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# **Version Control**

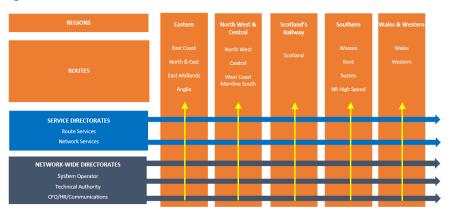
Version	Date	Description of Change		
0.1	09 August 2019	Consultation Document		
1.0	08 November 2019	Publication Document		

# 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.

#### **Operating Model**

Network Rail's operating model is divided into five regions across Great Britain; Eastern, North West & Central, Scotland's Railway, Southern and Wales & Western. These regions support 14 routes responsible for day to day delivery of train performance, maintenance and renewals. This new structure was introduced from June 2019 to bring our people closer to our passengers and the communities we serve, with a focus on operations to help us improve train performance. Our five regions are supported by network-wide functions and services. Our new Network Services directorate coordinates national initiatives that impact the operational railway such as freight, incident management, security and performance. Route Services will continue to provide business services delivered with a strong customer services culture.



#### **Regions and Routes**

Our route businesses are part of our corporate structure. They're not necessarily the same as the routes passengers will recognise from their journeys and often look quite different from them. More broadly, our regions encompass multiple routes and transport hubs to better align operations with passengers' and communities' needs.

Each of these routes is run locally so that we can work more closely with the relevant train and freight operating companies to better meet the needs of passengers and businesses.

Our routes operate, maintain and renew infrastructure to deliver a safe and reliable railway for passengers and freight customers.

#### **System Operator**

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.

#### **Network Services**

Network Services will look after key national functions effecting all of the regions and routes. It will promote the importance of the railway operating as a national network, driving up performance and delivering improvements for passengers and freight users. The Network Services function incorporates the previous Freight and National Passenger Operators (FNPO) route and central teams from finance & performance, incident management & operational security and performance improvement programme.

#### **Technical Authority**

As the technical authority, Safety, Technical and Engineering (STE)'s primary focus is to enable safety and performance across Network Rail. As a centre of excellence, STE use business intelligence to set strategic direction, capture and share best practice, and provide tools, guidance and resources that enable the Routes, Regions, and Corporate Functions to achieve targets.

#### The Office of Rail and Road

We are accountable to the Office of Rail and Road (ORR), the regulatory body for Great Britain, for compliance with the obligations 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.

#### Other industry stakeholders

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>. Other rail networks connected to our infrastructure are described in Section 3.2.2.



# 1.2 Objective 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.

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

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 nondiscriminatory 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 RailNetEurope (RNE), 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.

RNE is explained in more detail in <u>Section 1.10</u>.

# 1.3 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 by The Railways (Access, Management and Licensing of Railway Undertakings) (Amendment) Regulations 2019) (hereinafter referred to as "the Access, Management and Licensing Regulations") implement Directive 2012/34 establishing a single European railway area (known as the recast of the first railway package) and Directive 2016/2370 (amending Directive 2012/34, and known as the fourth railway package). The 2019 Regulations are stated to apply in Great Britain until 31 December 2020, after which time most of the changes made will cease to have effect. Directive 2012/34/EU reviewed the Network Statement requisites in its Article 27:

- 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 cooperation 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 <u>Regulation 13</u> of the Access, Management and Licensing Regulations. Additional requirements relating to conditions for rail infrastructure capacity are set out in (EU) <u>Regulation 2015/10</u>, procedures, criteria regarding framework agreements for the allocation of capacity are set out in (EU) <u>Regulation 2016/545</u> 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 (EU) 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 (EU) Regulation 2017/2177 and conditions for access to service facilities can be found in <u>Section 5.3</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 <u>The Railways and Other Guided Transport Systems (Safety) Regulations 2006 (ROGS).</u>

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>. 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 has to 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 Technical Specifications for Interoperability (TSI).

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.

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 Acceptance 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)</u> Regulations 2006.

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 June 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 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 Railways (interoperability) Regulations 2011, as amended by The Railways (interoperability) (Amendment) Regulations 2013, 2014 and 2015, which came into force on 16 January 2012. This replaces provisions in the Railways (Interoperability) Regulations 2006. The interoperability directive also mandates the common specification of a Register of Infrastructure (Commission Implementing regulation (EU) 2019/777 repealing implementing decision 2014/880 EU).

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 TSIs. While, Commission Delegated Decision (EU) 2017/1471 sets out the specific objectives for each TSI 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), are required to transpose the (EU) 2016/797 into national law by June 2020.

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

#### **Technical Specifications for Interoperability (TSIs)**

In May 2019 TSIs were published in the Official Journal of the European Union and many of the updates reflect policy set out in the Fourth Railway Package Technical Pillar Commission Implementing Regulation (EU) 2019/776 (in force from 16 June 2019) amending the following TSIs.

- CCS (EU) No 2016/919
- ENE (EU) No 1301/2014
- INF (EU) No 1299/2014
- LOC&PAS (EU) No 1302/2014
- SRT (EU) No 1303/2014
- WAG (EU) No 321/2013.

The Interoperability Directive (2008/57/EC) also requires the production of mandatory TSIs, which define the technical specifications required to underpin those essential requirements and harmonise the technical and operational characteristics of the rail network.

The TSIs apply to various structural and functional sub-systems, some of which are referred to as 'transversal', covering more than one sub-system. The <u>TSIs</u> are drafted by ERA and published by the European Commission.

Our adoption of the TSIs is a key element of compliance with the Railways (Interoperability) Regulations 2011. In order to underpin this importance, a number of initiatives have been put in place so that the Interoperability Regulations and TSIs 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.

In addition, we are also developing a <u>Register of Infrastructure</u> as specified in the European Commission implementing decision, and which will be used for assessing routes prior to the start of operation. See <u>Section 2.7</u> for more information.

#### A summary of the TSIs:

**Control, Command and Signalling (CCS) TSI** relates to the train control and train protection systems. The target technology of this TSI is European Rail Traffic Management System (ERTMS) but there is also an implication for the existing 'Class B' systems. <u>Section 3.3.3.1</u> outlines the ERTMS and Class B systems currently in use on the network.

Energy (ENE) TSI relates to the power supply and contact systems for providing energy to trains. The target technology for this TSI is 25kV AC OLE systems but the TSI makes provision for the 750v DC third rail contact system adopted in parts of the UK. <u>Section 3.3.2.6</u> provides an overview of the electrification systems currently in use on the network.

**Infrastructure (INF) TSI** 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) TSIs 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.

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

The **Operations and Traffic Management (OPE) TSI** is being taken into account in the development of our Traffic Management system.

#### **Telematic Application for Freight and Passengers**

**Telematics Applications for Freight (TAF) TSI** 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 TSI 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) TSI** 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 TSI.

Further information about the TAF TAP TSIs can be found on our website,

# 1.4 Legal status

#### 1.4.1 General remarks

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 <a href="Network Code">Network Code</a>, <a href="Engineering Access Statement">Engineering Access Statement</a> and <a href="Timetable Planning Rules">Timetable Planning Rules</a> which are referenced within this Network <a href="Statement">Statement</a>.

## 1.4.2 Liability

The Network Statement has been prepared for the benefit of existing and potential customers, and so as 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.

## 1.4.3 Appeals procedures

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 <a href="Timetable Planning Rules">Timetable Planning Rules</a>. Such challenges are heard by the relevant panel established under the <a href="Access Dispute Resolution Rules">Access Dispute Resolution Rules</a>, 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 2.3.

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 <u>Regulation 32(2)</u>. 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 <u>ORR's guidance on the Access, Management and Licensing Regulations</u>.

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 <a href="mailto:networkstatement@networkrail.co.uk">networkstatement@networkrail.co.uk</a> to do this.

# 1.5 Structure of Network Statement

The structure of this Network Statement follows the 'Network Statement Common Structure', adopted by European Infrastructure Managers that are members of RailNetEurope (see Section 1.10), 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 NS of other countries.

The Network Statement is thus structured in 6 chapters constituting the main document and appendixes giving further details:

- Chapter 1 gives general information about the Network Statement and contacts
- Chapter 2 defines the legal requirements and access proceedings to the railway network
- Chapter 3 describes the main technical and functional characteristics of the railway network

- Chapter 4 sets out the procedure for the allocation of the train paths
- Chapter 5 lists the services provided by and other service facilities managers
- Chapter 6 refers to the charging of the provided services as well as incentive schemes.

# 1.6 Validity and updating process

## 1.6.1 Validity period

The Access, Management and Licensing Regulations require us as an Infrastructure Manager 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 2021 Network Statement is for use for capacity requests for the 2021 timetable year (13 December 2020 to 11 December 2021). The 2022 Network Statement, valid for capacity requests for the 2022 timetable, will be published in October 2020.

## 1.6.2 Updating process

The Network Statement will be updated on our website as 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 5.2.3) 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 Statement has been downloaded (see Section 1.7), it will fall outside any change control process.

Many of the documents referenced by the Network Statement (such as the Network Code, Engineering Access Statement and Timetable Planning Rules) are subject to their own version control processes. The updated

versions of these documents will be available through the web-links we have provided within this document.

# 1.7 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.

## 1.8 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:

Rachel Gilliland

Head of Customer Relationship Management & Freight Policy

Network Rail

1 Eversholt Street

London NW1 2DN

Email: rachel.gilliland@networkrail.co.uk

For new freight customers, please contact:

**Guy Bates** 

Head of Business Development

Network Rail

1 Eversholt Street

London

NW1 2DN

Email: <a href="mailto:guy.bates@networkrail.co.uk">guy.bates@networkrail.co.uk</a>

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 <u>Operational Planning Production Schedule</u> (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

Milton Keynes

MK9 1EN

david.galloway@networkrail.co.uk

#### Other GB railway organisations

Access Disputes Committee

Floor 8

1 Eversholt Street

London

NW1 2DN

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

One Kemble Street

London

WC2B 4AN

http://ORR.gov.uk/

Rail Delivery Group 200 Aldersgate Street

London EC1A 4HD

http://www.raildeliverygroup.com/

Rail Safety and Standards Board

The Helicon

One 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

55 Broadway

42-50 Victoria Street

London

SW1H 0BD

https://tfl.gov.uk

Transport for Wales

Southgate 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.rfg.org.uk/

HS1 Limited
5<sup>th</sup> Floor
Kings Place
90 York Way
London
N1 9AG
http://www.highspeed1.com/

HS2 Limited
One Canada Square
London
E14 5AB

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

# 1.9 Rail Freight Corridors

The Regulation (EU) No. 913/2010 concerning a European rail network for competitive freight became effective on 9 November 2010. This Regulation required Member States to establish international market-oriented Rail Freight Corridors (RFCs) in order to meet the following goals:

- strengthening co-operation between IMs on key aspects such as the allocation of paths, deployment of interoperable systems and infrastructure development,
- finding the right balance between freight and passenger traffic along the RFCs, giving adequate capacity for freight in line with market needs and ensuring that common punctuality targets for freight trains are met,
- promoting intermodality between rail and other transport modes by integrating terminals into the corridor management process.

The detailed description of the Rail Freight Corridor in which we are involved, RFC 2, can found on the following website:

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

# 1.10 RNE - international co-operation between IMs

RailNetEurope (RNE) was created in January 2004 on the initiative of a number of European railway IMs and Allocation Bodies (ABs) who wished to establish a common, Europe-wide organisation to facilitate their international business.

#### RNE's aims

RNE is committed to facilitating international traffic on the European rail infrastructure. It provides support to RUs in their international activities (both for freight and passengers) and strives to increase the efficiency of the IMs'/ABs' processes. As a trans-European association, RNE plays a pivotal role in encouraging the industry to follow harmonised, transparent and non-discriminatory rules in the international railway business. Together, the Members of RNE are making international rail transport conditions more uniform and introducing a corporate approach to promote the European railway business for the benefit of the entire rail industry across Europe.

#### A coordination platform for the Rail Freight Corridors

In November 2013 the first six Rail Freight Corridors (RFCs) became operational and a network of Corridor One-Stop Shops (C-OSSs) was established. In November 2015 three additional RFCs were officially launched. RNE has provided support to the IMs concerned from the beginning and is now the coordination platform of the RFCs as regards operational business. RNE's tasks include ensuring that harmonised processes and tools are applied on various corridors to the benefit of Applicants, and of IMs and ABs that are part of several RFCs. As a consequence the RFCs have become Associate Members of RNE.

#### An umbrella organisation

In its day-to-day work, RNE's task is to simplify, harmonise and optimise international rail processes such as Europe-wide timetabling, sales (including Network Statements), traffic management and after-sales services (e.g. reporting). These tasks are carried out by <a href="four-standing-working-groups">four-standing-working-groups</a> and by ad-hoc project groups co-ordinated by the <a href="RNE">RNE</a> Joint Office, which is based in Vienna, Austria. RNE international working groups and boards are striving to make seamless cross-border rail services across Europe a reality – whether this is by creating common standards for data exchange, easing interpersonal communication between traffic control centres or agreeing timetabling procedures for new train path products. RNE also provides support to its Members as regards compliance with the European legal framework. Last, but not least, dedicated IT tools are also being streamlined and harmonised wherever necessary, and RNE's own IT systems are gradually being rolled out across Europe.

## 1.10.1 One Stop Shop (OSS)

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

RNE has established one OSS contact point in 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

Tel: +44 (0) 7767 672 488

Email: Steve.Rhymes@networkrail.co.uk

#### 1.10.2 RNE Tools

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

PCS is an international path request coordination system for Railway Undertakings (RUs) and other Applicants, Infrastructure Managers (IMs,) Allocation Bodies (ABs) and Rail Freight Corridors (RFCs). The internet-based application optimises international path coordination by ensuring that path requests and offers are harmonised by all involved parties. Furthermore, PCS is the only tool for publishing the binding PaP and RC offer and for managing international path requests on RFCs.

Access to PCS is free of charge. A user account can be requested via the RNE PCS Support: support.pcs@rne.eu.

More information can be found on <a href="http://pcs.rne.eu">http://pcs.rne.eu</a>.

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

The CIS is an infrastructure charging information system for Applicants provided by IMs and ABs. The web-based application provides fast information on indicative charges related to the use of European rail infrastructure and estimates the price for the use of international train paths. It is an umbrella application for the various national rail infrastructure charging systems.

Access to CIS is free of charge without user registration.

More information can be found on http://cis.rne.eu or can be requested via the RNE CIS Support: <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 [IM name]'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 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: <a href="mailto:support.tis@rne.eu">support.tis@rne.eu</a>.

More information can be found on <a href="http://tis.rne.eu">http://tis.rne.eu</a>.

#### **RNE Glossary**

RNE has created an easy to use, English-language Glossary of Terms related to Network Statements. The definitions the glossary are written in a clear language using as little technical or legal jargon as possible. They provide practical guidance to IMs, ABs and their customers. Please note the legal disclaimer, which stresses that the available material is for information purposes only and that definitions are not legally-binding. By using the glossary, you agree to the terms of the legal disclaimer.

# Chapter 2 - Access Conditions 2.1 Introduction

Chapter 2 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.

# 2.2 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. 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 3.3.1.3</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. For example, many freight terminals and depots, as well as non-Network Rail networks, were exempted by <a href="The Railways">The Railways</a> (Class and Miscellaneous Exemptions) Order 1994. 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 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.

The Access, Management and Licensing Regulations also provide applicants with rights of appeal (as described in <u>Section 1.4.3</u>).

The access regime under the Railways Act 1993, together with the Access, Management and Licensing Regulations where these apply, accordingly provide a regime that covers both international and domestic traffic.

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@networkrail.co.uk

## 2.2.1 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 2.2.2 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 'One Stop Shop' arrangements offered by another European IM or RNE (see Section 1.10.1) 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 <a href="Part J7">Part J7</a> of the Network Code 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.

# 2.2.2 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 <u>Section 2.2.3</u>
- having an appropriate documented description of the operator's safety management system and holding a current Part A and Part B safety certificate as detailed in the Railway Safety Directive 2004/49/EC, the Part B certificate being issued by ORR – see Section 2.2.4

- having appropriate insurance see <u>Section 2.2.5</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 2.7</u>.

#### 2.2.3 Licences

It 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 <u>Licensing of Railway Undertakings Regulations 2005</u> as amended by the <u>Access, Management and Licensing Regulations 2016</u>, then a European licence is normally required. A European licence may be granted by ORR, or by another Member State that has implemented the EU Directives relevant to the licensing of RUs. To operate and provide train services in GB, European licence holders must also hold a Statement of National Regulatory Provisions (SNRP). Applications for licences, exemptions or SNRPs should be made to ORR's <u>Licensing Team</u> (for ORR's full contact details, please see <u>Section 1.8.3</u>).

Both passenger and freight licences (or, in relation to European licences, the associated SNRP) 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 environmental policy with related operational objectives and management arrangements
- ticketing (passenger licences only)
- insurance (see <u>Section 2.2.5</u>).

## 2.2.4 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.

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 2.7</u> and <u>Section 2.8</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

### 2.2.5 Cover of liabilities

A train operator's licence, or SNRP, will contain requirements for insurance (including optional self-insurance) against third party liabilities. The required levels of insurance will normally be such as are set by ORR. In respect of third party liabilities, the current default minimum of indemnity insurance is set at £155 million cover per incident as required by the 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**:

# 2.3 General Business / Commercial Conditions

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 our website.

#### **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 4.4.2.2</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 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. 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.

#### Sale of Access Rights (SoAR) panel

Our Sale of Access Rights panel provides network-wide governance of the process to negotiate and agree the sale of access to train operators. The principal role of the SoAR panel is to ensure that we apply a consistent 19

approach across the network, as appropriate, and that we're making the best overall use of capacity at an acceptable level of performance.

The SoAR panel needs to authorise all our sales of access rights before industry consultation takes place and submission of the agreed track access contract to the Office of Rail and Road (ORR) for its approval. It also needs to approve our response to ORR with regard to any disputed applications. In certain cases derogations apply which remove the requirement for specific authorisation for agreed and disputed sales.

Further information of the process can be found on our 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 <a href="ORR's website">ORR's website</a>:

- For stations operated by Network Rail
  - Station access contract for passenger services
  - Station access contract for freight services
  - o 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.

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

#### General Approval for depots

Further information about General Approvals can also be found on <u>ORR's</u> <u>website</u>.

#### 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
- Guidance on securing access to the national rail network.

RUs seeking access to and use of other facilities connected to the main rail network should refer to <u>Section 5</u>, in particular as regards details of additional and ancillary services.

#### 2.3.1 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).

## 2.3.2 Contracts with non-RU applicants

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

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 for the below can be found on <a href="ORR's website">ORR's website</a>:

- Model connection contract (for connecting facilities to our network see also the Connection Contracts General Approval 2014)
- Model freight customer contract (for use by freight customers, e.g. logistics companies, seeking to secure track access rights but not necessarily operate a train themselves)

## 2.3.3 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 Glossary.

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

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 (see <u>Section 4.4.4</u>). The basis for ORR approval is set out in the <u>track access 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 2.3.2</u>.

Before concluding a new framework agreement or extending or substantially increasing the framework capacity of an existing framework agreement, we shall take into account in addition to our <u>Access Rights</u> Policy, 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 as provided for in Article 14 of Regulation (EU) No 913/2010;
- (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 Article 47 of Directive 2012/34/EU 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.

# 2.4 Operational rules

#### Railway Group Standards and the Rule Book

Railway Group Standards 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 (RGSs). 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 RISs cover. 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 TSIs for use on the GB mainline 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 TSIs, the closing out of open points in the TSIs 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 TSIs". Copies of all RGSs can be found in the <a href="Standards">Standards</a>
<a href="Catalogue">Catalogue</a> 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 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	Book title(s)
Eastern	Anglia, London and North Eastern
North West & Cental	London North Western
Scotland's Railway	Scotland
Southern	Southern
Wales & Western	Great Western

# 2.5 Exceptional Transports

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 Group Standard GO/RT3056/K (Working Manual for Rail Staff – Freight Train Operators - Vehicles Requiring Special Conditions of Travel), and GO/RT3056/J (Working Manual for Rail Staff – Freight Train Operators – Intermodal Traffic) which is accessible through RSSB's website at: http://www.rssb.co.uk.

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;
- 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 <u>Section 3.3.2.1</u> regarding loading gauge, <u>Section 4</u> regarding capacity allocation process and <u>Section 5</u> for details of other services provided by the IM.

RNE has a process for international RUs to supply the OSS (see <u>Section</u> 1.10.1) 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.

# 2.6 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 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 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 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 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 Goods: Approved Derogations and Transitional Provisions and

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 <u>Section 2.2.4</u> 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.

Please also see <u>Section 5.4.3</u> for details of the person to contact regarding applications to move dangerous goods, <u>Section 4.4</u> regarding capacity allocation processes and <u>Section 5</u> for details of other services provided by the IM.

# 2.7 Rolling Stock Acceptance Process Guidelines

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 Industry</u> <u>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. Further information about network change can be found in Section 3.3.2.8.

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 <a href="ORR's website">ORR's website</a>.

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-commercial-partners/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 RSSB website.

Further information regarding interoperability, ORR's role as the National Safety Authority and the authorisations it grants can be found on <a href="ORR's website">ORR's website</a> and the <a href="DfT's website">DfT's website</a> 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/

#### Register of Infrastructure (RINF)

A <u>Register of Infrastructure</u> has been developed as specified in the European Commission Implementing Decision (RINF Decision). The main purpose of the RINF is to provide transparency on the characteristics of the network. The information provided by the RINF is used for planning purposes in designing new trains, for assisting the assessment of compatibility of trains with routes before the start of operation and for use as a reference database.

The most recent RINF Decision (Decision 2014/880/EU from 26 November 2014) repeals the previous Decision 2011/633/EU and introduces a computerised common user interface (CUI) which simplifies queries of infrastructure data.

The register provides a consideration 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:

National Registration Entity Network Rail The Quadrant:MK Elder Gate Milton Keynes MK9 1EN

Tel: +44 (0) 1908 781 000

Email: RINF.NRE@networkrail.co.uk

#### **National Vehicle Register (NVR)**

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.

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

# 2.8 Staff Acceptance Process

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 <a href="Section 1.8">Section 1.8</a>) 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 <u>website</u>.

# Chapter 3 – Infrastructure

# 3.1 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 17), 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 runs from 1 April 2019 to 31 March 2024. (hereinafter CP6)

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
- stations
- 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/

#### **Asset Information**

The Asset Information Services organisation has been designed to serve as the trusted source of asset-related data, information and insight from which informed business decisions can be made that optimally and sustainably balance investment, safety risk and performance across the railway as a system and deliver for passenger and freight customers. Its services portfolio has been developed to transform the way data and information products are delivered across the rail industry, providing clarity and consistency to the specification, collection, evaluation and collation of data and the structured analysis and communication of asset information through visualisation tools and decision support modelling.

#### **Further information**

Detailed information and data about the infrastructure is contained in the Sectional Appendix, which is described in <u>Section 3.3.1</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.

## 3.2 Extent of network

### **3.2.1 Limits**

The Network Statement covers the entire railway infrastructure that we own and operate and defined as the main rail network in <u>Section 1.1</u>. It

also includes some information on connecting infrastructure such as freight sidings, depots and rail-connected ports. Broadly, we own and operate the main line railway network in England, Scotland and Wales. Our operating model is described in <a href="Section 1.1">Section 1.1</a>. 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 <a href="Engineering Access Statement">Engineering Access Statement</a> described further in <a href="Section 4.5.1">Section 4.5.1</a>) and subject to the allocation of capacity for these purposes (as described in <a href="Section 4.5">Section 4.5</a>), 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, a <a href="Compendium of signal box opening hours">Compendium of signal box opening hours</a> and <a href="the Timetable Planning Rules">the Timetable Planning Rules</a> (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. 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 website</u>.

## 3.2.2 Connected railway networks

Our infrastructure, the main rail network, is connected to the railway infrastructure owned 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="http://highspeed1.co.uk/regulatory/network-statement">http://highspeed1.co.uk/regulatory/network-statement</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/eurotunnel-group/Eurotunnel-Railway-Network/">http://www.eurotunnelgroup.com/uk/eurotunnel-group/Eurotunnel-Railway-Network/</a>
- 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="http://www.heathrow.com/company/company-news-and-information/rail-regulation">http://www.heathrow.com/company/company-news-and-information/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>.
- 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 3.6.2</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>.

# 3.3 Network Description

# 3.3.1 Geographical Identification

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-commercial-partners/information-operating-companies/national-electronic-sectional-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>.

### 3.3.1.1 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 Sectional Appendices.

## 3.3.1.2 Track gauges

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

#### 3.3.1.3 Stations and nodes

There are 2,565 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
- Liverpool Lime Street
- London Bridge
- London Cannon Street
- London Charing Cross
- London Euston
- 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
- Dunrobin Castle
- Fishguard Harbour
- Horwich Parkway
- Prestwick International
- Southend Airport
- Stranraer Harbour
- Warwick Parkway

For further information relating to these stations please contact our <u>Leasing Manager</u>.

<u>Section 5.3</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 3.3.1</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.

## 3.3.2 Capabilities

#### Freight train capability - advice and support

We appreciate that the guidance given in this section is technically complex. If you do not have access to any of the sources of data referred to or are in need of further guidance please email our <u>Access Coordinator</u> with your requirements.

#### **Network capability**

Network capability includes the linespeed, gauge, route availability and electrification capability of the network. The capability of the network is published in the National Electronic Sectional Appendix (NESA).

#### **Network Change**

A network change is a change which is likely to have a material effect on the operation of the network or on the trains that operate on the network. network changes can either be:

- physical e.g. changes to the layout, configuration or condition of the network
- operational e.g. the introduction of a speed restriction on a section of track or a change to the way we maintain the track.

Operational changes are only classed as network changes if they last, or are likely to last, for more than six months.

The below are published on our website.

- every completed and current network change proposal
- every response to a network change
- determinations of matters referred to ADRR
- authorised variations
- standard forms for requesting, issuing and responding to network change proposals
- model terms and conditions

Further details regarding the network change process can be found in <u>Part</u> G of the Network Code.

#### Discrepancies between actual and published data

Discrepancies between the actual and published capabilities of the network are published in the <u>Annual Return</u>.

## 3.3.2.1 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 <u>our website</u>.

This link 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 3.3.1</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 3.3.1. 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 2.7 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 3 – December 2015) '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 on our website.

Examples of load conditions within standard gauges						
Unit Width	Container			Container		
Wagon	8'			2500mm		
Туре	FEA	IFA	IKA	FEA	IFA	IKA
Maximum			'		'	
Unit	Feet, inches			mm		
Height						
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 3.3.1.

## 3.3.2.2 Weight Limits

In Great Britain, the rules for determining the Route Availability (RA) value of a vehicle are set out in the RGS GE/RT8006 (Assessment of Compatibility of Rail Vehicle Weights and Underline Bridges), which is 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/our-routes/

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 Sectional Appendix in relation to this capability give rise to a need for clarification, enquiries should be made to the contact points given in <u>Section 1.8</u>.

A more detailed expression of the RA for each operational route section is contained in the Sectional Appendix. It should be noted that in some cases the passage of traffic heavier than the capability of structures may be permitted, subject to operating restrictions.

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 maximum RA for freight traffic at 75mph is RA8
- capability stated as RA9 or RA10 is for a maximum speed of 60mph (50mph on South East and Wessex Routes)
- capability stated as RA8 is for speeds in excess of 60mph up to a maximum of 110mph
- capability stated as RA7 is for speeds in excess of 110mph up to a maximum of 125mph.

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
- RA for EPS speed 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 in excess of 90mph 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. 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. 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 <u>guidance</u> 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).

### 3.3.2.3 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 3.A</u>.

## 3.3.2.4 Line speeds

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 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 <u>Section 3.3.1</u>.

#### 3.3.2.5 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 4.4.1.1</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 2.4.3</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.

#### 3.3.2.6 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).

We can also accommodate trains on our network that have more than one form of traction. These trains are referred to as bimodal trains. Bimodal 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.

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 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 5.A</u>. Further details of upcoming electrification works can be found within our <u>Enhancements Delivery Plan</u>.

#### 3.3.3 Traffic control and communication systems

Traffic control is exercised through a network of Route Control Offices. A 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. In the following sections we set out details of the principal systems of control and communication.

#### 3.3.3.1 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 remote control 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 recontrolled 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 train can run at.

The signals themselves on principal routes are either the multiple aspect colour-light type or semaphore signals. Trains are detected by means of track circuits or axle counters. On some routes, train detection may be

limited and train movements controlled by means other than lineside signals.

The purpose of signalling systems is to run trains safely and efficiently. The signalling systems takes in information about the position 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 block system are:

- Track circuit block
- Absolute block.

Other types of block systems currently in use include:

- Electric 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**

We utilise a variety of technologies to route trains according to the timetable or immediate need. Digital computer-based train control and routing systems are used for all new signalling schemes. 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 manage trains more strategically. They enable timetable and operational plans to be altered 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 signalling is in operation on the Cambrian Lines route. In this system, trains report their location via radio to a central processing system. The central system 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. 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. ETCS may operate in conjunction with lineside signalling such as on Thameslink core and GWML.

Further information on our signalling systems can be found on our website.

#### 3.3.3.2 Traffic control systems

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.

#### 3.3.3.3 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.

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/ Rail Operating 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/ Rail Operating Centres). 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 Commercial Off The Shelf (COTS) technology and enabling the foundations of a Digital Railway.

Distribution and access networks utilising the core are being deployed and at present the number of live nodes exceeds 140. 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 CAS-T.

#### **GSM-R**

GSM-R is a secure radio system used for communication between drivers and signallers that has been introduced through a national programme as a direct replacement for NRN and CSR. It allows signalling staff to address drivers of individual trains based on train head code rather than stock number and to enable Railway Emergency Calls and other 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 e.g. in Cambria and on the central section of Thameslink.

The national programme to deliver the GSM-R network was completed in July 2014. Fleet fitment, including Heathrow Experess and HS1 was

completed in 2016. GSM-R, an essential subsystem of ERTMS, is mandated by the EC CCS TSI. (European Commission – Control Command and Signalling – Technical Specification for Interoperability).

#### 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 (equivalent 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.

#### 3.3.3.4 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.

#### 3.4 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 3.3.1</u>)

#### 3.4.1 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

#### 3.4.2 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. On the discharge / and or deposit of waste from train toilets, we recognise the exemption that covers some old rolling stock which has no capacity to have grey water and toilet waste retention tanks retrofitted. In such cases, as stipulated in the exemption, discharges on the track may happen but must not exceed 25 litres of water per discharge.

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.

#### 3.4.3 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 (7.25 kilometres) section of the network. The tunnel is located between Pilning (Avon) and Newport (South Wales). An alternative route is available via Gloucester.

#### 3.4.4 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 3.3.1</u> for further information.

#### 3.4.5 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 <a href="Section 3.3.1">Section 3.3.1</a> for further information.

#### 3.4.6 Restrictions due to natural elements

Restrictions are imposed from time to time to manage the risk associated with adverse or extreme weather. These restrictions may consist of speed restrictions, train service reductions, or complete suspension or curtailment of services. We have defined procedures for dealing with these issues which, broadly speaking, fall into two categories:

Direct impact of weather or seasonal factors:

- high wind speeds or gusting in excess of 50 mph, including the impact upon overhead line equipment (25kV AC electric traction system)
- high tides which could breach exposed sea defence walls
- precipitation (rain or snow), including the impact of flooding, flash floods, embankment saturation and snow drifts
- extremes of temperature, including high rail temperatures, icing upon the conductor rail (750V dc electric traction system), icing on overhead line equipment, icicles.

Indirect impact of weather or seasonal factors:

• poor railhead adhesion caused by leaf fall contamination.

### 3.5 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 4.5</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.

#### 3.6 Service facilities

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.

A "service facility" means the installation, including ground area, building and equipment, which has been specially arranged, as a whole or in part, to allow the supply of one or more of the services listed in paragraph 2, 3 or 4 of Schedule 2 of the Access, Management and Licensing.

Operators of service facilities shall make publicly available the service facility description free of charge, in one of the following ways:

- by publishing it on their web portal or a common web portal and providing the infrastructure managers with a link to be included in the network statement;
- by providing the infrastructure managers with the relevant and ready-to-be-published information to be included in the network statement.

ORR's has published <u>additional guidance</u> on it's website.

#### RailNetEurope - Common Template

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

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 <a href="MetworkStatement@networkrail.co.uk">NetworkStatement@networkrail.co.uk</a> for publication.

#### **Network Rail's Service Facility Information**

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. This document 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.

#### 3.6.1 Passenger stations

Details of facilities at the 20 stations we manage (as listed in <u>Section</u> 3.3.1.3) are available on <u>our website</u>.

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.

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 2.7</u> and detailed information about the infrastructure is contained in the Sectional Appendix, which is described in <u>Section 3.3.1</u>.

#### 3.6.2 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 Freight Contacts List if you have any additional queries.

# 3.6.3 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 Section 4.

#### 3.6.4 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 <u>Section 4</u>.

#### **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.

#### 3.6.5 Maintenance facilities

Though some light maintenance depots are owned by us and leased to other operators, as IM, we do not operate nor offer facilities at such depots.

The operator of a depot is known as a depot facility owner. Other train operators, or third parties procuring depot services on behalf of a train

operator (known as beneficiaries), who want to use the depot must enter into an access contract with the relevant depot facility owner. ORR's approval of the agreement is usually required. Please refer to the Connected Facilities Details (Section 5.2.3) for more information.

# 3.6.6 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.

There are 222 such installations, predominantly on routes with significant freight traffic operating over long distances.

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

This equipment consists of fibre-optic sensors mounted under the rail, lineside Radio Frequency Identification Tagreader 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 <a href="Network Rail Standard">Network Rail Standard</a> (NR/SP/TRK/0133).

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.

There are 28 WILD installations across the network. A list of these installations and their location is provided on <u>our website</u>.

#### **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 Sections 3.6.5 and 5.3.1.5

#### 3.6.7 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 Freight Locations portal</u>, or where provided as part of our service provider information list.

Additionally maps showing ports and their associated rail connections can be found on the European Commission's website.

#### 3.6.8 Relief Facilities

The term 'relief facility' is undefined within national and European legislation, however it is defined within the <u>RNE's Glossary</u> as "areas, equipment 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.

#### 3.6.9 Refuelling facilities

We do not operate nor offer any diesel refuelling facilities. Any RU wishing to use fuelling facilities would need to reach an agreement with the relevant facility owner, often the owner of a light maintenance depot.

Provision of water for steam locomotives is not offered as standard and is usually undertaken by the RU. There are situations where we may be able to assist with provision of water for steam locomotives however this cannot be guaranteed, this is dependent upon location and will be considered on a case by case basis.

# 3.7 Service facilities not managed by Network Rail

Further details can be found on our website.

### 3.8 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.

In CP6 infrastructure projects will be progressed through a pipeline approach with incremental investment decision points, which aligns to the recommendations of the <u>Bowe review (Dame Colette Bowe's review of the planning of Network Rail's enhancements programme for Control Period 5, from 2014 to 2019). For DfT-funded projects, more details of how this works are set out in the <u>Rail Network Enhancements Pipeline (RNEP)</u>.</u>

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 the <a href="Enhancements Delivery Plan">Enhancements Delivery Plan</a> which is updated quarterly.

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

#### Long-term planning activities

Our long-term planning activities incorporate the views of our stakeholders on how the rail industry can drive and support economic growth, and give passenger and freight train operating companies the confidence to take their own strategic decisions in planning the future of their services.

We have designed our planning processes to be flexible. It is important to us to consider the views of our customers, the rail industry, funders and specifiers and to develop the network to meet everyone's needs.

Our planning processes look at the long-term capability of the network up to 30 years into the future so that we can promote efficient use of network capability and capacity

These activities fulfil our licence obligations to plan the future capability of the network.

Further information on long-term planning and previous outputs from this can be found on our website.

#### **Open for Business**

We're making it easier for other organisations to invest in the railway. We've published a list of opportunities for third parties to fund, finance or deliver improvements and have committed to keeping it regularly updated. We're introducing contestability and offering projects out to market which previously only Network Rail could deliver. To support this new way of working, we're increasing our capacity and capability by putting in place a dedicated project financing team who can facilitate and manage the extra interest from the market. And a new team of business development directors stationed across the country, will guide investors through their project from start to finish.

If you are interested in investing in or building on the railway, please contact your local business development director. Their details can be found on the opportunities for third parties page.

# Chapter 4 – Capacity Allocation

### 4.1 Introduction

We are responsible for the overall <u>timetabling process</u> 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 2.2.1).

#### 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 Description of process

How capacity is allocated is set out in <u>Part D of the Network Code</u>, Section 2 (please see <u>Section 2.2.1</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/

We are a member of North Sea-Mediterranean Rail Freight Corridor, the capacity allocation process for which is located in Book IV of their <u>Corridor Information Document</u>. Information regarding pre-arranged paths can be found on the <u>Corridor's website</u>.

Customers with international train slot requests may also take advantage of the <u>One Stop Shop</u> arrangements described in <u>Section 1.10.1</u> and referenced in the Network Code Part D.

# 4.3 Schedule for Path Requests and Allocation Process

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. To allow RUs to fine-tune their services mid-way through the year, a new updated timetable is published each May. This is known as the Subsidiary Timetable.

The 2021 Principal Timetable runs from Sunday 13 December 2020 to Saturday 15 May 2021, and the Subsidiary Timetable runs from Sunday 16 May 2021 to Saturday 11 December 2021.

The key dates for the production of the 2021 Principal Timetable (December 2020 change date) are set out in <u>Annex 4.A.</u>

Following the priority date (Friday 6 March 2020 for the Principal Timetable and Friday 7 August 2020 for the Subsidiary Change), we 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 discharges 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 2021 will be published on 12 June 2020 and 13 November 2020. 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.

#### 4.3.1 Schedule for Working Timetable

Each year at D-73 (19/07/2019) before the principal timetable change date we publish a schedule of dates for timetable production. This is set out in Annex 4.A 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 (Operational Planning Production Schedule) 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 1.8">Section 1.8</a> above and on <a href="Our website">our website</a>.

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 Timetable Change Risk Assessment Group (TCRAG) chair shall review all timetable changes for their significance and determine 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 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.

# 4.3.2 Schedule for Train Path Requests Outside the Timetabling Process (Ad-Hoc Requests)

After the new Working Timetable is published 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 12 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.

### 4.4 Allocation processes

#### 4.4.1 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 D2 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 D7. A draft version of the 2021 Calendar of Events is due to be published at D-64 (20 September 2019). The final version of the Calendar of Events is due to be published at D-54 (29 November 2019).

We have published a <u>Strategic Capacity Statement Code of Practice</u> (as part of Operational Rules). This sets out how we will produce the <u>Strategic</u>

<u>Capacity Statement</u>, which details the strategic paths that are identified for potential future use on key routes on our infrastructure. The Strategic Capacity Statement for the 2021 Principal Timetable is due to be published at D-45 (31 January 2020).

#### **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 national methodology for the <u>Timetable Planning Rules</u> change 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 such data as standard timing points, sectional running times for specific train types, headway and margin limits to be maintained between trains, station working rules 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 (22/11/2019). We then work on advanced proposals from D-55 (22/11/2019) to D-40 (06/03/2020). The latest schedule of dates for the timetabling process can be found in <a href="#">Annex 4.A</a>.

RUs wishing to amend their services should send us an access proposal. Access proposals received by the priority date at D-40 (06/03/2020) 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.

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 (06/03/2020) and D-26 (12/06/2020). The New Working Timetable is published at D-26 (12/06/2020). If we are unable to find compliant slots for all Access Proposals and Roll 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 <a href="Part">Part</a>
D4.6 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) seeking consistency with any relevant Route Utilisation Strategy
- (h) that, as far as possible, International Paths included in the New Working Timetable at D-48 (11/01/2019) 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; and
- (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.

#### 4.4.2 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 Section 1.8.3).

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 the 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.

# 4.4.3 Congested Infrastructure: Definition, Priority Criteria and Process

We consulted industry parties during 2015 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 <a href="Code of Practice">Code of Practice</a>.

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

# Midland Main Line (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. The subsequent capacity analysis and capacity enhancement plan are published on <u>our website</u>.

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.

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

The route was declared as congested infrastructure in April 2019 because, based on consideration access proposals received in 2019, we consider the infrastructure to become congested during 2019, to the extent that it will not be possible to accommodate all access proposals received.

The <u>Castlefield Corridor congested infrastructure report</u> can be found on our website.

#### 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.

#### 4.4.4 Impact 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 4.3, 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 (as defined in Section 82(2) of the Railways Act 1993)
- Secondly to firm access rights exercised at the priority date which cover part of the timetable period and 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 Regulation (EU) 2016/545, 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.

The requirements concerning the proportion of framework capacity that shall be used by the parties to the framework agreements is outlined in <a href="Part J of the Network Code">Part J of the Network Code</a>, further information can be found in <a href="Section 4.6">Section 4.6</a>

# 4.5 Allocation of Capacity for Maintenance, Renewal and Enhancements

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'.

Major changes are consulted upon once a year for the principal timetable, this is between D-64 (20 September 2019 and D-60 (18 October 2019). Version 1 is issued as a draft at D-59 (25 October 2019) and Version 2 issued as a final version at D-44 (7 February 2020), in readiness for the start of the timetable development process at D-40 (6 March 2020). For the subsidiary timetable a Version 3 is issued as a draft at D-59 (27 March 2020), with Version 4 issued as a final version at D-44 (10 July 2020). 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>Part D4.6 of the Network Code</u>. This document is subject to a right of appeal.

Once agreed, this document forms our firm rights for running Network Trains and allocating capacity for the purpose of undertaking engineering activities.

The procedures for scheduling planned and unforeseen maintenance work are set out in Sections D2 and D3 of the Network Code respectively. The former involves the production of an Engineering Access Statement which is described further in <u>Section 4.5.1</u>.

#### **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'.

### 4.6 Non-Usage / Cancellation Rules

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 PartJ4.

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

# 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 <u>Section 2.5</u> and <u>Section 2.6</u>.

# 4.8 Special Measures to be Taken in the Event of Disturbance

#### 4.8.1 Principles

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 are set out in the Railway Operational Code – please see Section 2.4.1.

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.

#### 4.8.2 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 – please see Section 2.4.1.

#### 4.8.3 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.

#### 4.8.4 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.

# 4.9 Allocation of Capacity for Service Facilities

Capacity for service facilities we manage is allocated in the same manner as outlined in <u>Section 4.4</u> above. Please see <u>Section 5</u> for more on service facilities.

# Chapter 5 – Services

### 5.1 Introduction

EU Directive 2012/34/EU (as amended) and the Access, Management and Licensing Regulations provide applicants (RUs and others) with an entitlement to a set of services for domestic and international rail traffic. The regulations create a presumption of access and provide the right for any applicant to apply for access to a range of services and facilities to operate rail services. The entitlement does not apply to certain infrastructure and networks which are identified in Regulation 4(7), including:

- stand-alone local and regional networks for passenger services on railway infrastructure;
- networks intended only for the operation of urban or suburban passenger services; and
- networks situated within a factory, nuclear site, or a site housing electrical plant, within a mine or quarry, used solely in connection with the carrying out of any building works or within a military establishment that are used only by the person responsible for that network for the purposes of freight operations connected with the premises or building works.

Under <u>Regulation 6</u> access to service facilities may only be refused if a viable alternative means of the service being provided under market conditions exists. A viable alternative means access to another facility which is economically acceptable to the RU, and allows it to operate the passenger or freight services concerned.

Additional services and ancillary services will supplied in a nondiscriminatory manner. <u>Additional services</u> will be supplied upon request, whilst <u>ancillary services</u> will be supplied if a decision has been made to provide the services within the facility in question. Where the services are provided by one supplier only, the charges imposed will not exceed the cost of providing it, plus a reasonable profit. Additional information of charges can be found in <a href="#">Chapter 6</a>.

There are rights of appeal to ORR (see <u>Section 2.1</u>). ORR has also developed guidance for appeals made under the Regulations:

#### http://orr.gov.uk/rail/access-to-the-network/track-access/guidance

The services fall into the following categories, set out in paragraphs 1-4 of Schedule 2 to the Access, Management and Licensing Regulations:

### 5.2 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.

#### 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 at:

https://www.networkrail.co.uk/industry-commercial-partners/information-operating-companies/network-statement/

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 <u>email. Parties</u> requiring access to certain connected facilities (for example some light maintenance depots and stations) may need an access contract, as described in <u>Section 2.1</u>.

# 5.3 Access to service facilities and supply of services

#### 5.3.1 Access to service facilities

#### 5.3.1.1 Passenger stations

<u>Section 3.6.1</u> provides further information regarding passenger stations on the rail network. Of more than 2,550 stations in operation we only operate 20 of the largest in Great Britain.

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 18 stations which it operates, and otherwise normally the relevant RU), as described in <u>Section 2.1</u>. 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.

#### 5.3.1.2 Freight terminals

There are numerous freight terminals connected to the main rail network – see <u>section 3.6.2</u>. Some of these are owned by us and leased to other parties to operate; others are owned by third parties. Freight terminals are operated by private companies, including some freight RUs, with the benefit of a connection agreement with us, governing the terms of connection.

The use of such freight terminals is a matter for agreement with the terminal facility owner is described in <u>Section 2.1</u>, where access is governed by the Railways Act 1993. ORR may be asked to direct that access rights are granted, if the parties have not reached agreement.

Where access or service provision is governed by the Access, and Management and Licensing Regulations, there is a right of appeal to ORR as regards the terminal facility owner's decisions in relation to this.

# 5.3.1.3 Marshalling yards and train formation facilities, including shunting facilities

Freight services on the GB railway network generally run as block trains direct from origin to destination without the need for intermediate marshalling with other wagons. Some freight train operating companies operate a small number of yards where their pattern of trunk and feeder service requires trains to be re-marshalled.

To obtain further details, please refer to <u>Section 3.6.3</u> or contact:

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

Tel: +44 (0) 7825 376 699

Email: <a href="mailto:guy.bates@networkrail.co.uk">guy.bates@networkrail.co.uk</a>

If information is required on locations of these facilities, please refer to the relevant regional contact; details can be found at:

#### https://www.networkrail.co.uk/industry-commercial-partners/rail-freight/

Train formation and preparation is generally carried out by RUs using facilities owned or leased by them, although this may also take place at network sites. To obtain further details, please refer to <u>Section 3.6.3</u> or contact Guy Bates, see above.

If information is required on the location of these facilities, please contact the relevant Senior Route Freight Manager / Route Freight Manager; see Section 3.6.3 (above).

#### 5.3.1.4 Storage sidings

Rolling stock which is not in service is generally stabled at facilities owned or leased by RUs. Alternatively, the ability to stable rolling stock in specified sidings (network sidings) on the main rail network may be granted as part of the access rights under a track access contract.

If information is required on locations of these facilities, please contact the relevant Senior Route Freight Manager / Route Freight Manager; see Section 5.3.1.3.

#### 5.3.1.5 Maintenance facilities

There are around one hundred and 20 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 are treated as separate facilities. If a RU requires access to a light maintenance depot, it will need to enter into an access contract with the facility owner as described in <u>Section 2.3</u>. 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.

Under the Railways Act 1993, RUs and others may only enter into a contract with a facility owner (e.g. Network Rail or another 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.

Information about connected facilities is contained in <u>Section 5.2.3</u>.

# 5.3.1.6 Other technical facilities, including cleaning and washing facilities

These may be provided by the operators of light maintenance depots (see Section 5.3.1.5), but we do not provide these directly.

#### 5.3.1.7 Maritime and inland ports

These may be provided by the operators of rail connected facilities, but we do not provide these directly.

Further information about maritime and inland port facilities can be found on our website or at <a href="https://railfacilitiesportal.eu/">https://railfacilitiesportal.eu/</a>.

#### 5.3.1.8 Relief facilities

The term 'relief facility' is undefined within national and European legislation, however it is defined within the <u>RNE's Glossary</u> as "areas, equipment and infrastructure to be used to overcome a disruption". We will use our assets and colleagues to operate the network in accordance with best practice to facilitate the carriage of passengers and goods across our network.

#### 5.3.1.9 Refuelling facilities

Refuelling facilities may be provided by the operators of light maintenance depots (see Section 5.3.1.5), but we do not provide these directly.

#### 5.3.2 Supply of services in service facilities

#### 5.3.2.1 Shunting

RUs are responsible for the supply, or arranging for the supply, of shunting and other services for their own trains.

#### 5.3.2.2 Other services

These may be provided by the operators of light maintenance depots (see Section 5.3.1.5), but we do not provide these directly.

### 5.4 Additional services

#### 5.4.1 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 5.A).

#### 5.4.2 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.

# 5.4.3 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 2.5</u> and <u>Section 2.6</u>.

For advice on the transport of exceptional loads please contact:

Gemma Burgess Access Co-ordinator

Network Rail

1 Eversholt Street

London

NW1 2DN

Tel: +44 (0) 20 3356 9562

Email: Gemma.Burgess@networkrail.co.uk

For advice on the transport of dangerous goods please contact:

Paul Ashton

Head of Operations Principles and Standards

Network Rail

The Quadrant:MK

Milton Keynes

MK9 1EN

Tel: +44 (0) 7799 864 192

Email: Paul.Ashton2@networkrail.co.uk

#### 5.4.4 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

#### 5.5.1 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 3.3.3.3</u> is primarily for those activities contained within the minimum access package.

#### 5.5.2 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>.

#### 5.5.3 Technical inspection of rolling stock

We do not provide this service, it may be carried out by relevant depot or facility owners – see <u>Section 5.2.3</u> for more information.

#### 5.5.4 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 3.3.1.3</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.

#### 5.5.5 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 5.2.3) for more information.

# Chapter 6 - Charges

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

#### 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.

### 6.1 Charging Principles

The below market segments reflect Article 32.1 of Directive 2012/34/EU (transposed into law in Great Britain by 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
- freight (segmented by commodity).

The list of market segments is to be reviewed at least every five years and the regulatory body referred to in Part 6 of the Regulations shall control that list. This allows for the UK's periodic review process to enable this obligation to be met by the existing regulatory regime. We engaged closely with the industry throughout the process for CP6, and published all of our consultation and conclusion documents on our <a href="website">website</a>. These documents provide more detail in relation to how the different charges discussed below were developed for CP6.

#### **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.

### 6.2 Charging system

Charges are set out in the track access contracts through which we grant permission to RUs to use the main rail network. These contracts require ORR's approval, and hence this approval extends to the charging arrangements within them. The model forms of contract approved by ORR contain provision for ORR to review those charging arrangements, including on a periodic basis, normally every five years.

#### In broad terms:

- ORR is responsible for developing the charging framework and we are responsible for calculating all existing track access charges within this framework. Ultimately, however, the level of track access charges is determined by ORR. Access Charges are set by ORR so as to be consistent with a position in which, under normal business conditions and over a reasonable time period, our income from such charges together with surpluses from other commercial activities and any public funds shall at least balance with infrastructure expenditure; and
- the basic cost of providing the main rail network, after taking account of other revenue sources, is met by charges to RUs.

#### 6.3 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 in <u>Section 6.6</u>.

#### 6.3.1 Minimum Access Package

This section discusses in detail the track access charges, including those that comprise the minimum access package (as set out in <u>Section 5.2</u>) that we levy on RUs.

The CP6 charges which are applicable from 1 April 2019 to 31 March 2024 can be found on our website.

#### Variable Usage Charge (VUC)

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 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 cost of track maintenance and renewal varies with factors such as axle load, speed, unsprung mass and yaw-stiffness. The higher a vehicle's axle load, speed, unsprung mass and yaw-stiffness the higher the consequent infrastructure maintenance and renewal costs. 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 nationally as there are currently no variations by area or region.

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</u> is also available on our website 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.

First, for freight wagons, adjustments are made to variable usage charges to reflect the relative 'track friendliness' of the suspension/bogie type. The purpose of this adjustment is to incentivise the use of 'track friendly' suspension/bogie types which will result in lower infrastructure costs. This adjustment ranges from a reduction of 14.2 per cent to an increase of 9.8 per cent and is based on a particular freight wagon's Ride Force Count. The Ride Force Count is a metric developed to provide a quantitative assessment of the 'track friendliness' of a wagon's suspension/bogie type, following vehicle dynamics modelling. The introduction of the Ride Force Count methodology was new for CP5 and replaces the previous methodology which allocated a freight wagon to a 'suspension band' based on a qualitative description of the wagon's suspension/bogie type. A key benefit of introducing the new Ride Force Count methodology is that it removes the, arguably, more subjective approach applied previously (i.e. the adjustment to charges is now based on a definitive Ride Force Count value rather than a qualitative description of wagon suspension/bogie types).

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 over time 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 paid 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 indexed, annually, to 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:

EC4T charge  $(\mathfrak{L})$  = 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> charges page.

<u>On-train metering</u> (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.

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

EC4T charge (£) = [electricity consumption (kWh) x (1+%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 <a href="here">here</a>.

Traction electricity tariffs are made up of 'energy' and 'delivery' tariffs. 'Delivery' tariffs vary by geographic areas or Electricity Supply Tariff Areas (ESTAs) and 9 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 the 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. Supplementary charges or rebates to RUs, as a result of the volume reconciliation, are calculated. This process confirms 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 the cost reconciliation . This reconciles the difference between electricity tariffs billed against the actual cost. The cost reconciliation confirms 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 bimodal trains. Bimodal

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 bimodal 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 or not. These trains are not deemed to be using traction electricity when they are operating on non-electrified infrastructure.

Metered bimodal 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, Article 32 (1) of the Directive 2012/34/EU, 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 indexed, annually, to the Consumer Prices Index.

#### **Access Charge Supplements**

Access Charge Supplements, paid by franchised and some open access RUs, recover the cost to us of having to pay compensation 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 indexed, annually, to the Consumer Prices Index.

#### **Fixed Track Charge**

The purpose of the Fixed Track 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 Charge is payable by franchised passenger RUs on an operator-specific basis. This charge is payable by franchised passenger train operators only.

Fixed track 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 3 of the of our key assumptions.

For CP6, ORR has introduced the 'Fixed Track 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 at the start of the Control Period. Network Rail's maximum downside financial exposure as a result of the 'Fixed Track Charge Wash-Up' is 1% over the Control Period (c.£50m).

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

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

#### **Open Access Infrastructure Cost Charge**

Infrastructure Cost Charges will be levied on some open access services from CP6. 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, has been deemed to be able to bear such charges. Infrastructure cost charges will be levied on new entrant open access services that operate (or partly operate) within the 'interurban' market segment. A service (or part of a service) between pairs of stations meeting the following criteria:

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

Existing open access services that currently operate within the interurban market segment will not be subject to the charge, unless 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.

The Open Access Infrastructure Cost Charge 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 set out in the relevant RU's track access contract.

#### **Scarcity charges**

Current charging arrangements do not include scarcity charges.

#### 6.3.2 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 as set out in <u>Section 5.3</u>.

Under these regulations, we may recover the costs associated with the following charges:

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

#### **Scarcity Charges**

Current charging arrangements do not include scarcity charges.

#### 6.3.3 Supply of services referred to in Section 5.3

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.

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:

- 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.
- 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; and
- 6. Summing each of the elements, above, to calculate individual managed station long term charges.

Both franchised and managed Station Long Term Charges are set by ORR in 2017/18 prices for the control period and indexed, annually, to the Consumer Price Index.

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

Property rent is paid by station operators 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.

At Network Rail managed stations QX is fixed for five years, whearas at Network Rail franchised stations it is renegotiated annually. Thie charge can also vary each year by an agreed efficiency target at each station (if applicable).

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**

GB track access charges do not include any environmental charges (cf. Article 31 of <u>EU Directive 2012/34/EU</u>). However, Part E of the Network Code provides for recovery of costs in relation to environmental conditions arising out of RUs' activities. Discounts, if given, are required to comply with Article 9, and these are referred to later in this section. Article 10 enables member states to put in place compensation schemes for the use of railway infrastructure which relate to the demonstrably unpaid environmental, accident and infrastructure costs of competing transport modes, insofar as these costs exceed the equivalent costs of rail. No such scheme has been implemented in Great Britain for the direct reduction of access charges; however, the websites of the <u>Department for Transport</u> and <u>Transport Scotland</u> may be consulted for the availability of grants 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.

#### 6.3.4 Additional services

Additional services are referred to in <u>Section 5.4</u> and 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 <u>Network Rail's website</u>.

#### 6.3.5 Ancillary services

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 6.1</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.

With regards to further information regarding ancillary services, please see Section 5.5.

### 6.4 Financial penalties and incentives

#### 6.4.1 Non-usage/cancellation fees and charges

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

#### 6.4.2 Reduction fee for Framework Agreements

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

#### 6.4.3 ERTMS Discounts

At present there are no standard ERTMS Discount arrangements.

#### 6.5 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 <a href="Section 2.3.2.1">Section 2.3.2.1</a>) 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 compensation is paid by either party if train or network performance fails to meet set benchmarks. Bonuses are received if either party delivers better performance than the benchmark. The performance scheme therefore has incentive properties for both parties (Network Rail and RUs) to improve their performance.

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 which makes the historic performance more difficult to achieve, 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, which makes the historic performance more difficult to achieve and is common to all charter RUs.

While franchised passenger RUs are incentivised to improve performance generally 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. This 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 target 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, the 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, the 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</u>
<u>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.

### 6.6 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 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).

### 6.7 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 Network Rail route team is responsible for the 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. All invoices are sent to RUs via Network Rail Finance Shared Services and are typically on a periodic (four week) basis.

Glossary		FTLB	Freight Train Load Book	
		GB	Great Britain	
Abbreviations		GSM-R	Global System for Mobile Communications – Railway	
AB	Allocation Bodies	HST	High Speed Train	
CAS	Certification Scheme for Telecommunications	ICC	Infrastructure Control Centre	
CCG	Common Components Group – responsible for delivery of	IM	Infrastructure Manager	
	the common messaging interface and the common reference data system required for TAF TSI, which should also be used for TAP TSI	LMD	Light Maintenance Depot	
		LTPP	Long Term Planning Process	
CoE	Calendar of Events	MU	Multiple Unit	
C-OSS	One Stop Shop operated by the North Sea Mediterranean Rail Freight Corridor	NESA	National Electronic Sectional Appendix	
		NVR	National Vehicle Register	
COTS	Commercial Off The Shelf	OLE	Overhead Line Equipment	
CRE	Customer Relationship Executive	ORR	Office of Rail and Road	
CSM RA	Common Safety Method Risk evaluation and Assessment	oss	One Stop Shop	
DfT	Department for Transport	PAP	Pre-arranged path for international freight in the European rail network created by a European rail freight corridor and allocated by them	
DMU	Diesel Multiple Unit			
ECM	Entities in Charge of Maintenance			
EIM	European Rail Infrastructure Managers	RDG	Rail Delivery Group	
ELMTREE	Exceptional Load Management Tool and Routing Enquiry Engine	RFC	Rail Freight Corridor	
		RGS	Railway Group Standards	
EMU	Electric Multiple Unit	RINF	Register of Infrastructure	
EPS	Enhanced Permissible Speed	ROC	Railway Operational Code	
ERA	European Union Agency for Railways	ROGS	The Railways and Other Guided Transport Systems (Safety) Regulations 2006 and The Railways and Other Guided Transport Systems (Safety) (Amendment) Regulations 2013	
ESG	Event Steering Group			
FOC	Freight train operating company			

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 TSI** Telematics Applications Freight – Technical Specifications

for Interoperability

**TAP TSI** Telematics Applications Passenger – Technical

Specifications for Interoperability

**TCAG** Timetable Change Assurance Group

TCRAG Timetable Change Risk Assessment Group

TfL Transport for London

TM Traffic Management

**Toc** Train (usually, passenger train) Operating Company

**TOPS** Total Operations Processing System

**TPH** Trains per hour

TRUST Train Running System on TOPS

TS Transport Scotland

**TSI** Technical Specification for Interoperability

**UIC** International Union of Railways

#### Terms explained

#### **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).

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

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

#### **Business Critical Rules**

Network Rail has established the Business Critical Rules programme to rationalise and simplify the Network Rail standards regime. The programme will roll out across Network Rail during the period from April 2014 to March 2019 with an initial focus on safety critical activity and assets. Effective risk assessment and means of control are key enablers for this programme, which will ultimately impact all areas of Network Rail.

#### **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 our website.

#### **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 <a href="Part J of the Network Code">Part J of the Network Code</a>, further information can be found in <a href="Section 4.6">Section 4.6</a>

#### 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, 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 <a href="Section 5.1">Section 5.1</a> and <a href="Section 5.2">Section 5.2</a>.

#### **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. Please see further at <u>Section 2.3.3</u>.

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

'Network Rail Standards' is the generic term for the documents that specify requirements and provide guidance directed towards securing the 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 Technical Specifications for Interoperability (TSIs), domestic legislation, and Railway Group Standards.

Further information on Network Rail standards is available at:

http://uk.ihs.com/products/standards/network-rail-company-standards.html

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, Railway Group Standards 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

The Register of Infrastructure will be used for planning purposes in designing new trains and developing routes before the start of operation. It will hold specific information on the railway infrastructure within a Member State. Each IM is responsible for maintaining their information and submitting it to the National Registration Entity. The Member State RINF information will be uploaded, no less frequently than every three months, into the European central RINF, such that any authorised user may view infrastructure information in any Member State. The RINF is being delivered in phases until 2019. The UK RINF is managed by the National Registration Entity and it has been agreed with the DfT that Network Rail will undertake this role.

#### **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 at Section 3.3.1.

#### 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 the 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 the production of the working timetable (using the rules set out in the Network Code).

#### **Transport Scotland**

A government department providing leadership across the transport sector to achieve its objectives, working with regional, local and private sector partners to deliver many of the services in Scotland.

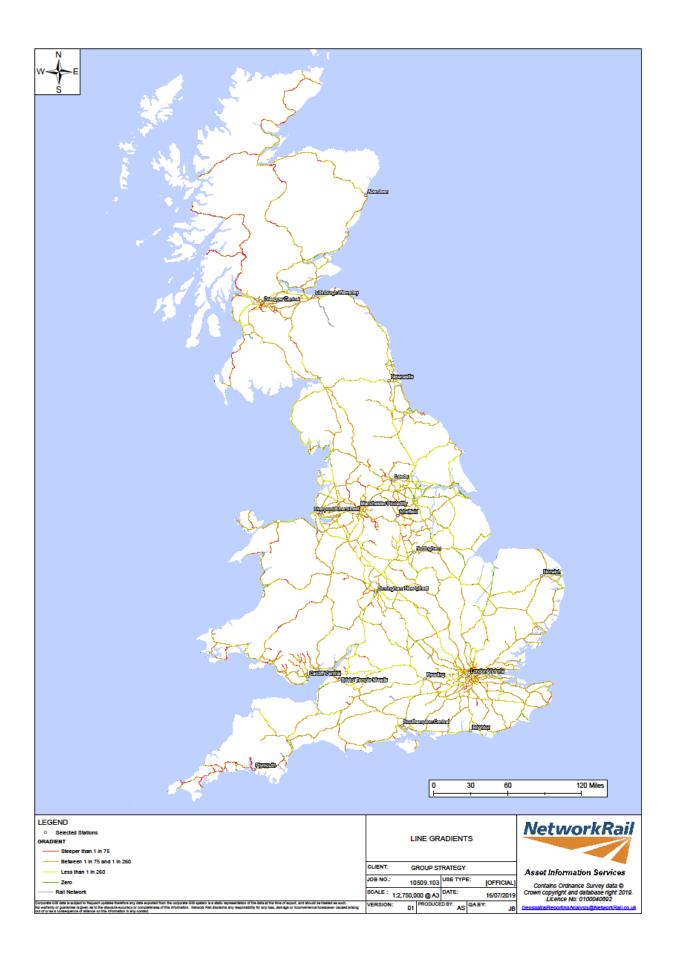
#### TRUST

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 in <u>Section</u> <u>4.3.1</u>.

# Annex 1 – Route Capability Gradients

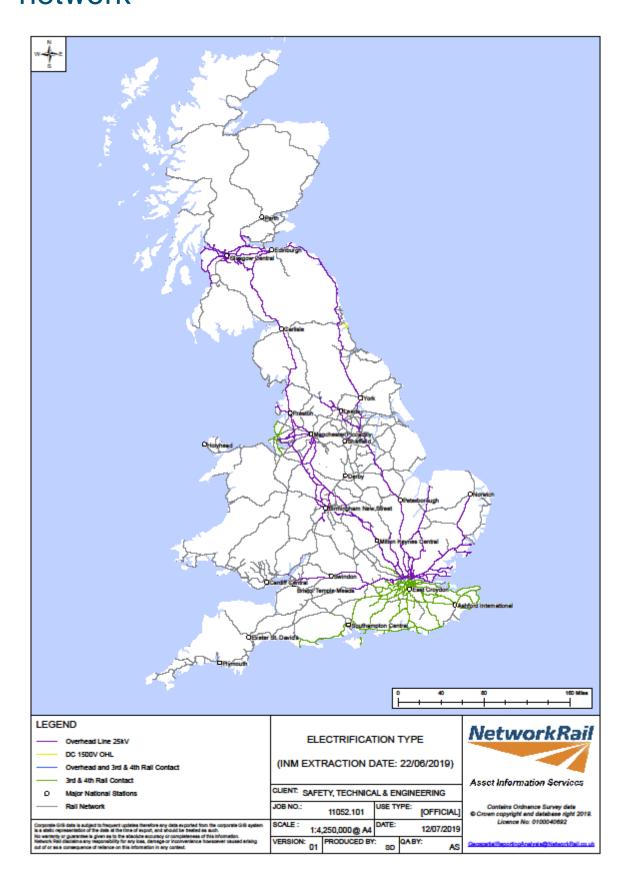


# Annex 2 – Schedule of timetabling process

Timetable Development Dates	Principal Change	Subsidiary Change			
D67 - Formal Notification of Process Dates	30/08/2019				
Revision of Timetable Planning Rules					
D64 – Start of NR Consultation of Proposed Changes to Rules	20/09/2019	21/02/2020			
D60 – End of NR consultation of proposed changes to Rules	18/10/2019	20/03/2020			
Rules to Planning Publications	16/10/2019	18/03/2020			
D59 – Publish 'Draft Rules'	25/10/2019	27/03/2020			
D54 – Operator Responses to 'Draft Rules'	29/11/2019	01/05/2020			
D54 to D44 – NR review Operator Responses					
Rules to Planning Publications	29/01/2020	01/07/2020			
D44 – Publish 'Final Rules'	07/02/2020	10/07/2020			
D41 – End of Appeal Period 'Final Rules'	28/02/2020	31/07/2020			
Initial Consultation Period					
D64 – Publication of draft Calendar of Events	20/09/2019	21/02/2020			
D45 – Publication of Strategic Capacity Statement	31/01/2020	03/07/2020			
D55 – Notification by TT Participants of major TT changes	22/11/2019	24/04/2020			
D55 – Start of Initial Consultation Period	22/11/2019	24/04/2020			
D54 – Publication of Final Calendar of Events	29/11/2019	01/05/2020			
D45 – NR to provide copy of 'Prior Working Timetable'	31/01/2020	03/07/2020			
D48 – Notification of Provisional International Paths	10/01/2020				
D40 – Priority Date	06/03/2020	07/08/2020			

Timetable Preparation Period					
D40 – Start of Timetable Preparation Period	06/03/2020	07/08/2020			
D37 - Timetable Change Risk Assessment Group	27/03/2020	28/08/2020			
D32 - Timetable Change Assurance Group	01/05/2020	02/10/2020			
D26 – NR Publish New Working TT	12/06/2020	13/11/2020			
New WTT and associated system files available to ATOC	12/06/2020	13/11/2020			
Operator responses to New WTT	26/06/2020	27/11/2020			
D22 – End of Appeal Period 'New Working Timetable	10/07/2020	11/12/2020			
D15 - Timetable Briefing process complete	28/08/2020	29/01/2021			
D14 - CIF Electronic Data available	04/09/2020	05/02/2021			
D9 - Timetable Extract taken for NRT Edit	09/10/2020	12/03/2021			
D8 - Corresponding Day Timetable Dates Proposed to Operators	16/10/2020	19/03/2021			
D4 - NRT Data sent to publishers	13/11/2020	16/04/2021			
Timetable Commencement Date	13/12/2020	16/05/2021			
Timetable End Date	15/05/2021	11/12/2021			
International Freight Train Notice (D9)					
D70 Publish the Initial International Freight Train Notice	09/08/2019				
D70 to D65 NR Consult the Initial International Freight Train Notice	13/09/2019				
D60 NR to provide an updated International Freight Train Notice	18/10/2018				

# Annex 3 – Extent of electrification across the network



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