to ORR's track access option policy statement.

#### Schedule for Working Timetable

Each year at D-73 (16/07/2023) before the principal timetable change date we publish a schedule of dates for timetable production. This is set out in Annex 2 to this Network Statement. The Network Code sets out when each step should be completed by D-x. Each new timetable starts at D-0 so D-1 is at 17:00 on the Friday one week before the timetable change. The various steps then number back from this point.

We produce a more comprehensive document<sup>3</sup> setting out all the dates and stages involved in creating the principal and subsidiary timetables and the weekly amended timetable process. Copies of this document are supplied free of charge to all people and organisations who participate in the capacity allocation process. Initial copies are available from the address shown in <a href="Section 1.6">Section 1.6</a> above and on <a href="Our website">our website</a>.

Since the start of the COVID-19 pandemic, Network Rail have attempted to successfully respond to the changing requirements placed on the Timetable Planning Community. Faced with a sudden change in landscape regarding requirements of the network, it was determined that an alternative approach for the industry would be required in the short term. Network Rail have collaborated with the rail industry to agree alternative viable dates to be used in the production and maintenance of current and future timetables to allow the industry to

continue to function based on the prevailing circumstances of the time. These agreed dates can be located <u>here</u> as a Calendar of Milestone Dates.

Potential RUs are advised to contact us to obtain further information about the timetabling process.

#### Risk Assessment and Briefing of Timetable Change

The timetabling process includes a detailed review and assessment of forthcoming changes to the timetable introduced in December and May each year. It also considers the effects of past changes including feedback on actions and looks ahead to the implications of change aspirations proposed to take place beyond the next timetable.

The System Operator PMO organisation was introduced following the May 2018 Timetable change to provide longer term review and risk assessment of systematic and upcoming timetable change.

The Timetable Change Risk Assessment Group (TCRAG) chair reviews all timetable changes for their significance and determines the appropriate level of assessment to be carried out based on local knowledge and information.

The Timetable Change Assurance Group (TCAG) carries out a high-level assurance check to monitor the activities of TCRAGs and also reviews aspirations for change beyond the next timetable.

TCRAG may also be required to assess major engineering works (e.g. blockades) and key business change activities in advance of any prescribed timetable being available. TCRAGs of this type may be held a significant period before such a change may take place and may use service specifications forecasts to allow the assessment to be

<sup>3</sup> Operational Planning Production Schedule.

undertaken. This may include service specifications developed by Events Steering Group (ESG).

TCRAG chairpersons shall review the Calendar of Events (CoE) and the associated list of ESGs which detail where timetables are or may be changing.

The dates associated with this process may be found in **Annex 2** 

# 4.5.2 Late Annual Timetable Path Requests

The processes by which access proposals received between D-40 and D-26, and variations requested received after D-26 are described in the Network Code Conditions D2.4.4 and D3.3, including the response timescales in respect of the latter. In respect of access proposals received after D-40 but before D-26 the requester will receive a response by D-26 to the extent reasonably practicable, as outlined in the Network Code Condition D2.4.4. There are no timescales pertaining to specific responses to any given access proposal between D40 and D-26. Network Code Condition D2.6 refers.

# 4.5.3 Ad-Hoc Path Requests

After the new Working Timetable is published (D-26) RUs may wish to obtain additional train paths or amend any of their train paths already included. These changes are called Timetable Variations and the process for dealing with them is set out in Condition D3.1 of the Network Code.

In line with our obligations under the Access, Management and Licensing Regulations and our network licence, our procedures for dealing with requests for capacity allocation (including ad hoc requests) are designed so that we treat all current and potential RUs (including

freight operators and the operators of international services) in a fair and non-discriminatory way.

RUs can make ad hoc requests for capacity under Condition D3.3 of the Network Code to meet variations in traffic and can be handled through the train planning process down to 48 hours' notice.

Variations within the last 48 hours before operation are handled by our Operational Controls.

Changes for engineering work under Condition D3.4 are planned on a weekly basis with the objective of having a confirmed timetable twelve weeks in advance of operation which can then be used, with confidence, by RUs, and for their passengers to plan their journeys.

However sometimes we have to undertake short notice possessions. These are dealt with under Condition D3.5 of the Network Code.

#### 4.5.4 Coordination Process

The coordination process regarding requests for infrastructure capacity referred to in Regulation 23 of the Access, Management and Licensing Regulations is set out in Part D Condition 2 of the Network Code.

We liaise with all RUs to identify significant events that will be taking place during the early part of CP6 and record this in a Calendar of Events. An event is a major change which may require alteration to an existing timetable that is more extensive than usually occurs during the bi-annual timetable change. Smaller changes that do not qualify as events are recorded and distributed using the same approach. Any RU may propose that a change be defined as an Event. These changes are managed through an Event Steering Group established in accordance with Network Code Condition D7. From 2021 the Calendar of Events

moved to a publication schedule of four releases in a calendar year, not linked to the timetable production schedule.

We have published a <u>Strategic Capacity Code of Practice</u>. This sets out how we will produce the <u>Strategic Capacity Statement</u>, which details the strategic paths that are identified for potential future use on key routes on our infrastructure. The <u>Strategic Capacity Statement</u> for the 2023 Principal Timetable is due to be published at D-45 (28 January 2022).

#### **Timetable Planning Rules**

The Timetable Planning Rules set out the building blocks of the timetable. They include items such as sectional running times (the time trains take between two points) and headways (the time interval between two trains on the same track).

The <u>Timetable Planning Rules</u> contain two parts: a National Overview and route-specific sections, containing wide-ranging information required to undertake the compilation of the timetable.

The methodology for the <u>Timetable Planning Rules</u> change (located within the National Rules section of each version of the Timetable Planning Rules) contains a 'plain English' description of the timetable planning process, together with details of the planning schedule and requirements to be met in RUs' requests for train slots. It also contains a procedure for the agreement of short term changes to the Engineering Access Statement and Timetable Planning Rules.

The route-specific sections contain information regarding mandatory timing points<sup>4</sup>, sectional running times calculations<sup>5</sup> for specific train types, headway<sup>6</sup> and margin<sup>7</sup> limits to be maintained between trains, station working rules<sup>8</sup> and route capability data.

They set out the rules regulating the standard timings between stations and junctions together with other matters enabling trains to be scheduled into the working timetable for the various parts of the main rail network.

RUs planning significant new services or significant amendments to their services that are not considered events must notify us at the earliest opportunity and when possible before D-55 (19/11/2021 for the 2023 Principal timetable, 29/04/2022 for the Subsidiary timetable). We then work on advanced proposals from D-55 to the Priority Date at D-40. The latest schedule of dates for the timetabling process can be found in **Annex 2** 

RUs wishing to amend their services should send us an access proposal. Access proposals received by the priority date at D-40 (04/03/2022 for the Principal timetable, 12/08/2022 for the Subsidiary timetable) have a higher priority than those received after the priority date. If RUs wish to run new services they should state if they have unused access rights they wish to exercise, or if they intend to obtain new access rights. Services that are unchanged by an Access Proposal will continue in the timetable as a Rolled Over Access Proposal.

<sup>4</sup> Locations where all trains travelling on a specific line or in a specific direction are required to be timed at this location.

<sup>5</sup> The amount of time, based on the characteristics of haulage capacity and trailing weight, required to pass and/or stop at any two consecutive standard timing points or stations.

<sup>6</sup> The planning headway is the minimum planned time interval between two successive train schedules at a specific timing point on the same line in the same direction, such that the second train can meet its SRT.

<sup>7</sup> The minimum period of time which must elapse between any two trains where one train must cross the path of the other. This is generally required at junctions and on the approach to main (multi-platform) stations.

<sup>8</sup> The minimum permissible time interval between two trains that are performing conflicting moves at a timing point, such that the second train can meet its SRT.

Once we have all the Access Proposals and all the Roll Over Access Proposals we will coordinate all the Train Slots within the timetable, so that each train is compliant with the Timetable Planning Rules. This takes place between D-40 (04/03/2022) and D-26 (10/06/2022 for the Principal timetable, and D-40 (12/08/2022) D-26 18/11/2022 for the Subsidiary timetable. The New Working Timetable is published at D-26. If we are unable to find compliant slots for all Access Proposals and rolled over Access Proposals we will allocate Train Slots in the priority order as set out in Network Code D4.2.

If we have to make a decision on how to timetable train slots with the same level of priority we will do so using the decision criteria, comprising of the Objective and the Considerations, below, which are defined in Part D, Condition 4.6 of the Network Code:

- (a) maintaining, developing and improving the capability of the Network
- (b) that the spread of services reflects demand
- (c) maintaining and improving train service performance
- (d) that journey times are as short as reasonably possible
- (e) maintaining and improving an integrated system of transport for passengers and goods
- (f) the commercial interests of Network Rail (apart from the terms of any maintenance contract entered into or proposed by Network Rail) or any Timetable Participant of which Network Rail is aware
- (g) the content of any relevant Long Term Plan and any relevant Development Timetable produced by an Event Steering
- (h) that, as far as possible, International Paths included in the New Working Timetable at D-48 are not subsequently changed
- (i) mitigating the effect on the environment
- (j) enabling operators of trains to utilise their assets efficiently

- (k) avoiding changes, as far as possible, to a Strategic Train Slot other than changes which are consistent with the intended purpose of the Strategic Path to which the Strategic Train Slot relates
- (I) no International Freight Train Slot included in section A of an International Freight Capacity Notice shall be changed.

These decision criteria allow Network Rail to take a range of factors into account when determining priorities in relation to the use of train slots. Those factors may include previous levels of utilisation of capacity as referred to in Regulation 29(3) of the Access, Management and Licensing Regulations.

#### **4.5.5 Dispute Resolution Process**

#### Timetable panel

RUs have certain rights of appeal in respect of decisions made during the timetabling process. These appeals are heard by a specialist Timetable Panel established by the Access Disputes Committee, an independent body with a majority of members elected by RUs (for contact details, please see <u>Section 1.6</u>).

Appeals are governed by Condition D5 of the Network Code together with the Access Dispute Resolution Rules (see below). These rules provide the framework within which the Timetable Panel may request information for the purposes of determining how a dispute may be resolved.

Referrals to the Panel must be made within the periods prescribed by Condition D5, which range from five to 25 working days. The dispute procedures are designed to avoid or minimise impact on the timescales of the timetabling process. Determinations of the panel may be subject to a further level of appeal to ORR.

#### Access Dispute Resolution Rules (ADRR)

The ADRR set out options for resolution of disputes which arise out of particular commercial contracts. The purpose of the ADRR is to provide a clear, coherent, and effective structure for dealing with disputes that arise from access contracts and the Network Code (including Network and Vehicle Changes but excluding timetabling disputes unless there are compelling reasons why it should not be allocated to the timetable panel).

Further information on the ADRR can be found at the <u>Access Disputes</u> <u>Committee website</u>. As well as containing useful guidance documents and other explanatory information on the use of the ADRR, this website also contains details of dispute panel determinations.

Disputes relating to performance are managed in accordance with the specific provisions of the performance regime itself (set out in full in Schedule 8 of each track access contract), which enables prompt resolution directly between the access contract parties. Parties may also seek guidance from the cross-industry Delay Attribution Board, established under Part B of the Network Code. In the event that a dispute remains unresolved through these channels, then the ADRR provisions apply.

#### 4.6 Congested Infrastructure

We consulted industry parties during 2021 on the processes used to address our obligations to identify and manage congested infrastructure. The responses to the consultation have been considered, and the revised approach is published alongside this Network Statement as a Code of Practice. A Register of Congested Infrastructure is also maintained and published.

Currently there are five areas of declared congested infrastructure. These are detailed below.

# Midland Mainline (Leicester to Cricklewood via Market Harborough and Corby)

This section of route was declared as congested infrastructure on 24 September 2014 because, after being unable to accommodate certain short-term freight services, we considered that the infrastructure was unlikely to be able to accommodate all access requests in the next timetable period.

Key constraints identified were the reversible slow line between Bedford and Kettering, the single line between Kettering and Corby, and the double track section with no passing loops between Kettering and Leicester. Information on the Midland Main Line upgrade can be found on our website.

#### **Reading to Gatwick Airport**

This route was designated as congested infrastructure in 2006 because a second hourly Great Western Railway service could not be accommodated on the Reading – Redhill – Gatwick route. Key constraints identified were platform capacity at Redhill for reversing services, slow line capacity from Redhill to Gatwick and platform capacity at Gatwick.

The capacity restriction from Reading to Redhill was mitigated by the provision of an additional platform at Redhill station and increased service levels between Reading and Redhill commenced September 2020. There exists a plan for staged implementation of increased services between Reading and Gatwick that if successful, should support revocation of the congested infrastructure declaration at some point

after May 2022. Further information is available in the <u>Wessex Route</u> <u>Strategic Plan.</u>

# Castlefield Junction to Manchester Piccadilly East Junction inclusive (The 'Castlefield Corridor')

The route was declared as congested infrastructure in April 2019 based on consideration of access proposals received in 2019.

The key constraint identified was "The Castlefield Corridor", the route between Deansgate station and Manchester Piccadilly platforms 13 and 14. This is a major pinch-point on the route due to the number of different services having to be funnelled onto a two-track section of railway. This both limits timetabling options for the area and magnifies delays.

# West Coast Main Line South Fast Lines (Camden South Junction to Ledburn Junction Inclusive

Designated as congested infrastructure with effect from 11 May 2020, on the basis of an expectation that all access proposals in respect of the December 2020 Timetable Period would not be accommodated. Further information is provided in the <u>capacity study</u> published in November 2020. The study concluded that there is no available capacity on these lines without significantly impacting performance and causing a reduction in timetable resilience.

#### **East Coast Main Line**

Although the East Coast Main Line (ECML) has not been declared as congested, it is subject to a special access policy. Please see <u>section 3.2</u>.

The ECML is facing a long-term issue of demand from operators exceeding available capacity. There are particular pinch points on the ECML including Kings Cross, Welwyn, Doncaster and the double-tracks 57

on northern sections. There also increased passenger services to meet franchise requirements (LNER, TPE, GTR), ORR directions for open access operators and competing freight demands.

#### Additional declarations

As the network grows busier, the probability of making declarations of congested infrastructure can be expected to increase. We will consider declarations in respect of each timetable planning cycle and will make consequential amendments to this section of the Network Statement during the course of the year if required. Industry parties will be informed directly as appropriate.

# 4.7 Exceptional Transports and Dangerous Goods

An RU which wishes to run exceptional or dangerous goods should apply to us for slots sufficient to accommodate the passage of those goods within the process described in this document. RUs will need to agree and have issued an RT3973 form where applicable to control the access to infrastructure.

Prior to any application, in the first instance it is the responsibility of the RU transporting the relevant goods to maintain compliance with all relevant legislation including UK and European law. We will afford any new RU assistance in compiling the necessary risk assessments together with advice on suitable routes. Only once these assessments have been completed can an access request be submitted. See also Section 4.7.

#### 4.8 Rules After Path Allocation

# 4.8.1 Rules for Path Modification by the applicant

Requests for path variation are governed by Condition D.3 of the Network Code – please refer to that section for details.

#### 4.8.2 Rules for Path Alteration by the IM

Requests for path variation are governed by Condition D.3 of the <u>Network Code</u> – please refer to that section for details.

# 4.8.3 Non-Usage Rules by the applicant

Part J of the Network Code, which is incorporated into Framework Agreements, provides a means by which access rights may be removed in the event that a RU fails to use them, unless this failure is due to non-economic reasons beyond the RU's control. The specific threshold quota required by Regulation 29 of the Access, Management and Licensing Regulations is specified by Part J4.2 of the Network Code but should be read in conjunction with the entirety of Part J.

# 4.8.4 Rules for Cancellation by the applicant

Where one RU is replacing another in the provision of transport services to a third party for the carriage of goods, a process in <u>Part J7 of the Network Code</u> allows for surrender and reallocation of access rights. This reflects Article 52 of EU Directive 2012/34/EU.

# Chapter 5 - Services and Charges

#### 5.1 Introduction

This section sets out the current charging principles for access to the main rail network.

The below market segments reflect the Access, Management and Licensing Regulations which states that the list of market segments defined by infrastructure managers shall contain at least the three following segments: freight services, passenger services within the framework of a public service contract and other passenger services.

The market segments applicable on our infrastructure are:

- franchised passenger
- open access passenger: interurban
- open access passenger: other
- charter services
- freight (segmented by commodity).

# **5.2 Charging Principles**

#### CP6 Variable, Station & Fixed Charges price lists

We have published <u>CP6 price lists</u> for regulated track and station access charges consistent with ORR's Final Determination.

The list of market segments is to be reviewed at least every five years and the regulatory body referred to in the Access, Management and Licensing Regulations shall control that list... ORR summarises decisions made as part of the 2018 periodic review process on charges and incentives in a supplementary document to the Final Determination. We engaged closely with the industry throughout PR18, and published 59

all of our consultation and conclusion documents on our <u>website</u>. These documents provide more detail in relation to how the different charges discussed below were developed for CP6, this period covers 1 April 2019 to 31 March 2024.

#### **Credit Ratings**

Prospective operators will need to assure us that they are financially and practically able to operate a successful train service. We will seek a formal credit rating for an RU, or for a parent company or financial backer, coupled with a bank guarantee to a value that will be set to cover our liabilities.

Further information on the assurances we require can be found in our Stakeholder Relations Code of Practice.

# 5.3 Minimum Access Package and Charges

#### **Tariffs**

This section sets out the different charges for access to the main rail network. They are based on the charging arrangements for Control Period 6 (CP6), determined by ORR and applicable from 1 April 2019 to 31 March 2024.

We levy a range of access charges on franchised passenger, open access passenger (split into interurban and other services) and freight RUs. These charges may include:

- Variable Usage Charge
- Electrification Asset Usage Charge
- Traction Electricity Charge
- Freight Specific Charge
- Access Charge Supplements

- Fixed Track Access Charge
- Infrastructure Cost Charges
- Additional Charges (e.g. additional signal box opening).

These access charges are discussed in more detail below.

The access charges are underpinned by the Minimum Access Package and Access & Management Regulations as discussed below.

#### Minimum Access Package

The 'minimum access package' comprises:

- (a) handling of requests for infrastructure capacity; and
- (b) the right to utilise such capacity as is granted and, in particular,
  - (i) such railway infrastructure including track, points and junctions as are necessary to utilise that capacity;
  - (ii) electrical supply equipment for traction current, where available and as is necessary to utilise that capacity
  - (iii) train control, including signalling, train regulation, dispatching and the communication and provision of information on train movements; and
  - (iv) all other information as is necessary to implement or to operate the service for which capacity has been granted.

Information on the access charges and price lists for CP6 are available on our website.

# Minimum Access Package for connected facilities

In relation to rail facilities that are not part of the main rail network, the provision of the minimum access package is the responsibility of the relevant service provider.

In developing the connected facilities details we have attempted to bring together information that goes beyond the physical location of connected facilities into a single resource (link below). Those service providers of connected facilities that have responded to our request for information have supplied, as a minimum, appropriate contact details. These details are available for any RU to use in order to obtain key information such as hours of operation, capacities and capabilities.

Information concerning connected facilities is available on our website.

Please note that this information has been provided to us by connected facility service providers. We do not operate these facilities and as such any queries should be addressed to the relevant service provider in the first instance.

If you are a service provider and you need to update the details that we hold, please download our <u>service provider information form</u> which can be returned by post or email. Parties requiring access to certain connected facilities (for example some light maintenance depots and stations) may need an access contract, as described in <u>Section 7.3.2.5</u>.

# **Track Access Charges**

This section discusses in detail the track access charges, including those that comprise the minimum access package that we levy on RUs.

The CP6 charges which are applicable from 1 April 2019 to 31 March 2024 can be found on <u>our website:</u>

### Variable Usage Charge

The purpose of the Variable Usage Charge is to recover our operating, maintenance and renewal costs that vary with traffic. In economic terms, it reflects the short run marginal cost. Hence, it does not reflect the cost of providing or changing the capability or capacity of the

network. The Variable Usage Charge is paid by franchised passenger, freight, charter and open access passenger (split into interurban and other services) RUs.

The Variable Usage Charge is based on a bottom-up analysis of our incremental costs. First, the total variable costs associated with all traffic on the network are established. Then these costs are distributed between individual vehicles based on their relative propensity to cause damage to the network. This propensity is established from an analysis of the causes of wear and tear to the network, and the relative characteristics of different rolling stock types.

The higher a vehicle's axle load, speed, unsprung mass and yawstiffness the more wear and tear the vehicle causes to the network. As such, the Variable Usage Charge reflects these characteristics.

Passenger and freight variable usage charges are specified on a pence per vehicle mile and pound per thousand gross tonne mile basis respectively. The charge rates for each vehicle type apply as uniform national rates.

For enquiring RUs, we can produce an estimate of the charge for a new vehicle type when provided with the information such as:

- tare weight
- number of axles
- unsprung mass
- yaw-stiffness
- maximum or operating speed of the vehicle
- seating capacity (passenger vehicles only)
- Ride Force Count (freight vehicles only)
- operating weight (freight vehicles only).

A <u>calculator is also available on our website</u> so that interested parties able to estimate Variable Usage Charge rates themselves.

Whilst the basis of the calculation of variable usage charges for freight is similar to that for passenger vehicles, there are some key differences.

Firstly, an additional adjustment is made to reflect the relative 'track friendliness' of the suspension of freight wagons. The purpose of this adjustment is to incentivise the use of 'track friendly' suspension which will result in lower infrastructure costs.

Secondly, freight variable usage charges vary depending on the commodity type being transported. The reason for this is that the operating speed and operating weight of a freight vehicle can vary materially depending on the commodity type being transported and this is reflected in the Variable Usage Charge. The list of freight commodity types used for charging purposes is set out, below:

- biomass
- chemicals
- coal Electricity Supply Industry (ESI)
- coal other
- construction materials
- domestic automotive
- domestic intermodal
- domestic waste
- enterprise
- European Automotive
- European Conventional
- European Intermodal
- general merchandise
- industrial minerals

- iron ore
- mail and premium logistics
- other
- petroleum
- Royal Mail
- steel.

Access charges are initially set in 2017/18 prices and then increased annually in line with the Consumer Prices Index.

#### Electrification Asset Usage Charge (EAUC)

The purpose of the EAUC is to recover the variable maintenance and renewal costs associated with our electrification assets e.g. OLE network and the DC network (third rail).

The charge has been calculated by estimating the percentage of our forecast electrification asset costs that vary with traffic levels and dividing this estimate of variable costs by our forecast traffic. The charge is payable by RUs running electrified vehicles on a pence per electrified vehicle mile basis for passenger operators or £ per electrified KGTM (Thousand Gross Tonne Mile) basis for freight operators. There are separate rates for vehicles operating on the DC network (third rail) and vehicles operating on the OLE network.

The Electrification Asset Usage Charge is set at the start of the control period and then increased annually in line with the Consumer Prices Index.

#### Traction Electricity (EC4T) Charges

We can purchase electricity on behalf of RUs which use it to power their electrified train services. RUs pay the Traction Electricity Charge to cover the costs of traction electricity. The level of the charge is dependent on the price of electricity, the amount of electricity consumed (this may be calculated by way of modelled kWh consumption rates or metered kWh consumption), transmission losses and the electrified train miles operated for electric multiple units/locomotive-hauled services respectively (when calculated by way of modelled consumption rates).

RUs (passenger and freight) can choose their strategy for the procurement of electricity (including the option to lock tariffs) via our contract with the relevant electricity supplier.

Alternatively, operators can purchase electricity from a third party.

The modelled traction electricity charges are defined by the following formula <sup>9</sup>:

EC4T charge (£) = electrified train miles x traction electricity modelled consumption rate ( $kWh/train\ mile$ ) x tariff (pence/kWh)

Modelled consumption rates are available to view on our <u>CP6 access</u> <u>charges page</u>.

On-train metering (OTM) enables train operators to be billed for their use of traction electricity, based on metered traction electricity consumption data, rather than modelled traction electricity consumption rates.

<sup>9</sup> This formula is applied to the small number of unmetered bi-modal trains on the network.

The metered traction electricity charges are defined by the following formula:

EC4T charge (£) = [electricity consumption (kWh) x (1+ per cent losses uplift) – regenerated electricity (kWh)] x tariff (pence/kWh)

The losses uplift values used to calculate metered traction electricity charges are contained in Appendix 3 to the Traction Electricity Rules, available <u>here</u>.

Traction electricity tariffs are made up of 'energy' and 'delivery' tariffs. 'Delivery' tariffs vary by geographic areas or Electricity Supply Tariff Areas (ESTAs) and nine season and time of day bands. The charges are billed every accounting period. 'Energy' tariffs are determined by the price of energy procured from the supplier.

A new way of being billed has recently been developed. This third method is referred to as Partial Fleet Metering (PFM). PFM means that metered traction electricity consumption data from metered trains can be extrapolated and used to bill the non-metered part of the same fleet of trains on the same train service code.

Where an RU, which uses modelled traction electricity consumption rates, is using regenerative braking (a system of braking where some generated current is returned to the overhead line or third rail), it may be eligible to receive a discount. The discount reflects the cost savings that result from the lower net consumption of electricity as a result of useable energy being returned to our distribution system.

At the end of each financial year we carry out a volume reconciliation, which reconciles estimated and actual electricity consumption in each of the ESTAs. Charter services and RUs which are billed by way of OTM do not participate in the volume reconciliation. Network Rail and modelled RUs participate in the volume reconciliation. We calculate any

supplementary charges or rebates that should apply to RUs, as a result of this volume reconciliation exercise. This process ensures that all consumption is accounted for. Where a RU has a fleet of trains billed for traction electricity on the basis of PFM, unmetered trains in the fleet will participate in the volume reconciliation.

Following the volume reconciliation, we carry out a cost reconciliation. This reconciles the difference between electricity tariffs billed against the actual cost. The cost reconciliation ensures that the entire cost is accounted for all RUs, except charter services, which are excluded from the cost reconciliation because the administrative costs of including them would be disproportionately high.

We can also accommodate trains on our network that have more than one form of traction. These trains are referred to as Bi-mode trains. Bi-mode trains can, for example, use diesel power when there is a section of our infrastructure that is not electrified and electric power where the infrastructure is electrified.

Modelled Bi-mode trains will be deemed, for billing purposes, to be using traction electricity whenever they are on electrified infrastructure that they are capable of drawing power from (e.g. an AC/diesel unit on AC infrastructure will be deemed, for billing purposes to be using AC power). This is because it is not possible to know whether these trains are using traction electricity. These trains are not deemed to be using traction electricity when they are operating on non-electrified infrastructure.

Metered Bi-mode trains will be charged for traction electricity according to readings taken from the meters on-board the train. Additional data ('Traction Electricity Usage Occurrence Data') is required in order to confirm when the train is using diesel.

More information on the traction electricity charges can be found in the <u>Traction Electricity Rules</u>.

More information on on-train metering is available on our website.

# Freight Specific Charge

The Freight Specific Charge contributes to the recovery of freight avoidable costs (i.e. costs that would be avoided if there was no freight traffic on the network) that are not recovered through other freight track access charges. Consistent with relevant legislation, the Access, Management and Licensing Regulations, the charge is only levied on segments of the market deemed by ORR as capable of bearing the cost. In CP6 the charge will only be levied on traffic carrying coal for the electricity supply industry, spent nuclear fuel, biomass for the electricity supply industry, and iron ore. The freight specific charge is set at the start of the control period and then increases, annually, in line with the Consumer Prices Index.

# **Access Charge Supplements**

Access Charge Supplements, payable by franchised and some open access RUs, recover the cost to Network Rail of having to pay compensation to RUs for disruption caused by an efficient volume of possessions (or restrictions of use) on the rail network.

RUs incur costs and lose revenue when disruptive engineering possessions are taken on the railway. Schedule 4 of the track access contracts sets out the arrangements by which we compensate RUs for those costs and revenue losses.

It is accepted that a certain level of engineering related disruption is inevitable on an operational railway. We are funded for paying compensation up to an efficient level agreed by ORR, through the

payment of access charge supplements. This incentivises us to plan our engineering work efficiently and notify operators early of any planned disruption.

In return for the payment of an access charge supplement, franchised passenger RUs (and open access RUs which opt to receive full engineering related disruption compensation) receive formula - based compensation for costs and revenue losses from engineering possessions. In addition, they are able to negotiate compensation in certain instances of more extreme planned disruption, for example possessions lasting several days or in cases where repeated and regular possessions have led to significantly higher costs and losses by the operator.

By default, open access RUs do not pay access charge supplements but receive compensation for the most significant disruption which they suffer. They can negotiate an access charge supplement type arrangement with us if they choose to.

The access charge supplement is set at the start of the control period and increased, annually, in line with the Consumer Prices Index.

#### **Fixed Track Access Charge**

The purpose of the Fixed Track Access Charge is to recover our residual funding requirement after accounting for the forecast income from variable track access charges, the station long term charge, network grants and other single till income (e.g. income that we receive through other sources such as property assets). The Fixed Track Access Charge is payable by franchised passenger RUs on an operator-specific basis.

Fixed Track Access Charges are calculated by allocating our net revenue requirement to routes and then dividing these costs between franchised passenger RUs according to each franchised passenger RU's share of

avoidable fixed costs. This process is carried out separately for England & Wales and Scotland, i.e. the Scottish net revenue requirement is recovered from the Scottish franchisees specified by Transport Scotland. The net revenue requirement for England & Wales is allocated to routes in England & Wales according to each route's share of avoidable fixed costs. A detailed explanation of the methodology for calculating Fixed Track Access Charges is available in Annex 1 of our key assumptions.

The Fixed Track Access Charge is set for five years and is payable by accounting period. The Fixed Track Access Charge recovers a proportion of the infrastructure costs deemed not to vary with traffic levels.

The Fixed Track Access Charge is indexed, annually, to the Consumer Prices Index.

For CP6, ORR introduced the 'Fixed Track Access Charge Wash-Up' whereby the amount an operator pays in Fixed Charges each year is adjusted by a percentage equal to the difference between the train miles timetabled each year and the baseline number of timetabled train miles determined by ORR before the start of that year. Network Rail's maximum downside financial exposure as a result of the 'Fixed Track Charge Wash-Up' is one per cent over the Control Period (c.£50m). However, due to the effects of COVID-19 on the number of trains that are running (and the difficulties in forecasting how many will run for the remainder of CP6) ORR has decided to suspend this wash-up for the remainder of CP6.

#### **Infrastructure Cost Charge**

An Infrastructure Cost Charge may be payable on some open access services. The purpose of the Open Access Infrastructure Cost Charge is to recover some fixed costs from open access services. There are two market segments for open access services in CP6: 'interurban' and 'other'. Services operating in the 'interurban' open access market segment, have been deemed to be able to bear such charges. Infrastructure cost charges will be levied on new entrant open access services <sup>10</sup> that operate (or partly operate) within the 'interurban' market segment, for the sections of the service that are classed as 'interurban'. A service (or part of a service) is within the interurban market segment if it meets the following criteria:

- at least one of the stations served has average annual entries/exits above 15 million passengers per year <sup>11,</sup> or the station served is within two miles of a station meeting that demand threshold;
- at least one other station served has average annual entries/exits above 10 million passengers per year <sup>12</sup> or it is within two miles of a station meeting that demand threshold; and two of the stations served meeting the above demand thresholds, or within two miles of stations meeting the above demand thresholds, are at least 40 miles apart.

Existing open access services (i.e. open access services that existed before the start of Control Period 6) that currently operate within the interurban market segment will not be subject to the charge, unless

<sup>10</sup> New entrant is defined here: Annex B, p 52-53, 2018 periodic review final determination: Supplementary document – Charges and incentives: Infrastructure cost charges conclusions, Office of Rail and Road, October 2018. This may be accessed here.

<sup>11</sup> Based on five-year average of station entries/exits between 2013-14 and 2017-18. ORR calculation. Estimate of station usage, Steer Group, December 2018. This may be accessed <a href="here">here</a>.

<sup>12</sup> ORR calculation. Estimate of station usage, Steer Group, December 2018. This may be accessed here.

they substantially modify their current service. Substantial modifications are:

- increasing the number of services;
- increasing the number of calls at stations where the operator currently has the right to stop; or
- calling at new stations (where the operator does not currently have the right to stop).

The charge will be phased in over five years for new services. Existing services will not benefit from a phased-in charge. Details on how the charge will be phased-in can be found in table 2.1 of ORRs 'Open access infrastructure cost charge implementation conclusions' document.

The Open Access Infrastructure Cost Charge was set at £4/train mile in 2017/18 prices, and is indexed, annually, to the Consumer Prices Index .

#### **Additional Charges**

ORR allows additional charges to be raised if a signal box, for example, needs to be opened specifically outside the hours set out in the timetable planning rules in order to accommodate a new service or new services. These are agreed on a case-by-case basis and then added into the relevant RU's track access contract.

# Scarcity charges

Current charging arrangements do not include scarcity charges.

#### Track access to service facilities

In addition to the track access charges, the Access and Management Regulations provide for entitlements to track access to facilities and the supply of services. Under these regulations, we may apply the following charges:

- Station Long Term Charge
- Depot Charges
- Qualifying Expenditure (QX)
- Facility Charges
- Property Rent.

# Supply of services

In respect of the stations that we operate (managed stations), or those that are leased (short or long term) to other station operators (franchised stations), charges are applied under the terms of station access contracts and lease contracts that RUs enter into with us.

#### **Station Long Term Charges**

The Station Long Term Charge is payable at all regulated railway stations in Great Britain (both those managed by RUs and those managed directly by us). The charge enables us to recover the maintenance, renewal and repair (MRR) expenditure associated with all the stations that we own. Station charges are generally recovered by the Station Facility Owner (SFO) through a pass on of the long-term charge to operators that use its stations on the basis of usage frequency (or something similar). Operators that do not call at stations (e.g. freight operators) do not pay station charges.

The Station Long Term Charge is regulated and set by ORR for each control period. As part of PR18, ORR determined the overall level of Station Long Term Charge income from 2019 to 2024, as well as the charges at individual stations. The level is set so as to recover the amount ORR considers to be our efficient operational property and

Station Information and Surveillance Systems (SISS) MRR expenditure associated with relevant stations.

At franchised stations, the charge is paid by all train operators calling at that station (in proportion to the number of vehicle departures) to the RU that operates the station. It is then passed on to us. The methodology for calculating franchised station long term charges for CP6 is described below:

- 1. Take the forecast of post-efficient route-level annual average franchised station operational property maintenance, repair and renewal (MRR) expenditure for CP6.
- 2. Allocate (1) to individual franchised stations in a route based on long-term annual equilibrium cost (the amount that we expect we would have to spend, on average, to preserve asset condition). An estimate of long-term annual equilibrium cost for operational property assets exists for all individual franchised stations (with a small number of exceptions where a station has just recently opened). These estimates are used to calculate averages for each combination of route and station category, which are then used to allocate route-level operational property MRR expenditure to individual franchised stations.
- 3. Take the forecast of route-level annual average franchised station Information and Security System (SISS) MRR over CP6 and allocate to relevant individual franchised stations in a route based on their share of the relevant route's annual average SISS renewal cost over 35 years.
- 4. There are some third party SISS contracts that only apply to certain stations. Where a third party SISS contract covers multiple stations, these costs are allocated to individual stations based on each station's share of those stations' annual average SISS renewal cost over 35 years.

5. Add (2), (3) and (4) to calculate the total long-term charge for each franchised station.

For Managed Stations, RUs pay the Station Long Term Charge for each managed station directly to Network Rail, in proportion to their share of vehicle departures at that station. The Long Term Charge at each managed station equals the forecast of efficient long-run MRR expenditure on operational property and SISS expenditure. The methodology for calculating managed station long term charges for CP6 is described in more detail below:

- 1. Calculating the long-term annual equilibrium cost for each individual managed station.
- 2. Taking the operational property maintenance forecasts for individual managed stations which we consider is representative of long-run maintenance expenditure.
- 3. Calculating the long-term annual average renewal cost for SISS for each managed station over 35 years.
- 4. Calculating the forecast SISS maintenance cost for individual managed stations in CP6 which we consider is representative of long-run maintenance expenditure.
- 5. There are several third party SISS contracts that only apply to certain stations. Where a third party SISS contract covers multiple stations, these costs are allocated to individual stations based on each station's share of those stations' annual average SISS renewal cost.
- 6. Summing each of the elements, above, to calculate individual managed station long term charges.

Both franchised and managed Station Long Term Charges are fixed at the start of the control period and set to increase annually in line with the Consumer Prices Index.

#### **Facility Charges for stations**

Facility Charges recover the costs of certain historical station enhancement funded by Network Rail at an operator's or user's request. Such arrangements are no longer available for new enhancements.

#### **Property Rent for stations**

Property rent is payable by station operators to Network Rail for the stations that it owns, under the terms of their station lease, and not regulated by ORR. However, as it forms part of Other Single Till Income, ORR reviews our assumed property rental income as part of the Periodic Review.

The rent provides Network Rail, as the property owner, a share of the income received by the station operator from commercial activities at the station- such as retailing and advertising.

Although property rent is subject to RPI indexation, there is no formal process for review or resetting of the rent to reflect changes in the level of commercial activity or income growth at stations.

#### Qualifying Expenditure (QX) for stations

Qualifying Expenditure recovers the operating costs of common amenities at managed stations such as station cleaning, refuse collection and disposal, insurance, utilities, and the provision of competent and suitably trained staff. It consists of a fixed element which is negotiated with RUs for the control period and a management fee element which is levied as a percentage of the fixed QX charge and recovers indirect central costs that arise as a result of operating managed stations. The QX management fee also includes a profit element which aims to recover the financial risk associated with providing 'QXable' services at managed stations on a fixed deal basis. ORR regulates only the management fee element of QX.

QX is fixed for five years, with the charge varying each year by an agreed efficiency target at each station (if applicable). It aims to provide certainty to RUs on what they will pay over a five year period, and further incentivises Network Rail to obtain value for money in the services it offers and procures from third parties at managed stations.

Where train operators occupy space at a managed station on an exclusive basis their occupation may be subject to individual leases for the space occupied. Charges under these leases are not regulated. An additional charge may be levied where the RU has requested specific services.

#### **Depot Charges**

Network Rail also levies charges in respect of the depots that it leases to depot operators. Depot operators are either RUs or specialist train maintenance companies.

Network Rail leases light maintenance depots to depot operators. The depot operator pays Network Rail a property rent for the facility, which is generally split between equipment rent and buildings rent. The rents payable by the depot operator are subject to review by Network Rail which generally consists of comparison with the open market value of industrial sites in the vicinity (for land and buildings), a depreciated cost model for plant and equipment, or by reference to an indexation method. While ORR does not set depot charges at a periodic review, the depot income we expect to receive is taken into account in determining our funding settlement. Depot charges paid by beneficiaries to Depot Facility Owners are approved by ORR through its approval of Depot Access Agreements.

#### **Environmental charges**

Great Britain track access charges do not include any environmental charges. No scheme has been implemented in Great Britain for the direct reduction of access charges to reflect the environmental benefits of rail. However, the websites of the <a href="Department for Transport">Department for Transport</a> and <a href="Transport Scotland">Transport Scotland</a> may be consulted for the availability of grants (such as the Mode Shift Revenue Support (MSRS) grant scheme) which may compensate in relation to track access charges or the cost of rail facilities, having regard to the environmental benefits of rail freight transport.

### 5.4 Additional Services and Charges

Additional services are generally not provided by Network Rail. For services provided by other service providers, from or in relation to facilities connected to the main rail network. Please contact the service provider directly. Service provider information can be found on <a href="Network Rail">Network Rail</a>'s website.

#### Traction current

Traction current, where available in relation to the main rail network, is supplied by us as part of the access rights provided under Track Access Contracts, and the supply equipment is provided accordingly, so as to support that supply provision. Electrical supply for traction current can either be in the form of an overhead contact wire service or as a third (or third and fourth) rail service, depending on location (please see electrification map in Annex 3).

#### Services for trains

RUs are responsible for the supply of these services for their own trains. Some such services may be provided by the operators of light maintenance depots, as part of the maintenance facilities.

In addition we may also provide access to preheating (shore supply) and water supply at some of our 20 managed stations, under contract.

#### Services for exceptional transports and dangerous goods

We can offer advice on how the transport of exceptional loads and dangerous goods can be achieved in accordance with the relevant rules and regulations, which are described in <u>Section 4.7.</u>

For advice on the transport of dangerous goods please contact:

Paul Ashton

Head of Operations Principles and Standards

Network Rail

The Quadrant: MK, Elder Gate, Milton Keynes, MK9 1EN

Email: Paul.Ashton2@networkrail.co.uk

#### Supply of fuel

This is not included in our service package, but is a "service" falling within the Access, Management and Licensing Regulations.

#### 5.5 Ancillary Services and Charges

To the extent that Network Rail supplies ancillary services, which may comprise access to the telecommunication network and provision of supplementary information, where these fall within arrangements under a track access contract, the charging principles are set out under <u>Section 5.2</u>. Otherwise, the relevant principles are set out in sections 2

and 3 of our <u>Stakeholder Code of Practice</u> approved by ORR under our network licence.

#### Access to telecommunication network

Neither we nor any other service provider is obliged to provide these services.

The use of our communications network described in <u>Section 2.3.12</u> is primarily for those activities contained within the minimum access package.

# Provision of supplementary information

Where information provision is not otherwise dealt with in this Network Statement, please refer to our <u>Stakeholder Relations Code of Practice</u>.

#### Technical inspection of rolling stock

We do not provide this service; it may be carried out by relevant depot or facility owners.

#### Ticketing services in passenger stations

As IM, we do not sell train tickets to passengers. RUs, that operate passenger train services, undertake this activity at stations across the country. A passenger can purchase tickets from stations by using the ticket offices or ticket vending machines. Passengers are also able to purchase rail tickets online, which can either be delivered to them or collected at a railway station.

At stations managed by us, see <u>Section 2.3.3</u>, the ticket offices are leased to the RU responsible for selling tickets at that station (designated lead retailer). All stations that are not managed by us have a lead operator who leases the station, including the ticket offices.

### Specialised heavy maintenance services

Though we own some heavy maintenance depots which are leased to other RUs, as IM, we do not operate nor offer facilities at such depots. ORR has no approval role in relation to heavy maintenance depots.

Heavy maintenance services are often provided by the manufacturer of the rolling stock. Other train operators, or third parties procuring services on behalf of a train operator (known as beneficiaries), who want to use the depot must contact the relevant facility owner directly. Please refer to the Connected Facilities Details (Section 5.3) for more information.

#### 5.6 Financial Penalties and Incentives

#### 5.6.1 Penalties for Path Modification

At present there are no penalties or charges levied for path modifications.

#### 5.6.2 Penalties for Path Alteration

At present there are no penalties or charges levied for path alterations.

#### 5.6.3 Penalties for Non-Usage

At present there are no standard non usage/reservation charge arrangements under regulation 17 of the Access, Management and Licensing Regulations.

#### 5.6.4 Penalties for Path Cancellation

At present there are no penalties or charges levied for path cancellations. However, through the existing industry performance regime an operator will make payments if they cause delay or cancel a train which then has a knock-on impact on another operators services. See section 5.7 below for more detail.

#### 5.6.5 Incentives/Discounts

#### Reduction fee for Framework Agreements

At present there is no standard arrangement for a reduction fee for Frameworks Agreements.

#### **ERTMS Discounts**

At present there are no standard ERTMS Discount arrangements.

#### 5.7 Performance Scheme

The GB rail industry operates a performance scheme which provides compensation to RUs for unplanned delays and cancellations which it is not directly responsible for. It is a liquidated sums regime which provides compensation based on the marginal effect on future revenues of changes in performance caused by Network Rail or other RUs. Details of the regime are incorporated into the track access contract (Schedule 8 of the model contracts as described in Section 3.3.3) of each RU. In most cases a standard template arrangement applies, though bespoke arrangements are also possible. Schedule 8 sets out a framework by which payments are made by either party if RU or Network Rail cause delays above their respective benchmarks. Payments are received when delays caused by a given party are below benchmark.

The Network Rail, passenger, charter and freight RU benchmark targets are set at realistic but challenging levels for all parties. If Network Rail and RUs perform at their respective benchmark levels then no Schedule 8 payments are made. The freight operator benchmark is based on average historic freight performance, adjusted for expected network traffic growth over the control period, and is common to all freight RUs. The charter operator benchmark is also based on average charter performance, adjusted for expected network traffic growth over the control period, and is common to all charter RUs.

While franchised passenger RUs may be incentivised to improve their own performance through their franchise agreement, under Schedule 8 of the track access contract, RUs also pay for delay they cause. They do not directly pay the other operators who suffer the effects of knock-on disruption, but instead they pay Network Rail, because it is only here that the direct contractual relationship exists. In turn, Network Rail pays the affected RU, and over time and on a national basis this is expected to hold Network Rail neutral to the effect of these consequential liabilities. Freight and charter RUs pay for the actual knock-on disruption that they cause to other operators, whereas passenger RUs pay a fixed, estimated amount based on disruption to their own services. This means that passenger RUs could pay for more, or less, disruption than they have truly caused, which incentivises Network Rail to manage the impact of knock-on delays. Franchised passenger RUs are also able to claim additional compensation from Network Rail if performance is poor over a sustained period, the trigger being where network performance is more than 20 per cent worse than the benchmark on a moving annual average basis.

Freight and charter RUs may also select an incident cap (a cap which limits the RUs financial liability under Schedule 8) in exchange for paying an Access Charge Supplement. Freight and charter RUs may

either select an option which completely caps their maximum financial liability for each incident under the performance regime, or they may select an option which limits their exposure to 30 per cent of the cost of the incident above their selected incident cap. Freight and charter RUs also have annual caps, which limits their liability through the performance regime on a yearly basis. The annual cap is reciprocal, so Network Rail's maximum annual liability is also limited to the same amount.

For freight RUs, Network Rail and freight operator payment rates are common across all freight operators, reflecting the desire to retain simplicity in the freight Schedule 8 regime. For charter RUs, Network Rail and charter operator payment rates are also common across all charter operators.

The performance scheme has to meet requirements set out in Regulation 16 and Schedule 3 of the <u>Access, Management and Licensing Regulations</u>. Further information on the performance scheme may be found on <u>ORR's website</u>.

#### **Dispute Resolution**

The procedure for dealing with disputes relating to the performance scheme are set out within Schedule 8 of ORR's template track access contracts.

#### 5.8 Changes to Charges

The charges that Network Rail levies on train operators are determined as part of the periodic review process, which also establishes Network Rail's funding and outputs to be delivered. The periodic review process sets Network Rail's charges for a five year period. During this period changes to charges are limited to small increases each year to reflect inflation. The 2018 Periodic Review process (PR18) set Network Rail's 72

charges for the period from 1 April 2019 to 31 March 2024. Therefore, with the exception of these small increases, no material changes to charges are expected prior to 1 April 2024. Any future changes will be determined by ORR, and established in consultation with the industry, as part of the 2023 Periodic Review process (PR23).

#### 5.9 Billing Arrangements

Each RU which operates on the main rail network will for commercial issues communicate with an assigned member of the relevant Network Rail route team. The relevant team is responsible for cost recovery of monies owed to Network Rail by the relevant RU, much of which is outlined in the specific track access contract. Remedies for non-payment include interest charges, suspension of the contract and termination. Invoices are sent to RUs via Network Rail Finance Shared Services and are typically on a periodic (four week) basis.

## Chapter 6 – Operations

#### 6.1 Introduction

This chapter sets out rules concerning the obligations to be followed for train and shunting operations.

## **6.2 Operational Rules**

#### Railway Group Standards and the Rule Book

Railway Group Standards (RGSs) are technical standards and operating procedures contributing to safe railway system operation and interworking, compliance with which is mandatory.

Rail Industry Standards (RISs) define functional or technical requirements to be met in circumstances where the management of the railway system does not need the use of Railway Group Standards. RISs are railway-specific standards: they contain requirements applicable to subsystems, or they set out rules about how subsystems should be operated or managed.

RISs benefit the industry by removing the need for companies to develop and maintain their own (company) standards in the areas covered by RISs. RISs are produced under governance arrangements approved by the Industry Standards Coordination Committee on behalf of the industry. These documents are issued by RSSB and can be accessed on its <a href="website">website</a>, some standards are supported by Guidance Notes, also issued by RSSB.

In addition, we have our <u>own standards</u> that are applicable to us Rail, our contractors and our suppliers.

#### National Technical Rules

Railway Group Standards are, for the purposes of Interoperability, notified to the European Commission as National Technical Rules (NTRs). RSSB is responsible, on behalf of the industry, for proposing to the DfT those industry standards that should be notified against each of the NTSN's for use on the GB main line railway. The DfT may need to notify additional requirements to ensure the notified NTRs address all of the essential requirements.

The DfT publishes the NTRs and project-specific technical rules that it has notified to the European Commission for use in Great Britain. The lists of NTRs and related documents will be subject to periodic review in response to changes in the status of the NTSN's, the closing out of open points in the NTSNs and as GB standards are developed or withdrawn. The currently notified NTRs can be found on the gov.uk website.

#### **National Safety Rules**

The Railways and Other Guided Transport Systems (Safety) Regulations 2006 (as amended) requires the safety management systems of infrastructure managers and RUs on the mainline railway to be "established to ensure that the mainline railway system ... is in conformity with relevant national safety rules and relevant safety requirements laid down in NTSNs". Copies of all RGSs can be found in the Standards Catalogue published on RSSB's website.

Additional information about the NSRs can be found on ORR's website.

## Freight Train Loads (and Lengths)

The permitted maximum trailing load (by weight) and length of a freight train are key parameters for a RU's business.

These dimensions vary according to the geography of the network (i.e. gradients, curvature, signalling, track layout and other features). The Freight Train Loads Books (FTLBs) contain maximum weight and length data for all lines of the GB network. The FTLBs were re-issued in an up to date format, however some of the data is commercially sensitive and cannot be made readily available. Please contact our <a href="Freight">Freight</a>
<a href="Documentation Support">Documentation Support</a> if you have specific queries.

The loads and lengths are published by geographical route<sup>13</sup> as follows Book of 'Specially Authorised Loads'

 National issue - a national compendium of specific permissible freight train loads which exceed those shown in the Route Books

 showing any special conditions or restrictions that apply.

#### Books of 'standard' loads

Region	Route coverage	
Eastern	Anglia, West Midlands, North East, East Coast	
North West and Central North West, Central, West Coast		
Scotland Scotland		
Southern	thern Kent, Wessex, Sussex, NR High Speed	
Wales and Western	Wales, Western	

#### 6.3 Operational Measures

## **6.3.1 Principles**

We develop and maintains train regulation policies so as to provide a framework to enable regulating decisions to be made by signallers in a way that is fair, consistent and in the best interests of all RUs and their passengers and freight customers so far as can reasonably be achieved, facilitating achievement of their performance objectives.

#### 6.3.2 Operational Regulation

We develop and maintains train regulation policies so as to provide a framework to enable regulating decisions to be made by signallers in a way that is fair, consistent and in the best interests of all RUs and their passengers and freight customers so far as can reasonably be achieved, facilitating achievement of their performance objectives. Train regulation policies are established by us in consultation with RUs, who may propose variations to them. Any disputes are determined by the Timetabling Panel of the Access Disputes Committee and if necessary by further appeal to ORR. The arrangements are governed by the Railway Operational Code in Part H of the Network Code – please see Section 3.2.1.

#### 6.3.3 Disturbances

The measures to be undertaken in the case of disruption or anticipated disruption so as to sustain, and where necessary restore, operation of train services on the network in accordance with the working timetable

<sup>13</sup> Network Rail's operations are managed regionally in 'Route' organisations with the configuration as shown in the table.

are set out in the <u>Railway Operational Code in Part H of the Network Code</u> – please see <u>Section 3.2.1</u>.

When a disruptive event occurs, we have to determine the appropriate actions to restore the working timetable as soon as is reasonably practicable, taking into account the needs of passengers and freight customers, the interests of safety and security and the efficient and economical operation of trains and the network. RUs are required to cooperate as regards such actions, which may include the provision of traction and train crew to clear the line.

We lead the process of development and maintenance of contingency plans and codes of practice which can be implemented in cases of major disruption. Where disruption is expected to continue for an extended period (typically in excess of two days), it is usual for an amended timetable to be implemented. These timetables are often prepared in advance by us in consultation with the affected RUs, so they can be implemented quickly.

#### **Foreseen Problems**

The Railway Operational Code provides for contingency plans to accommodate changes to the train service which may be expected to result in operational disruption. This may include pre-planned amended timetables that can be uploaded to the industry systems quickly so that passengers can see what train services will be running the following day.

#### **Unforeseen Problems**

Where a problem is unforeseen, but may be expected to result in operational disruption, and there is no contingency plan to cover it, we will, under the Railway Operational Code, consult with affected RUs as

may be reasonably practicable, and determine the most appropriate action to be taken.

## 6.4 Tools for Train Information and Monitoring

#### Path Coordination System (PCS, formerly Pathfinder)

PCS is a web application provided by RNE to IMs, ABs, RFCs, RUs and non-RU Applicants, which handles the communication and coordination processes for international path requests and path offers. PCS also assists RUs and non-RU Applicants in their pre-co-ordination tasks related to train path studies and international train path requests. Our domestic system is connected to the RNE Path Coordination System.

RNE provides a PCS Integration Platform (PCS IP), a direct communication channel between PCS and the domestic systems of RUs and IMs/ABs allowing two-way data interchange. With this module, one of the major obstacles to the use of PCS in the freight business has been eliminated: RUs and IMs/ABs no longer have to provide the same information about an international train path request twice (once in the national system and once in PCS) – it is now possible to automatically synchronize the international train path request data between national systems and PCS.

In November 2013 PCS was ready to be the tool for handling (publish, request, allocate) Pre-arranged Paths (PaPs) according to the RFC Regulation 913/2010. In the meantime, the system is continuously being improved based on the experiences of RUs, IMs and RFCs, in order to make PaP process for freight trains faster and more flexible.

For more information, please visit the website <a href="http://pcs.rne.eu/">http://pcs.rne.eu/</a> or write to the helpdesk: <a href="mailto:support.pcs@rne.eu">support.pcs@rne.eu</a>.

#### Charging Information System (CIS formerly EICIS)

CIS is an infrastructure charging information system for Applicants provided by IMs and ABs. The web application provides fast information on charges related to the use of European rail infrastructure and estimates the price for the use of international train paths within minutes. It is an umbrella application for the various national rail infrastructure charging systems. Future developments of the CIS aim to implement an RFC route-based estimate of infrastructure charges according to the RFCs' requirements.

However, CIS as configured currently is not compatible with the structure of our charges, which are not included in the system.

For more information, please visit the website <a href="https://cis.rne.eu/">https://cis.rne.eu/</a> or write to the helpdesk: <a href="mailto:support.cis@rne.eu">support.cis@rne.eu</a>.

#### Train Information System (TIS formerly EUROPTIRAILS)

TIS is a web-based application that supports international train management by delivering real-time train data concerning international trains. The relevant data are obtained directly from the IM's systems and all the information from the different IMs is combined into one train run from departure or origin to final destination. In this manner, a train can be monitored from start to end across borders. RUs and terminal operators may also be granted access to the TIS and they can join the RNE TIS Advisory Board. All members of this Board grant all other members full access to TIS data if they are involved in the same train run. Without it, mutual agreements have to be signed between RUs and between RUs and terminal operators. Access to TIS is free of charge. A user account can be requested via the RNE TIS Support. More information can be found on <a href="https://tis.rne.eu.">https://tis.rne.eu.</a>

## Chapter 7 – Service Facilities

#### 7.1 Introduction

As defined in article 5 of Commission Implementing Regulation (EU) 2017/2177, operators of service facilities shall establish a service facility description for the service facilities and services for which they are responsible.

The <u>Service Facilities Statement's</u> objective is to inform applicants, the authorities and other interested parties about our service facilities, and the terms of condition for allocation of capacity and use. The document covers Network Rail service facilities only. It is produced in accordance with directive 2012/34/EU, The Railways (Access, Management and Licensing of Railway Undertakings) Regulations 2016 and EC Implementing Regulation 2017/2177.

## 7.2 Service Facility Overview

The information given in this section corresponds to the provisions of Article 4 of Regulation 2017/2177.

#### Service Facility Information

RailNetEurope, a Europe-wide organisation of railway infrastructure managers, has published Common Template for Service Facilities in line with the requirements of the <u>Implementing Regulation</u>.

The Common Template is available on RailNetEurope's website.

The common template can be used by service facility operators and service providers in order to assist in populating a description their facilities and/or services. Information on the individual

themes/elements shown in the common template should be explained, if applicable.

Network Rail invites operators of service facilities connected to the GB rail network to send their ready-to-publish information or a hyperlink to their service facility information to

NetworkStatement@networkrail.co.uk

#### 7.3 Service Facilities Managed by the Infrastructure Manager

#### 7.3.1 Common provisions

All provisions described in the sections below are specific to the particular service facility described.

## 7.3.2 Passenger Stations

#### 7.3.2.1 General Information

We managed 20 stations on the network, as listed on our website.

The remaining stations are operated by various parties, normally a RU acting under a local passenger franchise agreement with the benefit of a lease where we are the owner of that station.

The operator of each station is known as the station facility owner. Other RUs who want to use the station (known as beneficiaries) must enter into an access agreement with the station facility owner (Network Rail in the case of the 20 stations which it operates, and otherwise normally the relevant RU). Such agreements govern the provision of common station amenities and services by the facility owner, including such matters as the availability of forecourts, concourses and platforms, non-exclusive staff amenities, cleaning and lighting and train despatch.

Such agreements may also deal with services other than those that are common to the use of the station generally, and if their provision is not agreed by the relevant parties, ORR may be requested to direct this.

#### **7.3.2.2 Services**

Details of facilities at the 20 stations we manage (as listed in <u>Section 2.3.3</u>) are available on <u>our website</u>.

## 7.3.2.3 Service Facility Description

The extent of most facilities provided at stations managed by RUs is usually determined by the facility owner. Details of the facilities at these stations can be found on the National Rail website.

## **7.3.2.4 Charges**

Details of charges are set out in the **Services Facilities Statement**.

#### 7.3.2.5 Access Conditions

Please refer to chapter 3 for information relating to access conditions.

#### 7.3.2.6 Capacity Allocation

Platform heights at all stations on the main rail network in Great Britain are generally higher than those encountered on railways in continental Europe. The stepping distance (both vertical and horizontal) between platforms and trains is part of the consideration afforded in the course of acceptance of new rolling stock onto the network.

More information on rolling stock acceptance is given in <u>Section 3.4.1</u> and detailed information about the infrastructure is contained in the Sectional Appendix, which is described in <u>Section 2.3</u>.

#### 7.3.3 Freight Terminals

There are several types of facilities that are commonly described as freight terminals, and there are other facilities that have a capacity to receive or despatch goods, operate as a terminal point in freight transport and serve, or potentially serve, multiple final customers. Whilst we are the landlord at a number of terminals nationwide, which are leased to RUs or directly to end users, as the IM we do not operate freight terminals nor offer any terminal facilities

Any party wishing to use these terminals would need to reach a separate agreement with the facility owner or service provider of that terminal, to whom the Access, Management and Licensing Regulations apply.

Additional information on freight terminals can be found on <u>our website</u> and the <u>Rail Freight Locations portal</u>.

Please refer to our <u>Freight Contacts List</u> if you have any additional queries.

# 7.3.4 Marshalling Yards and Train Formation Facilities, including Shunting Facilities

Though we own some train formation yards which are leased to RUs we do not generally control access to any train formation yards, with four specific exceptions;

- Carlisle Kingmoor
- Ipswich Reception Sidings
- Wembley WEFOC
- Doncaster Up Decoy.

Any prospective RU or other entity wishing to use one of the non-Network Rail managed yards for train formation or recessing purposes would need to reach an agreement with the facility owner of that yard.

Applications to use the four specific exceptions listed above would be considered as part of the allocation process described in <u>Section 4</u>.

#### 7.3.5 Storage Sidings

## National Supply Chain hubs

We do own some storage sidings in connection with our infrastructure haulage operations, however these are specialist sites that would not be generally available for storage of other types of train, vehicles or other rail-borne equipment.

## **Network Sidings**

In some circumstances network sidings may be used for stabling or storage of vehicles where this can be accommodated without detriment to infrastructure operators. Applications for access should be made as for the rest of the network in accordance with the process described in Section 4.

#### **Nodal Yards**

We currently have three Nodal Yards: Ipswich, Doncaster Up Decoy and Wembley WEFOC. In terms of availability and planning they are managed as part of the national network and serve to provide line of route recess, regulation & crew relief capability for freight services. They are effectively grouped sets of freight loops with a pattern of dynamic

service occupancy and are not intended for long term storage of vehicles.

#### Non-Network Rail sidings

Facilities to store trains, vehicles and rail-borne equipment may be available in yards, terminals and depots operated by other facility owners, as described in other sub-sections, but would require separate agreement for use with that facility owner.

#### 7.3.6 Maintenance Facilities

There are around one hundred and twenty light maintenance depots around the network which offer light maintenance services. These include refuelling, or the cleaning of the exterior of locomotives or other rolling stock, as well as the carrying out to locomotives or other rolling stock of maintenance work of a kind which is normally carried out at regular intervals of twelve months or less.

Light maintenance depots<sup>14</sup> are treated as separate facilities. If a RU requires access to a station or light maintenance depot, it will need to enter into an access contract with the facility owner as described in Section 2.3. The operator of a depot is known as a depot facility owner. Although we own most of the light maintenance depots in Great Britain, we are not the facility operator.

Most light maintenance depots are leased to and operated by one or other of the passenger train operating companies, who act as the facility owner, although some are owned and operated by non-train operators, specialist train maintenance companies or FOCs.

<sup>14 &#</sup>x27;Light maintenance services' are defined in section 82(2) of the Railways Act 1993 as services of any of the following descriptions:

<sup>(</sup>a) the refuelling, or the cleaning of the exterior, of locomotives or other rolling stock; or

<sup>(</sup>b) the carrying out to locomotives or other rolling stock of maintenance work of a kind which is normally carried out at regular intervals of twelve months or less to prepare the locomotives or other rolling stock for service.

Under the Railways Act 1993, RUs and others may only enter into a contract with a facility owner for permission to use that owner's railway facility if ORR so directs. If these contracts (and amendments to them) are not approved by ORR where that is required by law, they are invalid.

Where the parties have not been able to agree on the terms of a contract, or a subsequent amendment where the applicant is seeking increased access to the network, ORR may be asked to issue directions requiring the facility owner to enter into or amend the contract as determined by ORR.

## 7.3.7 Other Technical Facilities, including Cleaning and Washing Facilities

#### HABD - Hot Axle Box Detector(s)

This is a piece of line-side equipment, consisting of sensors mounted in a hollow sleeper and associated equipment housed in a relocatable electrical building that is designed to detect abnormal temperatures in wheel axle bearings (axle boxes) of passing train services. The sensors of a trackside HABD measure the thermal radiation emitted from the axle boxes of in-service rolling stock without the need for frequent intermediate stops for physical examination.

The equipment transmits a message with the passing of each train to the signalling centre responsible for the portion of line concerned. When an alarm is generated, a record will be created showing the wheel (axle) count number, the side (left or right) and temperature (°C) allowing the signaller to bring the train to a stand at a suitable location to facilitate confirmatory inspection by the train driver.

A list of these installations and their location is provided on our website.

#### WILD - Wheel Impact Load Detector(s)

This equipment consists of fibre-optic sensors mounted under the rail, lineside Radio Frequency Identification Tag reader and a data processing cabinet. The system registers the weight (Weighing In Motion) and wheel impact (Wheel Defect Detection) upon the railhead from each wheel of a passing train.

This equipment is designed to provide information on latent defects in the wheel surface, overloaded axles, and asymmetrically loaded vehicles. The system is capable of generating an alarm message where the output reading exceeds a required threshold. The equipment transmits data to a central server, from which each control centre and nominated data centre can receive train alarms and wheel condition data.

When a wheel impact alarm message is generated, staff at the control centre will be responsible for identifying the train involved and notifying the signaller at the centre through which the train will shortly pass. This will enable the train to be stopped at a suitable location for the driver to examine the wheel-set(s) concerned and implement a temporary speed restriction for that train as directed by the Standard.

Where vehicles are tagged with RFID tags, wheel condition data may be automatically provided to operators and ECMs for information used to better manage wheel set maintenance.

A list of these installations and their location is provided on our website.

#### PME – Pantograph Monitoring Equipment

The Pantograph Monitoring Equipment (PME) is mounted lineside that combines an overhead camera for looking down onto the top of the train to view the pantograph and a side mounted camera to view pantograph uplift forces. The high-speed cameras are able to capture

high resolution images of the pantograph whilst the train is travelling at line speed.

Post processing can detect damage to the pantograph including wear or damage to the carbon strip. In addition, the side mounted camera provides accurate measurements of pantograph uplift forces exerting on the contact wire.

There is currently one site which is deployed at Cheddington on the West Coast Mainline with further installations of the next generation of PME planned in early CP6 in Scotland and Eastern Region.

#### Cleaning and washing facilities

These facilities are often found located within light maintenance depots, further information can be found in <u>Section 7.3.6</u>.

#### 7.3.8 Maritime and Inland Port Facilities

These may be provided by the operators of rail connected facilities, but are not provided directly by us.

Further information about maritime and inland port facilities can be found on the <u>Rail Facilities portal</u>, or where provided as part of our <u>service provider information list</u>. The Rail Facilities portal also provides quick access to information on all kinds of rail facilities, in particular rail freight facilities.

#### 7.3.9 Relief Facilities

The term 'relief facilities' is undefined within national and European legislation; however, it is defined within the <u>RNE's Glossary</u> as "areas, equipment's and infrastructure to be used to overcome a disruption". Following any disruptive incident, we will endeavour to operate the

network in accordance with best practice to facilitate the carriage of passengers and goods across our network.

## 7.3.10 Refuelling Facilities

Refuelling facilities may be provided by the operators of light maintenance depots (see <u>Section 7.3.6</u>), but we do not provide these directly.

## OFFICIAL

Glossary		ERA	European Union Agency for Railways	
		ESG	Event Steering Group	
Abbreviations		FOC	Freight train operating company	
AB	Allocation Bodies	FTLB	Freight Train Load Book	
CAS	Certification Scheme for Telecommunications	GB	Great Britain	
CCG	Common Components Group – responsible for delivery of the common messaging interface and the common reference data system required for TAF NTSN, which should also be used for TAP NTSN	GPRS	General Packer Radio Services	
		GSM-R	Global System for Mobile Communications – Railway	
		GTR	Govia Thameslink Railway	
CoE	Calendar of Events	HST	High Speed Train	
C-OSS	One Stop Shop operated by the North Sea Mediterranean Rail Freight Corridor	ICC	Infrastructure Control Centre	
		IM	Infrastructure Manager	
COTS	Commercial Off The Shelf	LMD	Light Maintenance Depot	
CRE	Customer Relationship Executive	LNER	London North Eastern Railway	
CSM RA	Common Safety Method Risk evaluation and Assessment	LTPP	Long Term Planning Process	
DfT	Department for Transport	MU	Multiple Unit	
DEMU	Diesel Electric Multiple Unit	NESA	National Electronic Sectional Appendix	
DMU	Diesel Multiple Unit	NTSN	National Technical Specification Notice	
ECM	Entities in Charge of Maintenance	NVR	National Vehicle Register	
EIM	European Rail Infrastructure Managers	OLE		
ELMTREE	Exceptional Load Management Tool and Routing Enquiry		Overhead Line Equipment	
	Engine	ORR	Office of Rail and Road	
EMU	Electric Multiple Unit	OSS	One Stop Shop	

Enhanced Permissible Speed

**EPS** 82

PAP Pre-arranged path for international freight in the

European rail network created by a European rail freight

corridor and allocated by them

RDG Rail Delivery Group

**REP** Rail Environment Policy

**RFC** Rail Freight Corridor

**RGS** Railway Group Standards

**RINF** Register of Infrastructure

ROC Railway Operational Code

**ROGS** The Railways and Other Guided Transport Systems

(Safety) Regulations 2006 and The Railways and Other

Guided Transport Systems (Safety) (Amendment)

Regulations 2013

**RNE** RailNetEurope

**RSSB** Rail Safety and Standards Board Limited

RU Railway Undertaking

**RUS** Route Utilisation Strategy

SCADA Supervisory Control And Data Acquisition

**SNRP** Statement of National Regulatory Provisions

**SP** Sprinter Diesel Multiple Units

TAC Track Access Contract

**TAF NTSN** Telematics Applications Freight – National Technical

**Specification Notices** 

**TAP NTSN** Telematics Applications Passenger – National Technical

Specification Notices

TCAG Timetable Change Assurance Group

**TfL** Transport for London

**TfW** Transport for Wales

TM Traffic Management

Train (usually, passenger train) Operating Company

**TOPS** Total Operations Processing System

**TPE** TransPennine Express

**TPH** Trains per hour

**TRUST** Train Running System on TOPS

**TS** Transport Scotland

**UHF** Ultra High Frequency

**UIC** International Union of Railways

## Terms explained

## 2019 regulations

The Railways (Access, Management and Licensing of Railway Undertakings) (Amendment) Regulations 2019.

## Access and Management Regulations

The Railways (Access, Management and Licensing of Railway Undertakings) Regulations 2016 ("Access, Management and Licensing Regulations") which implement Directive 2012/34/EU of the European Parliament and of the Council of 21 November 2012 establishing a single European railway area (the Recast).

The Access, Management and Licensing Regulations were amended by The Railways (Access, Management and Licensing of Railway Undertakings) (Amendment) Regulations 2019).

## **Access Dispute Resolution Rules**

Rules appended to the Network Code, which govern the handling of disputes arising from matters covered by the Code.

#### **Concession Agreement**

An agreement between the government or other authority and a party which offers to provide specified railway passenger services for a period, the terms of which may provide for the government to pay a subsidy or receive a premium for those services. For the purpose of this document the terms concession agreement and franchise agreement have the same meaning.

#### **Connected Facility**

A facility connected to the main railway network, such as a terminal, port or light maintenance depot.

#### **Connected Facilities Details**

Details of where further information may be obtained about the nature of access to, and supply of services in, terminals, ports and service facilities to which access may be obtained under Regulations 6 and 7 of the Access and Management Regulations.

#### DfT

Department for Transport, a government department providing leadership across transport sectors to achieve its objectives, working with regional, local and private sector partners to deliver many of the services running within, and from, England and Wales.

#### Depot access contract

A contract for rights of access to a light maintenance depot, including provision of services. Also referred to as a depot access agreement.

#### **Engineering Access Statement**

Rules regulating the arrangements for access to the various parts of the main rail network when affected by inspection, maintenance, renewal and other works. Please see further at <u>Section 4.5.1</u>. The current Engineering Access Statement is available Network Rail's <u>our website</u>.

## Facility owner

The owner of an interest in a network, station or light maintenance depot, such that their permission is needed if anyone else is to enjoy access to that facility in order to use it for, or in connection with, the operation of trains.

#### Firm rights

Rights of access to the main rail network granted by track access contracts which are not contingent, other than in relation to the applicable Engineering Access Statement or Timetable Planning Rules. The expression is also used to refer to Network Rail's own rights to carry out maintenance, renewal and enhancements to the main rail network under the Engineering Access Statement or Timetable Planning Rules.

#### Framework Agreement

This expression is used in EU Directives as referring to a general agreement setting out rights and obligations in relation to infrastructure capacity to be allocated and the related charges for a period longer than one working timetable period. In the GB context, this refers to a track access contract between an IM and access beneficiary.

## Framework Capacity Statement

A <u>Framework Capacity Statement</u> has been published which indicates the cumulative effect of capacity allocated through track access contracts on various parts of the network.

The requirements concerning the proportion of framework capacity that shall be used by the parties to the framework agreements is outlined in <u>Part J of the Network Code</u>, further information can be found in <u>Section 3.3.1</u>.

#### Franchise agreement

An agreement between a government and a party which offers to provide specified railway passenger services for a period, the terms of which may provide for the government to pay a subsidy or receive a premium for those services. For the purpose of this document franchise agreement and concession agreement are the same.

## Franchised passenger railway undertaking

A RU which operates passenger services in support of a franchise agreement.

## Infrastructure Manager

The Infrastructure Manager is the body that is responsible for operating, maintaining, renewing and developing railway infrastructure.

## Interoperability

As defined under the Interoperability Directive 2008/57/EC. Interoperability means the ability of a rail system to allow the safe and uninterrupted movement of trains which accomplish the required levels of performance for these lines. This ability depends on all the regulatory, technical and operational conditions which must be met in order to satisfy the essential requirements.

The EC Directive has been transposed into UK law by The Railways (Interoperability) Regulations 2011, as amended.

#### **Licensing Regulations**

The Railway (Licensing of Railway Undertakings) Regulations 2005 (as amended), is currently the statutory instrument implementing various EU Directives requiring most people who want to operate passenger trains or freight trains in GB to hold an appropriate European passenger licence or European freight licence, and associated Statement of National Regulatory Provisions (SNRP) available at:

http://ORR.gov.uk/what-and-how-we-regulate/licensing/licensing-railway-operators/model-licences-and-statements-of-national-regulatory-provisions-snrps

#### Light maintenance depot

A place at which services are provided where locomotives or other rolling stock are refuelled, cleaned externally or receive regular servicing as defined in the Railways Act 1993.

#### Main rail network

The rail network in Great Britain (including the Isle of Wight), of which Network Rail is the IM and/or owner (as defined by the Access and Management Regulations). Ownership may in this context include a lease or other property right. Where Network Rail owns network (e.g. in a freight depot), but has leased it to another party (e.g. a FOC) that manages that network, then the other party will be the operator and the facility is no longer part of the main rail network (for the purpose of this Network Statement).

#### Minimum access package

Access to facilities and a set of services for international or domestic traffic for which Directive 2012/34/EU confers rights and which include the handling of requests for infrastructure capacity and the right to use such capacity as is granted. These are further described in <u>Section 5.3</u>.

#### Notified National Technical Rules

The standards, technical specifications, and technical rules in use in the United Kingdom which have been notified by the Secretary of State to the Commission pursuant to article 17(3) of the Directive or Article 16(3) of the High-Speed Directive or Article 16(3) of the Conventional Directive, including any variations from time to time notified.

#### National Vehicle Register

The National Vehicle Register is a database of vehicles authorised to operate in Great Britain under the Railways (Interoperability)

Regulations 2006 and superseded by the Railways (Interoperability) Regulations 2011. The Secretary of State has appointed Network Rail Infrastructure Limited as the Registration Entity, which is responsible for maintaining the NVR. This duty is discharged through the Rolling Stock Library (RSL).

#### **Network Code**

A common set of rules that applies to all parties that have a track access contract with Network Rail. <u>The Network Code</u> is incorporated into, and therefore forms part of, each such bilateral contract.

#### **Network Rail (Company) Standards**

'Network Rail Standards' is the generic term for documents that specify requirements and provide guidance directed towards securing safe and efficient operation of the rail infrastructure. They support the overall company assurance system by specifying how Network Rail controls its principal health and safety risks, and how the organisation complies with National Technical Specification Notices (NTSNs), domestic legislation, and Railway Industry Standards. Please refer to <a href="http://uk.ihs.com/products/standards/network-rail-company-standards.html">http://uk.ihs.com/products/standards/network-rail-company-standards.html</a>

# Possession (or restriction of use including temporary speed restrictions)

Non-availability of the network for full use by trains for a period when reserved for the carrying out of works.

## Passengers' Charter

A commitment by a franchised passenger RU to its passengers as regards what passengers may expect, including as to standards of service, compensation, and contact arrangements.

#### Principal Timetable

The working timetable that is established for the year beginning on the Sunday immediately after the second Saturday in December.

## Railway Group Standards

Published by RSSB, <u>Railway Group Standards</u> are technical and operational documents whose objective is to provide a framework for the safe management of risk in areas of interface / co-operation between different duty holders. Compliance is mandatory by RSSB and the members of RSSB subject to any approved non-compliance arrangements that are in place. RSSB has integrated the management of RGS with the work that it does to support the industry on interoperability standards.

#### Railway undertaking

Any public or private undertaking licensed according to Directive 2012/34/EU, the principal business of which is to provide services for the transport of goods and/or passengers by rail, often described as an RU.

#### Railway Safety and Standards Board

The Rail Safety and Standards Board was established in April 2003 with its primary objective to facilitate the railway industry's work to achieve continuous improvement in the health and safety performance of the railways in Great Britain, and thus to facilitate the reduction of risk to passengers, employees, and the affected public.

#### **Register of Infrastructure**

Data specified by the Register of Infrastructure (Commission Implementing Regulation (EU) 2019/777) can be used for planning purposes in designing new trains and developing routes before the start

of operation. Each Infrastructure Owner is responsible for making the information as specified by the RINF data specification available within 28 days of a request by an applicant for authorisation under the RIR2011 or an approved body.

## Sectional Appendix

A listing, according to line of route, of various physical and operational attributes of the main rail network, including information as to permanent speed restrictions, position of signal boxes and stations, and with other information relevant to the operation of trains. Please see further information at Section 2.3.

#### Service provider

A party that will supply and charge for, where appropriate, services used by a RU in the operation of trains. The service provider is generally, but not always, the facility owner (for example, of a station or depot).

#### Station

A place where trains stop, or where loading and unloading occurs, and where assistance may be available as defined in the Railways Act 1993.

#### Station access contract

A contract for rights of access to a station on a rail network. Also referred to as a station access agreement.

#### Subsidiary Timetable

The adjustment of the Principal Timetable that is established at midnight on the third Saturday in May during the currency of the Principal Timetable.

### **Timetable Change Assurance Group**

A national group composed of competent individuals who carry out assurance checks on the outputs from TCRAGs.

## **Timetable Change Risk Assessment Group**

A Route based group composed of competent individuals to assess the effects of proposed significant timetable changes and determine any mitigation measures to be applied.

## Timetable Planning Rules

Rules regulating standard timings and other matters enabling trains to be scheduled into the working timetable on the main rail network. Please see section 2.4 for more information.

#### **Total Operations Processing System**

TOPS is a database that contains details of vehicles and schedules (for loco hauled vehicles only). Non-loco hauled schedules are located in TRUST (e.g. EMU, DMU and DEMU).

#### Track access contract

A contract for access to the track, including an option to have such rights of access. Also referred to as a track access agreement.

## Traffic Management

This is a system under development that will allow larger areas of Network Rail's network to be controlled from fewer locations and help increase capacity and improve reliability.

#### Train path

This expression is used in EU Directives to refer to the infrastructure capacity needed to run a train between two places over a given time period; and in the context of this Network Statement is treated as the

provision of the capacity in the timetable to enable train movement on the rail network.

#### Train slot

A right contained in a track access contract to a train movement between two places, together with certain other characteristics, which may include times at those places, routing, calling pattern, traction type, and exceptional characteristics by specific agreement. These characteristics must be reflected when processed by Network Rail in production of the working timetable (using the rules set out in the Network Code).

#### **Transport Scotland**

Transport Scotland is an executive agency of the Scottish Government, directly accountable to the Scottish Ministers. <u>Transport Scotland</u> seeks to deliver a safe, efficient, cost-effective, and sustainable transport system for the benefit of the people of Scotland.

#### **TRUST**

A computer system, part of the TOPS suite of systems, which records details of train running as compared with schedule, together with causes of delays.

## Working timetable

The timetable used for working purposes, as further described <u>in Section 4.5.1.</u>

# Annex 1 - Route Capability Gradients



# Annex 2 - Schedule of timetabling process

	2023 timetable		
Timetable Development Dates			
	Principal Change	Subsidiary Change	
D73 - Formal Notification of Process Dates	16/07/2021		
Revision of Timetable Planning Rules			
D64 – Start of NR Consultation of Proposed Changes to Rules	17/09/2021	25/02/2022	
D64 TCRAG - Start of -Train Plan Hazard Identification (TP-HAZID)	17/09/2021	25/02/2022	
D60 – End of NR consultation of proposed changes to Rules	15/10/2021	25/03/2022	
Rules to Planning Publications	13/10/2021	23/03/2022	
D59 – Publish 'Draft Rules' (V1/V3)	22/10/2021	01/04/2022	
D56 - TCRAG End of -Train Plan Hazard Identification	12/11/2021	22/04/2022	
D55 - TCRAG - Start of Train Plan Assessment/Mitigation	19/11/2021	29/04/2022	
D54 – Operator Responses to 'Draft Rules'	26/11/2021	06/05/2022	
D54 to D44 – NR review Operator Responses			
Rules to Planning Publications	26/01/2022	06/07/2022	
D44 – Publish 'Final Rules' (V2/V4)	04/02/2022	15/07/2022	
D41 – End of Appeal Period 'Final Rules'	25/02/2022	05/08/2022	
Initial Consultation Period			
D64 – Publication of draft Calendar of Events	17/09/2021	25/02/2022	
D45 – Publication of Strategic Capacity Statement	28/01/2022	08/07/2022	
D55 – Notification by TT Participants of major TT changes	19/11/2021	29/04/2022	
D55 – Start of Initial Consultation Period	19/11/2021	29/04/2022	
D54 – Publication of Final Calendar of Events	26/11/2021	06/05/2022	
D45 – NR to provide copy of 'Prior Working Timetable'	28/01/2022	08/07/2022	
D48 – Notification of Provisional International Paths	07/01/2022	N/A	
D40 – Priority Date	04/03/2022	12/08/2022	

Timetable Preparation Period		
D40 – Start of Timetable Preparation Period	04/03/2022	12/08/2022
D38 - TCRAG - End of Train Plan Assessment/Mitigation	18/03/2022	26/08/2022
D37 - TCRAG - Start of Train Plan Risk Evaluation - (TP-REP)	25/03/2022	02/09/2022
D33 - TCRAG - End of Train Plan Risk Evaluation - (TP-REP)	24/04/2022	30/09/2022
D32 - TCRAG - Start of Timetable Change Assurance Panel (TP-RAP)	29/04/2022	07/10/2022
D30 - TCRAG - End of Timetable Change Assurance Panel (TP-RAP)	13/05/2022	21/10/2022
D26 – NR Publish New Working TT	10/06/2022	18/11/2022
New WTT and associated system files available to ATOC	10/06/2022	18/11/2022
Operator responses to New WTT	24/06/2022	12/12/2022
D22 – End of Appeal Period 'New Working Timetable	08/07/2022	16/12/2022
D15 - Timetable Briefing process complete	26/08/2022	03/02/2023
D14 - CIF Electronic Data available	02/09/2022	10/02/2023
D9 - Timetable Extract taken for NRT Edit	07/10/2022	17/03/2023
D8 - Corresponding Day Timetable Dates Proposed to Operators	14/10/2022	24/03/2023
D4 - NRT Data sent to publishers	11/11/2022	21/05/2023
Timetable Commencement Date	11/12/2022	21/05/2023
Timetable End Date	20/05/2022	09/12/2023

**Note:** Change Dates are based on the Principal Change being the Sunday after the 2nd Saturday of December, and Subsidiary Change being the 3rd Sunday of May. The timetable change dates used to calculate the development dates are shown on the Change Dates CP5 tab. Changing the start and end dates shown on the change dates tab will then alter the development dates.

## Annex 3 - Extent of Electrification across the Network

