

**2017 HS1 NETWORK STATEMENT**

**Dated Edition: March 2016**

**HIGH SPEED 1 (HS1)**

**HS1 LIMITED**

## GLOSSARY OF TERMS

ACC	Ashford Control Centre
Access Agreement	Framework Track Access Agreement, Track Access Agreement or Station Access Agreement (as applicable)
AIC	Additional Inspection Charge
Applicant	Any person that wants to apply for a train path including TOCs, shippers, freight forwarding agents and combined transport operators applying on behalf of a TOC
APC Magnets	Automatic Power Control Magnets
ATCS	Automatic Train Control System
AWS	Automatic Warning System
Access Proposal	Any notification made by any Applicant for a Train Slot as provided under the HS1 Network Code
Competent authority restriction of use	Any restriction of use taken by the Infrastructure Manager pursuant to a direction or an agreement with any competent authority
Concession Agreement	The agreement made between the Secretary of State and the Infrastructure Manager granting the concession to the Infrastructure Manager for the operation and financing of HS1 and the repair, maintenance and replacement of HS1
DAG	Delay Attribution Guide
DBC	DB Cargo (UK) Limited
Disruptive Event	Any event or circumstance which materially prevents or materially disrupts the operation of trains on any part of HS1 in accordance with the relevant Working Timetable
EIL	Eurostar International Limited
Engineering Access Statement	The Engineering Access Statement set out the possessions requirements of the Infrastructure Manager in order to carry out inspections, maintenance, repair, renewal and enhancement works on HS1
ERTMS	European Rail Traffic Management System
ETCS	European Train Control System
Eurotunnel (ET)	The infrastructure manager of the Channel Tunnel

New Working Timetable	The version of the Working Timetable which is formally offered to Applicants 22 weeks prior to coming into effect, and after the resolution of any disputes
Flexing Right	The right of the Infrastructure Manager to vary any Access Proposal or Train Slots as provided under the HS1 Network Code
Framework Track Access Agreement	Agreement between the Infrastructure Manager and an Applicant for access onto HS1 for a duration of more than one Timetable Period
Franchised TOC	A TOC providing domestic passenger train services on HS1 pursuant to a franchise agreement with the Secretary of State
Freight OMRC	OMRC to be paid by a freight TOC for operating freight train services on HS1
GSM-R	Global system for mobile telecommunications - railway
HS1 CAHA	CTRL Claims Allocation & Handling Agreement as updated
HS1 Codes	The HS1 Network Code, the HS1 Emergency Access Code, the HS1 Performance Data Accuracy Code and the HS1 Systems Code
HS1 Disputes Resolution Agreement	CTRL Disputes Resolution Agreement as updated
HS1	High Speed 1 (formerly known as the CTRL) rail infrastructure or the Rail Link Facility
HS1 Network Code	The HS1 Network Code as updated
HS1 Rule Book	The CTRL Rule Book as updated
HS1 Sectional Appendix	The CTRL Sectional Appendix as updated
HS1 Standards	The CTRL Standards as updated
IRC	Investment Recovery Charge
Infrastructure Manager	HS1 Limited
KVB	Controle de vitesse par balises – Speed supervision by beacons
LSEER	London & South Eastern Railway Limited
NR (HS)	Network Rail (High Speed). Formerly known as Network Rail (CTRL) Limited. A subsidiary of NRIL

NRIL	Network Rail Infrastructure Limited – also referred to as Network Rail
NR Network	The UK domestic railway operated by NRIL
OMRC	Operations, Maintenance and Renewal Charge
ORR	Office of Rail and Road
OSS	One Stop Shop
Possession	Restriction of use of railway infrastructure assets
Principal Change Date	The date normally falling on the Sunday next following the second Saturday in December in any calendar year
Rail Regulations 2005	Railways Infrastructure (Access & Management) Regulations 2005 as amended by the Railways Infrastructure (Access and Management) (Amendment) Regulations 2009
Relevant Year	A year commencing at 0000 hours on 1 April and ending at 2359 hours on the following 31 March
Revised Access Proposal	Any Train Operator Variation seeking to revise a Train Slot scheduled in the relevant Working Timetable
RNE	RailNetEurope, an association of European infrastructure managers
ROGS Regulations	The Railways and Other Guided Transport (Safety) Regulations 2006
Rolling Stock	Wheeled vehicles capable of movement on a railway, whether self-propelled or not
Timetabling Planning Rules	The Timetabling Planning Rules containing operating procedures and a procedure to enable amendments to be made to the Engineering Access Statement other than through the annual consultation process set out in Condition D2 of Part D of the HS1 Network Code
Second Exemption	The ability of an Infrastructure Manager to set charges in excess of directly incurred costs under the exemption set out in paragraph 3 of Schedule 3 of the Rail Regulations 2005
Secretary of State	Secretary of State for Transport
Section 1	The portion of HS1 that runs between Fawkham Junction/Southfleet Junction and Cheriton (Channel Tunnel Boundary)

Section 2	The portion of HS1 that runs between St Pancras International Station and Southfleet Junction
SNRP	Statement of National Regulatory Provisions
Station	St Pancras International Station, Stratford International Station, Ebbsfleet International Station and Ashford International Station (as applicable)
Station Access Agreement	Agreement between the Station Facility Owner and an Applicant for access to the relevant Station
Station Access Conditions	The HS1 Station Access Conditions (Edition Date: October 2015) and the annexes in relation to the relevant Station as each are modified in respect of the relevant Station from time to time
Station Facility Owner	HS1 Limited
STM	Special Transmissions Module
Subsidiary Change Date	The date normally falling on the Sunday next following the second Saturday in May in any calendar year
Temple Mills Depot	The light maintenance depot located at Temple Mills, north of Stratford, London
Timetable Period	The period of operation of the relevant Working Timetable
Timetable Week	In respect of a Timetable Period, any week (or, in the case of the first and last such week of such period, part thereof) occurring during that period and commencing at 0001 hours on any Saturday and ending at 2400 hours on the next following Friday
Track Access Agreement	Agreement between the Infrastructure Manager and an Applicant for access on to HS1 for duration of up to a single Timetable Period
Train Operator Variation	Any formal request made to change, delete or add to the Train Slots shown in the Working Timetable
Train Slot	A train movement or a series of train movements, identified by arrival and departure times at each of the start, intermediate (where appropriate) and end points of each train movement
TRUST Monitoring System	The system which measures train delays on the network and underpins the performance regime calculations

TOC	A Train Operating Company, being any public or private undertaking, licensed according (or exempt from licensing) to applicable European Community legislation, the principal business of which is to provide services for the transport of goods and/or passengers by rail with a requirement that the undertaking must ensure traction; this also includes undertakings which provide traction only
TPWS	Train Protection and Warning System
TVM 430	HS1 signalling system
UIC	Union Internationale des Chemins de fer
UKPN	UK Power Networks Services (Contracting) Limited
VHME	Vehicle Health Monitoring Equipment
VSTP	Very Short Term Train Planning
Working Timetable	The timetable for the train services on HS1 established in accordance with Part D of the HS1 Network Code for the relevant Timetable Period

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## **1. GENERAL INFORMATION**

### **1.1 Introduction**

The High Speed 1 ("HS1") rail infrastructure consisting of track, four stations and associated infrastructure links the UK to continental Europe via the Channel Tunnel. The track on HS1 runs from the Channel Tunnel to St Pancras International Station. The four stations on HS1 are St Pancras International Station, Stratford International Station and Ebbsfleet International Station and the international section of Ashford International Station which is located within the infrastructure owned by Network Rail Infrastructure Ltd ("NRIL") and operated by London & South Eastern Railway Limited ("LSER").

HS1 Limited ("HS1 Ltd") is the infrastructure manager of HS1 under the Railways Infrastructure (Access and Management) Regulations 2005 (as amended by the Railways Infrastructure (Access and Management) (Amendment) Regulations 2009) (the "Rail Regulations 2005") and has issued this Network Statement for HS1. Directive 2012/34/EU, which recasts the first railway package, is not yet transposed into UK law, however this Network Statement complies with this as far as possible at the date of publication.

HS1 Ltd (the "Infrastructure Manager") is a nominated undertaker for the purposes of the Channel Tunnel Rail Link Act 1996 and the Channel Tunnel Rail Link (Supplementary Provisions) Act 2008. The Infrastructure Manager has entered into an agreement with the Secretary of State for Transport (the "Secretary of State") under which the Secretary of State grants it a concession to operate, finance and maintain HS1 for a specified period ("Concession Agreement").

### **1.2 Objective**

This Network Statement has been developed pursuant to the requirements of the Rail Regulations 2005. This Network Statement provides general information about HS1; conditions of access to HS1 by transport operators; rules, procedures and criteria for allocation of capacity and payments for the same.

### **1.3 Legal Framework**

- 1.3.1** EU Directive 2001/14/EC sets out various requirements on the allocation of railway infrastructure capacity and the levying of charges for use of railway infrastructure. These requirements include the development and publication of network statements by infrastructure managers. The Directive was transposed into domestic law by the Rail Regulations 2005. On 17 September 2010 the European Commission adopted a draft proposal to amend the First Railway Package directives. The recast aimed to simplify and consolidate the rules by merging three directives and their amendments into a single text. In addition, the recast seeks to clarify existing provisions and tackle key problem areas which had been identified in the market over the last ten years. The Recast (Directive 2012/34/EC) has not yet been transposed into UK law, and as such does not yet apply to HS1.
- 1.3.2** The other legislation that relates to HS1 includes the Channel Tunnel Rail Link Act 1996, the Channel Tunnel Rail Link (Supplementary Provisions) Act 2008, parts of the Railways Acts of 1993 and 2005, the Railways and Transport Safety Act 2003 and a range of secondary legislation.

**1.3.3** The Secretary of State has established a charging framework under the Rail Regulations 2005. The Infrastructure Manager is obliged to set its charges for use of HS1 by reference to this charging framework.

**1.3.4** The Office of Rail and Road ("ORR") is obliged by the Rail Regulations 2005 to exercise its functions under or by virtue of the Concession Agreement in order to ensure that the Infrastructure Manager is provided with incentives to reduce the cost of provision of infrastructure and the level of access charges. The ORR's functions under the Concession Agreement include a periodic review of the charges levied by the Infrastructure Manager in respect of operation, maintenance and renewal of HS1 (other than in respect of Stations).

## **1.4 Legal Status**

### **1.4.1 General Remarks**

This Network Statement is intended to be an informative document only. Operators on HS1 infrastructure are required to enter into Track Access Agreements, which encompass and make contractually binding a number of other HS1 documents including the Network Code, Passenger Access Terms / Freight Access Terms, and HS1 Operational Codes.

### **1.4.2 Liability**

Reasonable efforts have been made to ensure that the information provided in this Network Statement is accurate. Whilst the Infrastructure Manager is responsible for keeping the Network Statement up to date and in compliance with the Rail Regulations 2005, it does not accept any liability for errors, omissions or inaccuracies due to information provided by third parties. Errors which are notified to the Infrastructure Manager will be reviewed and corrected where appropriate in the next issue of the Network Statement.

### **1.4.3 Appeals Procedure**

Any dispute on matters covered by the HS1 Access Disputes Resolution Rules should be dealt with in accordance with the procedure prescribed in such rules, which are annexed to the HS1 Network Code. This is a regime which was introduced on 2 January 2011 and addresses disputes arising out of or in connection with Framework Track Access Agreements, Track Access Agreements and Station Access Agreements. The Access Disputes Committee for the dispute services under the HS1 Access Disputes Resolution Rules is the same committee as used on the NR network. The charges for the provision of such services are passed on to the Train Operating Company ("TOC") in the Framework Track Access Agreements, Track Access Agreements and Station Access Agreements.

Any disputes in relation to other matters covered by the HS1 Disputes Resolution Agreement should be dealt with in accordance with the procedure prescribed in that agreement. The HS1 Disputes Resolution Agreement provides for the referral of any dispute to a technical, operational or financial panel, as appropriate, then an attempt at amicable settlement and finally to arbitration under the rules of the London Court of International Arbitration.

The ORR is the regulatory body to which an appeal may be made in accordance with the Rail Regulations 2005 if any applicant for capacity on HS1 believes it has been treated unfairly, discriminated against or is in any other way aggrieved concerning this Network Statement or any of the other matters specified in Regulation 29(2) of the Rail Regulations 2005. Details of the procedure can be obtained from the ORR website

([http://orr.gov.uk/\\_data/assets/pdf\\_file/0020/5609/hs1\\_criteria\\_and\\_procedures.pdf](http://orr.gov.uk/_data/assets/pdf_file/0020/5609/hs1_criteria_and_procedures.pdf)). In considering appeals concerning HS1, the ORR is obliged by Regulation 29(8) of the Rail Regulations 2005 to consult with and take account of any representations made by the Secretary of State.

It is the aspiration of the Infrastructure Manager that the signatories to the HS1 Disputes Resolution Agreement exhaust the applicable procedures prior to making any appeal to the ORR.

## **1.5 Structure of Network Statement**

This Network Statement has been structured in the format agreed by members of the RailNetEurope network statement working group.

## **1.6 Validity and Updating Process**

### **1.6.1 Validity Period**

The Access and Management Regulations 2005 require HS1 Ltd as an IM to publish a Network Statement four months before the deadline for applications for infrastructure capacity (the Priority Date for the relevant timetable). Consequently, in the context of the GB allocation process, the 2017 Network Statement is for use for capacity requests for the 2017 timetable year (11 December 2016 to 9 December 2017).

### **1.6.2 Updating Process**

This Network Statement will be updated and re-published as and when changes are required. The next scheduled update is October 2016 when we will conduct our annual consultation ahead of publication of the 2018 Network Statement. If significant amendments are required before this date, then the Network Statement will be updated at that point as required.

## **1.7 Publishing**

The Network Statement can be downloaded free, from the website of the Infrastructure Manager (<http://highspeed1.co.uk/regulatory/key-regulatory-documents> )

## **1.8 Contacts**

### **1.8.1 On all issues related to HS1:**

Head of Regulation  
HS1 Limited  
1 Euston Square  
40 Melton Street  
London NW1 2FD  
Tel: +44 (0)20 7014 2700  
Website: [www.highspeed1.com](http://www.highspeed1.com)

### **1.8.2 On issues relating to Temple Mills Depot:**

Head of Regulatory Affairs  
Eurostar International Limited  
Times House, Bravingtons Walk,  
Regent Quarter, London N1 9AW

Tel: +44 (0)20 7843 5500  
Website: [www.eurostar.com](http://www.eurostar.com)

**1.8.3 On issues relating to Ashford Depot:**

Head of Maintenance Delivery  
Hitachi Europe Limited  
4<sup>th</sup> Floor, 16 Upper Woburn Place,  
London WC1H 0AF  
Tel: +44 (0)20 7970 2711  
Website: [www.hitachi-rail.com](http://www.hitachi-rail.com)

**1.8.4 On issues relating to Dollands Moor:**

Access Manager  
DB Cargo (UK) Limited  
2<sup>nd</sup> floor McBeath House  
310 Goswell Road  
London, EC1V 7LW  
Tel: +44 (0)1302 577 140  
Website: <http://uk.dbcargo.com/rail-uk-en/start/>

**1.8.5 On issues relating to track access on the NR Network and the domestic section of Ashford International Station:**

South East Route Managing Director,  
Network Rail Infrastructure Limited,  
Floor 2, Cottons Centre,  
Cottons Lane,  
London, SE1 2QG  
Tel: +44 (0)20 3357 7900  
Website: [www.networkrail.co.uk](http://www.networkrail.co.uk)

**1.8.6 On issues relating to access to track through the Channel Tunnel:**

Director of Railway Development  
Eurotunnel  
UK Passenger Terminal Building  
P.O. Box 2000, Folkestone  
Kent, CT18 8XY  
Tel: +44 (0) 1303 288615 / +33 (0)321 00 8615  
Fax: +44(0)1303 288609 / +33(0)321 00 8609  
Email: [jean-pierre.ramirez@eurotunnel.com](mailto:jean-pierre.ramirez@eurotunnel.com)  
Website: [www.eurotunnel.com](http://www.eurotunnel.com)

**1.9 Rail Freight Corridors**

Currently there are no RFCs which utilise HS1 infrastructure.

**1.10 RailNetEurope – Cooperation between European Infrastructure Managers**

In 2004, a number of European railway infrastructure managers and Allocation Bodies established a common organisation to address operational issues in the field of international rail: RailNetEurope (RNE). With a co-ordinating Joint Office based in Vienna,

RNE represents its members as an association for facilitating international traffic on European rail infrastructure.

Together, the members of RNE are harmonising conditions and introducing coordinated approaches to promote the European rail business from the rail infrastructure point of view and to the benefit of the entire rail industry.

RNE has 38 members. In total, the members serve a network of around 244,000 kilometres of railway infrastructure. The RNE members are working with over 140 Railway Undertakings in the international rail industry in Europe. The main objective of RNE is to develop and improve the international railway business. To achieve this, RNE focuses on the entire rail infrastructure production process; this includes harmonising the members' medium and long-term planning, timetabling, marketing and sales, and operations, as well as after-sales services, such as monitoring and reporting.

HS1 Ltd is a member of RNE.

### **1.10.1 One Stop Shop**

Most European infrastructure managers are members of RNE who have set up an OSS which works as a network of customer contact points under the RNE umbrella. When applying for an international path, customers only need to contact one of these OSS, which initiates the whole international path co-ordination process.

The contacted OSS, in close cooperation with the concerned Infrastructure Managers:

- offers customer support and information on the product and service range of the Infrastructure Managers participating in RNE;
- supplies the information required to gain access to the infrastructure of any infrastructure manager participating in RNE;
- co-ordinates requests for any international train path within RNE, including requests for the next timetable period, so that they can be duly taken into account in the annual timetabling process; and
- provides train path offers for the whole international journey; the path coordination is mainly done via the RNE tool Pathfinder.

Each OSS is part of an international network designed to make rail network access for customers as simple as possible. The OSS also provides information on infrastructure charges and train movements, including quality monitoring. These functions are supported by RNE's information tools EICIS and EUROPTIRAILS. The OSS philosophy stands for competent and efficient assistance across all borders based on transparent, confidential and non-discriminatory procedures.

The national OSS contact person information is available at [http://www.rne.eu/oss\\_network.html](http://www.rne.eu/oss_network.html)

## 1.10.2 RNE Tools

### 1.10.2.1 PCS (formerly Pathfinder)

PCS (Path Coordination System) is a web application provided by RNE to Infrastructure Managers (IMs), Allocation Bodies (ABs), Rail Freight Corridors (RFCs), Railway Undertakings (RUs) and non-RU Applicants, which handles the communication and co-ordination processes for international path requests and path offers. PCS also assists RUs and non-RU Applicants in their pre-co-ordination tasks related to train path studies and international train path requests. RNE provides a PCS Integration Platform (PCS IP), a direct communication channel between PCS and the domestic systems of RUs and IMs/ABs allowing two-way data interchange. With this module, one of the major obstacles to the use of PCS in the freight business has been eliminated: RUs and IMs/ABs no longer have to provide the same information about an international train path request twice (once in the national system and once in PCS) – it is now possible to automatically synchronize the international train path request data between national systems and PCS.

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

For more information, please visit the website <http://pcs.rne.eu/> or write to the helpdesk: [support.pcs@rne.eu](mailto:support.pcs@rne.eu)

### 1.10.2.2 CIS (formerly EICIS)

CIS (Charging Information System) is RNE's international access charge estimation tool, designed to provide customers with pricing information. A web-based umbrella system for the various national rail infrastructure charging systems, it can calculate the price for the use of international train paths within minutes, 24 hours a day – including charges for train paths, station fees and shunting fees.

Future developments of the CIS aim to implement a RFC route-based estimate of infrastructure charges according to the RFCs' requirements.

The CIS website is at [www.eicis.com](http://www.eicis.com) and the helpdesk may be contacted via email: [support.cis@rne.eu](mailto:support.cis@rne.eu)

### 1.10.2.3 TIS (formerly EUROPTIRAILS)

TIS (Train Information System) is an easy-to-use, web-based application, which visualizes international trains from origin to destination. It supports international train management by delivering data concerning international passenger and freight trains along RNE Corridors and Rail Freight Corridors. Following the request of some internationally active Railway Undertakings TIS is now processing a defined amount of national trains as well in order to simplify data exchange and optimise the information process. Additionally, a specific function has been developed for Terminals along the corridors so that they can take advantage of the TIS information exchange as well. TIS delivers real-time train data directly to the users via internet and generates reports based on historical data. The two TIS products are based on the same raw data. The real-time train information overview gathers, centralizes and publishes information on train running on most of the (remaining) RNE Corridors and Rail Freight Corridors.

Current participants: Austria, Belgium, Bulgaria\*, Croatia, Czech Republic, Denmark, France, Germany, Hungary, Italy, Luxembourg, Norway\*, Poland, Portugal\*, Romania\*, Slovakia, Slovenia, Spain\*, Sweden, Switzerland, The Netherlands. (\*Contract signed, implementation in progress.)

Data portfolio:

- current and past train location (train running information message)
- agreed daily timetable information (contracted timetable message)
- delay information and reasons for delay (delay reason message)

The reporting function enables the monitoring and analysis of train and delay information

Data portfolio:

- punctuality and delay analysis
- data quality analysis
- system performance analysis

In the meantime, TIS has been optimised and is now able to process both in-bound and outbound TAF TSI messages from/to the IMs, and outbound TAF TSI messages to the RUs directly.

Currently, TIS applicants are IMs, RUs and Terminal Operators.

TIS may be accessed via: <http://tis.rne.eu/>

The helpdesk may be contacted by email: [support.tis@rne.eu](mailto:support.tis@rne.eu)

### **1.11 Commitment to the European Commission (EC)**

In April 2010, the EC was notified that SNCF, SNCB and LCR intended to create a standalone entity, Eurostar International Limited (Eurostar) to operate Eurostar services. Previously, these were jointly operated by Eurostar (UK) Limited ("EUKL"), a subsidiary of London & Continental Railways, Societe Nationale des Chemins de fer Francais and Societe Nationale des Chemins de fer Belges.

The EC was concerned that the merger "*could significantly impede effective competition on the routes London-Paris/Brussels*", by making entry more difficult for new entrants, particularly in relation to access and the provision of services to stations and depots and the charges for those services. To address the EC's concerns the parties gave a number of assurances to the EC (referred to as commitments) to complement existing legal arrangements. These included a dispute resolution mechanism to underpin the ability of authorised cross-channel train operators to have fair and non-discriminatory access to the relevant stations and maintenance facilities across the UK, the Channel Tunnel, France and Belgium.

For GB facilities, these included commitments from HS1 relating to the provision of access to facilities and services at London St. Pancras International Station. Details of the commitments can be found in the European Commission merger decision which is available from the following link:

[http://ec.europa.eu/competition/mergers/cases/decisions/M5655\\_20100617\\_20212\\_831906\\_EN.pdf](http://ec.europa.eu/competition/mergers/cases/decisions/M5655_20100617_20212_831906_EN.pdf)

EU merger control clearance is mandatory for relevant transactions where the companies concerned meet the EU's turnover thresholds. In 2015, the European Commission approved the acquisition of sole control of Eurostar by SNCF Mobilites. The Commission's decision is conditional on compliance with commitments offered by Eurostar, SNCF and SNCB. The full press release can be found at:

[http://europa.eu/rapid/press-release\\_IP-15-4976\\_en.htm](http://europa.eu/rapid/press-release_IP-15-4976_en.htm)

The commitments are designed to ensure access for a new entrant to:

- i) standard and cross-Channel areas and services, such as ticket offices, passenger information services and cross-Channel areas in stations in France and Belgium currently managed by SNCF and SNCB;
- ii) maintenance centres in France, the UK and Belgium currently managed by SNCF, Eurostar and SNCB for services such as overnight storage, servicing and cleaning of trains and light maintenance;
- iii) train paths currently used by Eurostar at peak times, should a new entrant not be able to obtain such access through the usual procedure for path allocation by the infrastructure managers.

Independent individuals or bodies – known as “Monitoring Trustees” - have been appointed in the UK, France and Belgium with a duty to monitor compliance with the commitments. A train operator can seek recourse from a Monitoring Trustee if a dispute arises between the parties regarding a request for access to any of the facilities covered by these commitments. The Monitoring Trustee is to provide prompt resolution in the event of a dispute but where a party is not happy with the decision of the Monitoring Trustee then it has a right to make an appeal to the relevant appeal authority. This is the national regulator of the UK, France or Belgium, as appropriate. In relation to GB facilities, this means the Office of Rail and Road (ORR). The UK Monitoring Trustee is Chris Bolt ([cwbolt@gmail.com](mailto:cwbolt@gmail.com)).

## **1.12 Periodic Review – Control Period**

The ORR has the responsibility under the Rail Regulations 2005 to regulate the economic aspect of the HS1 Ltd regulatory framework. The ORR regulates HS1 Ltd through its Concession Agreement between HS1 Ltd and the Secretary of State.

The periodic review (PR) is the process by which the ORR sets the level of OMRC that HS1 Ltd is able to recover from the TOCs in the next control period. In addition, the PR process sets a number of elements of HS1 Ltd's regulatory framework governing how the industry interacts with HS1 Ltd.

The PR 2014 was the first PR for HS1 Ltd and covers the period from 1 April 2015 to 31 March 2020, Control Period 2. The purpose of the PR is detailed in Schedule 10 of the Concession Agreement. In December 2013 HS1 Ltd submitted the final Five Year Asset Management Statement for Control Period 2 to the ORR. This is available via the following link: <http://highspeed1.co.uk/media/1915/hs1-ltd-five-year-asset-management-statement.pdf> The ORR issued its final approval on the Five Year Asset Management Statement on 9 May 2014. This is available via the following link:



As a result of the PR14 process, OMRC charges to operators have been reduced by more than 10 per cent beginning 1 April 2015.

## **2. ACCESS CONDITIONS**

### **2.1 Introduction**

This section deals with access conditions as applicable to HS1.

### **2.2 General Access Requirements**

In order to be able to secure access to and operate on HS1, an Applicant will have to fulfil the requirements set out in this section 2.

#### **2.2.1 Conditions for applying for capacity**

To apply for a train path on HS1, an Applicant must have entered into a Framework Track Access Agreement or a Track Access Agreement or confirm in writing that it will be willing to enter into a Framework Track Access Agreement or a Track Access Agreement. Please refer to Section 2.4 for further information.

Framework Track Access Agreements and Track Access Agreements contain a number of conditions which must be satisfied by an Applicant before it can use a train path. These conditions require the Applicant to:

- (a) hold a valid licence to be the operator of trains granted under section 8 of the Railways Act 1993 or a licence exemption granted by the ORR or fulfil the relevant provisions of the Channel Tunnel Rail Link Act 1996 which grant exemption from the need for a licence under the Railways Act 1993, or hold a European Licence and a Statement of National Regulatory Provisions ("SNRP") granted or recognised under the Railway (Licensing of Railway Undertakings) Regulations 2005;
- (b) hold a valid and current safety certificate (see section 2.2.4);
- (c) become a signatory to the HS1 Claims Allocation and Handling Agreement ("HS1 CAHA"), to the HS1 Disputes Resolution Agreement (including any revision/amendments to the HS1 Disputes Resolution Agreement) and to the HS1 Access Disputes Resolution Rules (which are incorporated into a Framework Track Access Agreement or Track Access Agreement by way of the HS1 Network Code);
- (d) if the Applicant is intending to operate passenger services, become a signatory to the Station Access Agreements for the stations it intends to use and such other agreements as may be specified in the relevant Framework Track Access Agreement or Track Access Agreement; and
- (e) become a signatory to a direct agreement with the Secretary of State and the Infrastructure Manager in relation to the Framework Track Access Agreement or Track Access Agreement (as applicable) and the Station Access Agreements (if any) ("Direct Agreement").

Under the Rail Regulations 2005 the Infrastructure Manager and the Applicant will need to obtain the prior approval of the ORR before entering into, or amending a Framework Track Access Agreement. However the Infrastructure Manager and an Applicant will not need to obtain the approval of the ORR prior to entering into or amending a Track Access Agreement.

In addition, the Infrastructure Manager reserves the right to require the Applicant to provide credit protection for the benefit of the Infrastructure Manager. Please contact the Infrastructure Manager for further information at the address set out in section 1.8.1.

Any capacity allocated to an Applicant is non-transferable and non-tradeable.

## **2.2.2 Conditions for access to the railway infrastructure**

HS1 is open access rail infrastructure and is open to all TOCs as long as they fulfil the requirements to obtain a train path and are capable of operating rail services on HS1. HS1 has been declared as Specialised Infrastructure pursuant to Regulation 22 of the Rail Regulations 2005 (see section 3.4.1). Applicants who require access to and egress from HS1 by means of other networks are advised also to check the requirements of the relevant infrastructure managers.

## **2.2.3 Licences**

The ORR is the body responsible for issuing licences under the Railways Act 1993, European Licences under the Railways (Licensing of Railway Undertakings) Regulations 2005 (which may also be issued by corresponding bodies in other member states of the European Union) and SNRPs in Great Britain, to domestic and international users. For further information, please refer to the ORR website [www.orr.gov.uk](http://www.orr.gov.uk). The Channel Tunnel Rail Link Act 1996 provides for an exemption from the requirement to hold a train operating licence under the Railways Act 1993 in the following circumstances:

- (a) the TOC is providing train services involving travel through the Channel Tunnel;  
or
- (b) the TOC is a rail link undertaker (as defined in the Channel Tunnel Rail Link Act 1996) who provides train services for the carriage of goods which does not involve carriage outside HS1.

## **2.2.4 Safety Certificate**

The ORR is the National Safety Authority (NSA) for railways in Great Britain. The Railways and Other Guided Transport Systems (Safety) Regulations 2006 ("ROGS Regulations") requires all mainline train operators to maintain a safety management system (SMS) and hold a safety certificate indicating that the SMS has been accepted by the ORR. To obtain a safety certificate, applicants need to describe how their safety management system allows them to run their transport system safely. ORR will focus on checking that safety management systems are effective, meet the requirements of ROGS and are fit for the purpose they are being used for. Further information can be found in the *New Operator Guide* on the HS1 website, via the following link:

<http://highspeed1.co.uk/regulatory/new-operator-guide>

## 2.2.5 Cover of liabilities

All licensed TOCs are required to maintain the insurance cover required by the conditions of their licence. TOCs are required to maintain an insurance cover of not less than £155 million per incident in respect of all liabilities to third parties. Unlicensed TOCs will be required to maintain equivalent insurance.

The Infrastructure Manager maintains insurance with respect to HS1 as follows:

<b>Insurance</b>	<b>Minimum Sum Insured</b>
Material Damage and Business Interruption	£350 million in respect of any one occurrence
Public and Products Liability	£155 million in respect of any one claim unlimited during any one period of insurance
Employer's Liability	£10 million in respect of any one claim during any one period of insurance

Please contact the Infrastructure Manager for further information at the address set out in section 1.8.1.

## 2.3 General Business / Commercial Conditions

### 2.3.1 Framework Agreement

A framework agreement specifies the characteristics of the infrastructure capacity allocated to an Applicant over a period of time exceeding the duration of a single timetable period. It does not specify train paths in detail but provides an assurance that suitable capacity should be available to meet the commercial needs of the Applicant as envisaged at the time of entering into the agreement. For HS1, the function of framework agreements is fulfilled by the Framework Track Access Agreements made between the Applicant and the Infrastructure Manager.

Where an Applicant wishes to enter into a Framework Track Access Agreement it should contact the Infrastructure Manager at the earliest opportunity to discuss its requirements. There are no application forms which need to be submitted prior to contacting the Infrastructure Manager with a request for a Framework Track Access Agreement.

In deciding whether to enter into Framework Track Access Agreements, the Infrastructure Manager will take into account whether the request made by the Applicant complies with the Rail Regulations 2005 including:

- (a) the extent to which the proposed arrangement will preclude the use of HS1 by other Applicants; and
- (b) whether the proposed duration of the arrangement satisfies the requirements specified in regulation 18(7) to (9A) of the Rail Regulations 2005.

In circumstances where the Infrastructure Manager does not consider that there is sufficient capacity on HS1 it will discuss the request with the Applicant and seek to agree alternative arrangements.

While applications for Framework Track Access Agreements will be considered by the Infrastructure Manager in the order that they are received, if the Infrastructure Manager is considering more than one application at the same time and is unable to accommodate all of the requests for capacity, the Infrastructure Manager will apply the priority criteria specified in the declaration of specialised infrastructure (see section 3.4.1) contained in Part D of the HS1 Network Code.

Regulation 18(2) of the Rail Regulations 2005 requires the Infrastructure Manager and the Applicant to obtain the prior approval of the ORR before entering into or amending any Framework Track Access Agreement. The process is set out in the 'ORR's Criteria and Procedures for the Approval of Framework Agreements for HS1'<sup>1</sup>.

A template Framework Track Access Agreement is available on the HS1 website:

<http://highspeed1.co.uk/media/1961/2013-march-template-for-international-passenger-services-ftaa.pdf>.

By entering into a Track Access Agreement, the Applicant is also entering into the relevant Access Terms.

The HS1 Passenger Access Terms specifies the operational and commercial arrangements between the Infrastructure Manager & Applicants in relation to each other. In the context of Applicants wanting to operate passenger services on the HS1 network the Framework Track Access Agreement is governed by the HS1 Passenger Access Terms. The Passenger Access Terms is available on the HS1 website via the following link:

<http://highspeed1.co.uk/regulatory/track-passenger>

Similarly, the HS1 Freight Access Terms exist for Applicants wanting to operate freight services on the HS1 network. The Freight Access Terms can be found on the HS1 website, via the following link:

<http://highspeed1.co.uk/regulatory/track-freight>

### **2.3.2 Contracts with RUs**

Except for the purposes of emergency access, each Applicant must enter into a Framework Track Access Agreement or a Track Access Agreement (as applicable), Station Access Agreements (as applicable), HS1 CAHA and the HS1 Disputes Resolution Agreement with the Infrastructure Manager to cover the full scope of the intended operations. Each Applicant must also enter into a Direct Agreement with the Secretary of State and the Infrastructure Manager. Under the Direct Agreement:

- (a) a TOC undertakes not to terminate its Framework Track Access Agreement or Track Access Agreement (as applicable), Station Access Agreement(s) (as applicable) on account of an Infrastructure Manager event of default, without first giving the Secretary of State not less than 15 business days prior written notice; and
- (b) if the Concession Agreement is terminated by the Secretary of State:

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<sup>1</sup> [http://orr.gov.uk/data/assets/pdf\\_file/0020/5609/hs1\\_criteria\\_and\\_procedures.pdf](http://orr.gov.uk/data/assets/pdf_file/0020/5609/hs1_criteria_and_procedures.pdf)

- (i) the Secretary of State may step-in to a TOC's Framework Track Access Agreement or Track Access Agreement (as applicable) and Station Access Agreement(s) (if any) and perform or procure the performance of the Infrastructure Manager's obligations (including payment obligations) under the relevant agreements; and
- (ii) the Secretary of State or another person may assume by way of sale, transfer or other disposal the rights and obligations of the Infrastructure Manager under the relevant agreements.

The ORR has the power to periodically review the charging framework which has been established for HS1 through the Concession Agreement and applicants can appeal to ORR if they believe the level of charges to be unfair or discriminates against the Applicant.

An Applicant applying for capacity with a view to operating an international passenger service must give notice, discuss and agree its access rights with the Infrastructure Manager. The ORR encourages an Applicant to consider a pre application meeting with the ORR (see section 4.4.1.1 for further details).

Applicants would need to enter into separate agreements with any depot facility owners whose services they may wish to use. Please see section 1.8 for the relevant contact details.

## **2.4 Operational Rules**

### **2.4.1 HS1 Codes**

The HS1 Network Code, HS1 Emergency Access Code, HS1 Performance Data Accuracy Code and the HS1 Systems Code, (together the "HS1 Codes") (web link: <http://highspeed1.co.uk/regulatory/key-regulatory-documents>) describe the operational arrangements applicable to encourage the safe and efficient operation of HS1. Incorporated as part of the Framework Track Access Agreements or Track Access Agreements (as applicable), the HS1 Codes aim to govern the operational behaviour of the Infrastructure Manager and Applicants in relation to each other. Please contact the Infrastructure Manager for further information at the address set out in section 1.8.1.

### **2.4.2 HS1 Network Code**

The HS1 Network Code sets out procedures relating to the operation of HS1. The code regulates change including changes to railway vehicles and to HS1 itself. The HS1 Network Code also deals with the process for establishing a working timetable, addressing operational disruption and performance improvement planning and monitoring. The HS1 Access Disputes Resolution Rules are appended to the HS1 Network Code.

Particular attention is drawn to the requirements under Part D of the HS1 Network Code setting out the processes outlined for establishing the Engineering Access Statement and the Timetabling Planning Rules.

### **2.4.3 HS1 Emergency Access Code**

For details of the HS1 Emergency Access Code, see section 2.6.4 below.

### **2.4.4 HS1 Performance Data Accuracy Code**

The HS1 Performance Data Accuracy Code specifies the standards of accuracy in the recording of data required to be satisfied by the performance monitoring system established in the HS1 Network Code. It also provides a mechanism for agreeing and notifying changes to such standards.

#### **2.4.5 HS1 Railway Systems Code**

The HS1 Railway Systems Code describes the systems utilised on HS1 and the process required to be undertaken for changes proposed to those systems.

#### **2.4.6 Engineering Access Statement**

The Engineering Access Statement sets out the possessions required by the Infrastructure Manager in order to carry out inspections, maintenance, repair, renewal and enhancement works on HS1. The Engineering Access Statement specifies:

- (a) the location, number, timing and duration of any possessions of any track or section of track, which enable inspection, maintenance, renewal and repair thereof or of any other railway asset or any other works in relation thereto, and any restrictions regarding those possessions;
- (b) any temporary speed and other restrictions on the operation of trains on any section of track (including the intended duration of such restrictions), which may be necessary to carry out any inspection, maintenance, renewal or repair referred to in section 2.6.1.5(a) above; and
- (c) any alternative train routes or stopping patterns which may apply during any possessions referred to in section 2.6.1.5(a) above.

The Engineering Access Statement is settled each year through a consultation process set out in Condition D2 of Part D of the HS1 Network Code. The latest version is available on the Network Rail website:

<http://www.networkrail.co.uk/browse%20documents/Rules%20Of%20The%20Route/Viewable%20copy/roprhome.pdf?a=new>

Please contact the Infrastructure Manager for further information at the address set out in section 1.8.1.

#### **2.4.7 Timetabling Planning Rules**

Amongst other things, the Timetabling Planning Rules contain the rules regulating the standard timings with other matters enabling trains to be scheduled into the working timetable for the various parts of the rail network.

The Timetabling Planning Rules also contain a procedure to enable amendments to be made to the Engineering Access Statement and the Timetabling Planning Rules other than through the annual consultation process set out in Condition D2 of Part D of the HS1 Network Code. No changes may be made to the Engineering Access Statement or the Timetabling Planning Rules unless the Infrastructure Manager has consulted, to the extent reasonably practicable, with each TOC affected by the proposed change and due regard has been had to the decision criteria specified in Condition D4 of Part D of the HS1 Network Code.

The Timetabling Planning Rules are settled each year through a consultation process set out in Condition D2 of Part D of the HS1 Network Code. Please contact the Infrastructure Manager for further information at the address set out in section 1.8.1.

#### **2.4.8 HS1 Standards and HS1 Rule Book**

HS1 Standards are technical standards and operating procedures contributing to safe railway system operation and inter-working issued by the Infrastructure Manager, which are identified as "CTRL Standards" and compliance with which is mandatory. The HS1 Standards include the HS1 Rule Book, a modular document that includes procedures and specific working instructions in relation to general safety responsibilities: electrified lines; mishaps, incidents and extreme weather; on-track plant and machines; working by pilot-men; signals; speeds; shunting and station duties; track and signalling work; train signalling regulations and signalling general instructions; and train working. Please contact the Infrastructure Manager for further information at the address set out in section 1.8.1.

#### **2.4.9 HS1 Sectional Appendix**

The physical attributes of HS1 are described in the HS1 Sectional Appendix. It also contains any special instructions required to amplify the HS1 Rule Book in respect of operations at specific locations. Please contact the Infrastructure Manager for further information at the address set out in section 1.8.1.

#### **2.4.10 HS1 Emergency Access Code**

The HS1 Emergency Access Code grants a TOC permitted to use HS1 a permission to use railway facilities of other TOCs and the Infrastructure Manager in case of an emergency on HS1 for the duration of such emergency and for as long after the cessation of such emergency as shall be reasonably necessary.

The stabling charges for the purpose of the emergency access shall be as follows:

- (a) in respect of HS1:
  - (i) for the first 24 hours – £40 (subject to indexation in accordance with the HS1 Emergency Access Code); and
  - (ii) for each subsequent period of 24 hours – £185 (subject to indexation in accordance with the HS1 Emergency Access Code); and
- (b) in respect of Temple Mills Depot: Rates as advised by the contact person for Temple Mills Depot specified in section 1.8.2; and
- (c) in respect of other railway facilities: Rates as advised by the facility owner of the railway facility.

The above amounts are amounts payable in respect of each railway vehicle stabled and are exclusive of value added tax. For periods shorter than 24 hours, the amounts in question shall be prorated.

#### **2.4.11 Station Access Conditions**

When an Applicant enters into a HS1 Station Access Agreement in respect of a Station, the Station Access Agreement shall incorporate the Station Access Conditions which set

out the operational arrangements applicable to the operation of the Stations. The Station Access Conditions are available on the HS1 website, via the following link:

<http://highspeed1.co.uk/regulatory/stations>

## **2.5 Exceptional Transports**

Special conditions of travel may 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 on an individual basis by comparing the consignment with the characteristics of the route over which it is to travel. Please contact the Infrastructure Manager for further information at the address set out in section 1.8.1.

## **2.6 Dangerous Goods**

Goods which are capable of posing a risk to health, safety, property and the environment during carriage by rail are classified as "Dangerous Goods" according to the Regulations concerning the International Carriage of Dangerous Goods by Rail and the Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2007. Both sets of regulations apply to TOCs operating on HS1. Dangerous Goods will require special authorisation and working instructions will be issued specific to the movement of such goods as per the HS1 Rule Book. Any TOC wishing to transport Dangerous Goods on HS1 should contact the Infrastructure Manager at the address set out in section 1.8.1.

## **2.7 Rolling Stock Acceptance Process**

All vehicles placed in service on HS1 by a TOC must be covered by Part B of the Safety Certificate that is referred to in Schedule 2, Part I of the ROGS Regulations. Regulation 5(1)(d)(iii) of the ROGS Regulations requires that the safety management system of the TOC describes the arrangements for "placing in service of new or altered vehicles, the design or construction of which incorporates significant changes compared to any vehicle already in use on the transport system and which changes would be capable of significantly increasing an existing risk or creating a significant safety risk". Any TOC requiring to introduce a new vehicle, or make changes to an existing vehicle which come under the scope of Regulation 5(1)(d)(iii), will have to consult and agree with the Infrastructure Manager (in accordance with the duty of co-operation detailed in Regulation 22) how the risks will be controlled. The TOC is also required to obtain the necessary authorisation from the independent National Safety Authority – the Office of Rail and Road. Please contact the Infrastructure Manager for further information at the address set out in section 1.8.1.

## **2.8 Staff Acceptance Process**

**2.8.1** TOCs are responsible for ensuring that all staff involved with or affecting the movement of trains:

- (a) possess the necessary skills and competences (including English language skills as described in section 2.10.2 below); and
- (b) comply with the relevant policies and codes of practice applicable to HS1.

**2.8.2** Until HS1 comes within the scope of EU Directive 2007/59/EC "on the certification of train drivers operating locomotives and trains on the railway system in the Community", drivers



and other on-board staff with safety of the line responsibility are expected to speak English to a level which enables them to communicate safety of the line issues clearly to signalling staff as well as being able to come to a clear understanding with signallers of instructions issued by them, normally through "livret formulaire" procedures, i.e. dictated instructions on forms provided at the ACC and drivers' cabs.

When HS1 comes within the scope of the directive (through transposition into English law), TOCs will be required to comply with the language provisions of the transposed directive.

### **3. INFRASTRUCTURE**

#### **3.1 Introduction**

HS1 is a high-speed rail network that links the Channel Tunnel to St Pancras International Station and it includes four stations and allied infrastructure. Currently the Infrastructure Manager has appointed NR (HS) to operate and maintain HS1 (including the stations other than the international section of Ashford International Station) (please see section 3.3.1 below) on its behalf.

The Infrastructure Manager has appointed Mitie Technical Facilities Management Limited to operate and maintain the international section of Ashford International Station on its behalf. The international section of Ashford International Station is the only part of Ashford International Station forming part of HS1 (domestic services operate from an adjacent station of the same name which forms part of the NR Network).

HS1 is an electrified railway on which train operations with diesel locomotives are not permitted, except under special instructions and arrangements. (Please also refer to section 3.4).

#### **3.2 Extent of Network**

##### **3.2.1 Geographical Limits**

HS1 runs from the Eurotunnel interface at the UK end of the Channel Tunnel at Cheriton to St Pancras International Station. Please refer to Annex 4 for a route map of HS1.

St Pancras International Station is part of HS1 except that the tracks, signals, railway telecommunications and overhead line equipment in platforms 1 to 4 (inclusive) are part of the NR Network. Ebbsfleet International Station, Stratford International Station and the international section of Ashford International Station are also part of HS1, although the tracks passing through the international section of Ashford International Station and the signals, railway telecommunications and overhead line equipment are part of the NR Network. The infrastructure maintenance depot at Singlewell and the infrastructure maintenance siding at St Pancras are not available for normal railway operations and are restricted to network services only.

##### **3.2.2 Connected Railway Networks**

HS1 connects to other railway networks or facilities at the following locations:

<b><u>Location</u></b>	<b><u>Infrastructure Manager</u></b>
St Pancras (North London Line)	Network Rail Infrastructure Limited
St Pancras (Midland Main Line)	Network Rail Infrastructure Limited

Ripple Lane	Network Rail Infrastructure Limited
Springhead Junction	Network Rail Infrastructure Limited
Fawkham Junction (Waterloo Connection)	Network Rail Infrastructure Limited
Ashford Connecting Lines	Network Rail Infrastructure Limited
Dollands Moor Freight Connection	DB Cargo (UK) Limited
Cheriton	Eurotunnel
Temple Mills	Eurostar International Limited

### 3.2.3 Further Information

Further details about HS1 can be found in the HS1 Sectional Appendix. Please contact the Infrastructure Manager for further information at the address set out in section 1.8.1.

## 3.3 Network Description

### 3.3.1 Geographical Identification

#### 3.3.1.1 Track Typologies

HS1 is a double-track railway, including connections with the NR Network (see section 3.2.2), except for the Temple Mills and Dollands Moor connecting lines which are single track, and for the station areas at St Pancras, Stratford and Ebbsfleet which have multiple tracks. All lines are signalled for bi-directional operation, except for the Waterloo connection which is unidirectional operation. Additionally, loops are provided for train regulation purposes on both up and down lines at Singlewell and Lenham and within the multiple-track layouts at Stratford and Ebbsfleet stations.

#### 3.3.1.2 Track Gauge

The nominal track gauge is 1,435mm.

#### 3.3.1.3 Stations and Nodes

St Pancras International Station (except as described in section 3.2.1 above), Stratford International Station, Ebbsfleet International Station and the international section of Ashford International Station are owned by the Infrastructure Manager and (except as described in section 3.2.1 above) form part of HS1.

#### St Pancras International Station

St Pancras International Station is located in the northern fringe of central London and has thirteen platforms. Six platforms (nos. 5 to 10 inclusive) are for use by international services. Four platforms (nos. 1 to 4 inclusive) are for use by domestic services on the NR Network to major towns and cities in the North. Three platforms (nos. 11 to 13 inclusive) are for use by high-speed domestic services to and from Stratford, Ebbsfleet, Ashford and North and East Kent. Platforms 1-13 are elevated above ground level, and all are accessible via escalators, lifts or stairs. Platforms 1-10 are also level access from certain station entrances, despite being elevated above ground level.

The lengths of the platforms at St Pancras International Station are shown in the table below:

<b>Platform</b>	<b>Length from the buffer stops to the top of the ramp (metres)</b>	<b>Useable length after allowing for a stopping distance from the buffer stops (metres)</b>
International Platforms	434.93	424.93
Domestic Platforms	294	284

There is an area within the station for international arrivals and departures (for customs and border control), two sets of public toilets, large public concourse areas on the ground floor and at platform level, approximately 60 retail units, arrival and departure passenger information screens, direct access to the NRIL low-level station for Thameslink services to Brighton and Bedford, a public car parking facility and direct access to London Underground. There are concourses and platforms for Midland Main Line services, which operate on the NR Network, but the station facilities for these are part of HS1.

Due to weight limitations built into the design of the station, freight traffic will not be permitted into St Pancras International Station, unless permitted under special instructions and arrangements. Please also refer to section 3.4 for further details.

#### **Stratford International Station**

Stratford International Station is located in East London and has four platforms: two for international services (platforms 1 and 4) and two for high-speed domestic services (platforms 2 and 3). Platforms are located below ground level and reached by escalators and lifts.

The lengths of the platforms at Stratford International Station are shown in the table below:

<b>Platform</b>	<b>Nominal Length (metres)</b>
International Platforms	410
Domestic Platforms	290

There are public toilets, large public concourse areas, international arrivals and departures areas, arrival and departure passenger information screens and a number of retail units.

#### **Ebbsfleet International Station**

Ebbsfleet International Station is located near Dartford in North Kent, and has six platforms: two for international trains (platforms 1 and 4), two for high speed domestic trains adjacent to the international platforms (platforms 2 and 3) and two for the North Kent domestic services (platforms 5 and 6), sited on the North Kent connecting line. The international platforms and adjacent domestic platforms are accessible by escalators, lifts or stairs. The North Kent domestic platforms are accessible by lift or stairs.

The lengths of the platforms at Ebbsfleet International Station are shown in the table below:

<b>Platform</b>	<b>Nominal Length (metres)</b>
International Platforms	410
Domestic Platforms	290

There are public toilets, a large public concourse area at ground floor level, a public car parking facility for up to 5,000 vehicles, international arrivals and departures areas, arrival and departure passenger information screens and a number of retail units.

### **Ashford International Station**

The international section of Ashford International Station is located in Ashford in Kent, and has two platforms for international services only (nominal platform lengths being 412m), public toilets, international arrival and departure areas, a large public concourse area, a number of retail units, arrival and departure passenger information screens and a number of public car parking facilities.

LSER is the station facility operator of the domestic section of Ashford International Station.

## **3.3.2 Capabilities**

### **3.3.2.1 Loading Gauge**

The structure gauge is as follows:

- UIC "GC" on HS1; and
- UIC "GB+" on Ashford connecting lines on the NR Network.

The track interval is not less than 4.5m between the centre lines of adjacent tracks, where the speed capability is greater than 230km/h.

Trains calling at Ashford International Station will have to comply with NRIL requirements, although the international platforms (3&4) have been altered to accommodate UIC GB vehicles only. The network statement published by NRIL with respect to the NR Network can be found on the NRIL website. Domestic platforms at St. Pancras International Station, Stratford International Station and Ebbsfleet International Station are at the UK standard platform height of 915mm, whereas international platforms are at the TSI (high speed) infrastructure compliant platform height of 760mm. The route between Fawkham Junction and Southfleet Junction (Waterloo connection) is at UK standard structure gauge (W6/W6A) for lines up to 165km/h with 380mm passing clearance.

Please also refer to Section 3.3.1.2 for further details.

### 3.3.2.2 Weight Limits

	Maximum Static Load
Section 1*	17t/axle
Section 2**	17t/axle
Loco hauled freight train***	22.5t/axle

\* Section 1 is the part of HS1 between Fawkham Junction/Southfleet Junction and Cheriton (Channel Tunnel boundary).

\*\* Section 2 is the part of HS1 between St Pancras International Station and Southfleet Junction.

\*\*\* Includes loco assisting a passenger train.

### 3.3.2.3 Line Gradients

The maximum gradient is 2.50% (1 in 40). Due to this maximum gradient, trains composed of vehicles fitted with standard UIC 850KN couplings will be limited to a maximum trailing load of 1,100 tonnes. Details of gradients along the route may be requested from the Infrastructure Manager. Please contact the Infrastructure Manager for further information at the address set out in section 1.8.1.

### 3.3.2.4 Line Speeds

The Infrastructure Manager is obliged to operate and maintain HS1 in such a way that the TOCs are able to achieve the following line speeds on HS1:

	International Passenger Trains	Domestic Passenger Trains	Freight Trains***
Section 1*	300 km/h	225 km/h	140 km/h
Section 2**	230 km/h	225 km/h	140 km/h

\* Section 1 is the part of HS1 between Fawkham Junction/Southfleet Junction and Cheriton (Channel Tunnel boundary).

\*\* Section 2 is the part of HS1 between St Pancras International Station and Southfleet Junction.

\*\*\* Includes loco assisting a passenger train.

Please contact the Infrastructure Manager for further information at the address set out in section 1.8.1.

### 3.3.2.5 Maximum Train Lengths

Maximum train lengths (excluding exceptional transports):

- International Passenger 400m
- Domestic Passenger 276m
- Freight 750m (including locomotives)\*

\* local length restrictions below this figure may apply at St Pancras International Station. St Pancras International Station cannot facilitate freight trains except under very restricted conditions.

Please contact the Infrastructure Manager for further information at the address set out in section 1.8.1.

### 3.3.2.6 Power Supply

Power is supplied from the overhead catenary system which is compliant with the Energy (High Speed) TSI at 25kV/50Hz AC. The contact wire height above rail level is generally set at 5.08m. However, the wire height through Ashford International Station platforms is set at a minimum of 4.68m.

The principal characteristics of the power supply system are as follows:

Description	Performance
Nominal voltage	25kV
Maximum voltage (continuous)	27.5kV
Minimum voltage (continuous)	19kV
Nominal frequency	50Hz
Maximum fault current	12kA (6kA in St Pancras area)

Pantographs are to comply with EN 50206 or other pantographs as approved by the Infrastructure Manager from time to time. The pantograph configuration must be in accordance with Annex H of the Energy TSI. HS1 cannot accept Rolling Stock fitted with brake regeneration capabilities, unless that brake regeneration functionality can be inhibited whilst operating on HS1.

The power supply at the North Kent line connection, and the Ashford domestic connecting lines, is through conventional NRIL 750V DC third rail system.

### 3.3.3 Traffic Control and Communication Systems

The ACC is the combined traffic control, signalling control, electrical control and a communication centre for HS1 and is responsible for all day-to-day railway operating activities.

#### 3.3.3.1 Signalling Systems

The TVM430 in-cab system is used throughout HS1, except at interfaces with the NR Network, where TVM interfaces with standard UK lineside signalling. St Pancras

International Station and its approaches are controlled by lineside signalling. Rolling stock must be fitted with one or more of the following train control systems and configured for operation on HS1:

- (a) TVM430 or ERTMS/ETCS with STM;
- (b) for all connecting lines onto the NR Network, AWS/TPWS is needed; and
- (c) for St Pancras International Station and its approaches, KVB is required.

Please also refer to section 3.4 for more details.

### 3.3.3.2 Traffic Control System

Trains on HS1 are regulated according to train regulation policies agreed in accordance with Part H of the HS1 Network Code. Traffic is regulated by the management of real time performance. The ACC operates the overall traffic management system which contains the following:

- (a) automated route setting;
- (b) automated conflict resolution; and
- (c) train graphing technology for perturbation management and very short term train planning (VSTP).

### 3.3.3.3 Communication System

GSM-R is installed throughout HS1, albeit at the date of publication of this Network Statement, it is only used by LSER high speed domestic services. Until such time as GSM-R is implemented for use with international services for secure track-to-train radio, all international trains must be fitted with Cab Secure Radio, complying with BR1845 Issue H (including the October 1995 amendment) and BR 1989 specifications.

### 3.3.3.4 Automatic Train Control Systems (ATCS)

The automatic train control systems on HS1 are as follows:

Passenger trains operating on HS1	TVM 430 plus KVB
Freight Trains operating on HS1	TVM 430 plus compatibility to operate APC magnets located on HS1
Freight trains requiring access to St Pancras International Station	Only permitted under special arrangements
Trains intending to operate in addition across the NR Network/ HS1 interface	AWS/TPWS compliant with Railway Group Standard GE/RT8030
Trains fitted with ERTMS/ETCS	STM required to interface with TVM 430

Please contact the Infrastructure Manager for further information at the address set out in section 1.8.1.

### **3.4 Traffic Restrictions**

#### **3.4.1 Specialised Infrastructure**

Following consultation, HS1 has been declared as Specialised Infrastructure as described in Directive 2001/14/EC Article 24 and Regulation 22 of the Rail Regulations 2005.

The effect of the declaration is that HS1 is designated for use by specified types of rail service and may give priority to that specified type of rail service in the allocation of capacity. These priorities are as follows (from highest to lowest):

- (a) High Speed International Passenger Trains;
- (b) High Speed Domestic Passenger Trains;
- (c) High Speed Freight Trains; and
- (d) Other Trains.

#### **3.4.2 Environmental Restrictions**

TOCs are required to provide the Infrastructure Manager with copies of their current environmental policy and environmental management systems. A TOC's environmental policy must have due regard to the environmental policy of the Infrastructure Manager and adopting good industry practice in relation to energy efficiency. Further environmental restrictions applicable to HS1 can be found in Part E of the HS1 Network Code. Please contact the Infrastructure Manager for further information at the address set out in section 1.8.1.

Rolling stock must be configured so that EMC emissions comply with adjacent NRIL and Channel Tunnel requirements as appropriate, as well as those of HS1.

#### **3.4.3 Dangerous Goods**

There are no sections of line where Dangerous Goods are not permitted. Please refer to Section 2.6 for more detail.

#### **3.4.4 Tunnel Restrictions**

Tunnel restrictions on HS1 apply as follows:

- (a) Emissions (particularly in respect of tunnels) must be assessed through the Rolling Stock Acceptance Process unless in the event of an emergency. Please refer to section 2.7 for further details; and
- (b) HS1 tunnels have been designed for a certain aerodynamic specification. Please contact the Infrastructure Manager for further information at the address set out in section 1.8.1.



### **3.4.5 Bridge Restrictions**

Bridge restrictions on HS1 apply in the event of extreme high winds (i.e. wind speeds over 160km/h) a speed restriction will be placed on the Medway Viaduct. Please contact the Infrastructure Manager for further information at the address set out in section 1.8.1.

### **3.5 Availability of the Infrastructure**

HS1 remains closed on 25 December every year. However, the TOCs may apply to operate train services on this day and the Infrastructure Manager may accommodate such requests.

For further restrictions on the availability of HS1, please refer to Engineering Access Statement as set out in section 2.4.6.

### **3.6 Service Facilities**

#### **3.6.1 Passenger Stations**

Please refer to section 3.3.1.3 for information about the Stations.

#### **3.6.2 Freight Terminals**

Dollands Moor Freight Yard: DB Cargo (UK) Limited ("DBC") is the facility owner of this railway freight yard near Folkestone in Kent. Please contact DBC for further information at the address set out in section 1.8.4.

#### **3.6.3 Marshalling yards and train formation facilities, including shunting facilities**

Ripple Lane Exchange Sidings are part of HS1 and may be used for certain types of train movements.

#### **3.6.4 Storage Sidings**

Save as expressly provided below, the Infrastructure Manager will normally restrict access to the sidings described below to network services or to defective rolling stock which is awaiting retrieval.

There is a short network service maintenance siding at St Pancras International Station connecting HS1 with the NR Network (Midland Main Line); however there are restrictions placed upon its use for commercial passenger and freight movements.

Ripple Lane Exchange Sidings are part of HS1 and may be used for certain types of train movements.

There are two turnback sidings located in Church Path Pit (Ebbsfleet International Station).

There are head-shunts (i.e. short sidings which could be used for berthing of network service trains, crippled wagons etc.) at the country end of the Up Loop at Singlewell and at both ends of the Up Loop at Lenham Heath.

Please refer to the HS1 Sectional Appendix for details. Please contact the Infrastructure Manager for further information at the address set out in section 1.8.1.

### **3.6.5 Maintenance Facilities**

See 3.6.10

### **3.6.6 Other Technical Facilities**

See 3.6.10

### **3.6.7 Maritime and inland port facilities**

None available on HS1.

### **3.6.8 Relief Facilities**

None available on HS1.

### **3.6.9 Refuelling Facilities**

None available on HS1.

### **3.6.10 Other Facilities**

Ashford Depot: Hitachi Europe Limited has facilities which can undertake berthing, light servicing, light and heavy maintenance of train sets. This depot is not part of HS1. Please contact Hitachi Europe Limited for further information at the address set out in section 1.8.3.

Temple Mills Depot: EIL has facilities which can undertake berthing, light servicing, light and heavy maintenance of train sets which are compatible with Class 373 and Class 374 units at its Temple Mills Depot. This depot is not part of HS1. Please contact EIL for further information at the address set out in section 1.8.2.

## **4 CAPACITY ALLOCATION**

### **4.1 Introduction**

In accordance with the Rail Regulations 2005, the Infrastructure Manager will ensure that capacity on HS1 is allocated in a fair and non-discriminatory manner. Annex 5 details the timetable development schedule for the effective timetable on the Principle Change Date (December 2016) and Subsidiary Change Date (May 2017).

### **4.2 Description of Process**

**4.2.1** As contemplated by Regulation 18 of the Rail Regulations 2005, the reservation of capacity on HS1 will be undertaken by the Infrastructure Manager through entering into a Framework Track Access Agreement (the process for the approval of the Framework Track Access Agreement is captured in the 'ORR's Criteria and Procedures for the Approval of Framework Agreements for HS1') or a Track Access Agreement with the relevant Applicant. The capacity rights under a Framework Track Access Agreement or a Track Access Agreement are translated into Train Slots in the timetable through the timetabling process. Details of the timetabling process are found in Part D of the HS1 Network Code, and described in section 4.4.1 below.

**4.2.2** Where an Applicant has requested and has been allocated capacity on HS1 in accordance with Regulation 19(1) or 21(1) of the Rail Regulations 2005 and it has not entered into a Framework Track Access Agreement, it will be required to enter into a Track Access

Agreement with the Infrastructure Manager. The Track Access Agreement will expire at the end of the relevant timetable period and will only reflect the capacity which has been allocated to that Applicant through the timetabling process (i.e. the train paths allocated to that Applicant for the relevant timetable period).

- 4.2.3** Where an Applicant is requesting capacity on the HS1 network to operate freight services during the period of night under the Framework Track Access Agreement, it will do so using a catalogue path allocation system. In 2012, HS1 consulted the industry on the rules and principles of the catalogue path system. The catalogue path allocation system will be implemented after the Applicant has entered into a Framework Track Access Agreement with HS1.

The catalogue path allocation system will have pre-arranged available train paths for the period of a timetable year. An Applicant will be able to bid for a train path in accordance with the access rights in the Framework Track Access Agreement. The catalogue of available train paths will be published once in each timetable year and revised as and when additional train paths are identified. The catalogue paths will be advertised on the HS1 website and entered into the Timetabling Planning Rules.

#### **4.3 Schedule for Path Requests and Allocation Process**

The Infrastructure Manager follows the process and timeline for scheduling path requests as specified in Part D of the HS1 Network Code.

##### **4.3.1 Schedule for Working Timetable**

Part D of the HS1 Network Code sets out the procedures by which the Working Timetable, Engineering Access Statement and Timetabling Planning Rules may be changed. Although changes may be made to the Working Timetable at any time, significant changes in the Passenger Timetable may be made only twice a year, namely at the dates referred to as the Principal Change Date and the Subsidiary Change Date. The relevant dates are set out in Annex 5.

##### **4.3.2 Schedule for requests for train paths outside the timetabling process (Ad-Hoc Requests)**

Where TOCs wish to obtain additional train paths or amend any of their existing paths, the Infrastructure Manager will endeavour to process such requests in line with the process used for Train Operator Variations as set out in Condition D6 of the HS1 Network Code, and described in section 4.4.1.5 below.

Where a TOC is seeking an additional train path in excess of the capacity it has reserved in its Framework Track Access Agreement or Track Access Agreement, a supplemental agreement would be required to grant the additional rights. If the supplemental agreement constituted a framework agreement under the Rail Regulations 2005 or amended the existing Framework Track Access Agreement the Infrastructure Manager and the TOC would need to obtain the approval of the ORR.

#### **4.4 Allocation Process**

##### **4.4.1 Co-ordination Process**

Each year at or before the start of the timetable development process there will be a dialogue between the Infrastructure Manager and each Applicant regarding the base

timetable. Each Applicant will notify the Infrastructure Manager of any changes to the base timetable Train Slots that it seeks to make. Regulation 16(4A) of the Rail Regulations 2005 requires an Applicant that applies for infrastructure capacity with a view to operating an international passenger service to give a notice of that fact to the Infrastructure Manager and the ORR and provide them with such information as the ORR may reasonably require or prescribe.

Following the issue of the base timetable, the Infrastructure Manager will consult with the Applicants for establishing the Working Timetable. New applicants requiring a copy of the base timetable should contact the Infrastructure Manager at the address set out in section 1.8.1. Applicants with Framework Track Access Agreement(s) with the Infrastructure Manager must, on or before a specified date known as the priority date (D-36 as shown in Annex 5), notify the Infrastructure Manager of the Train Slots they wish the Infrastructure Manager to timetable in the Working Timetable from the capacity reserved by them in their Framework Track Access Agreement(s). Applicants not having a Framework Track Access Agreement with the Infrastructure Manager shall also notify their aspirations for timetabled Train Slots.

Taking into account the notifications made by the Applicants and the decision criteria set out in Condition D4 of the HS1 Network Code, the Infrastructure Manager will prepare and issue a draft timetable. The decision criteria firstly take into account the Order of Priority in the allocation of capacity:

- a) first, high speed international passenger trains;
- b) second, high speed domestic passenger trains;
- c) third, high speed freight trains; and
- d) fourth, other trains.

And secondly, the Considerations which seek to achieve the objective of sharing the capacity on HS1 for the safe carriage of passengers and goods in the most efficient and economical manner in the overall interest of current and prospective users, providers and funders of railway services.

Following the issue of the draft timetable, the Infrastructure Manager will continue to work with Applicants to further refine the timetable to include any new aspirations of the Applicants. It is not intended that significant service changes should be introduced at this stage but changes may be introduced to the extent that it is reasonably practicable to do so in the available time. Following such modifications, the Infrastructure Manager will make a formal offer of the proposed New Working Timetable and Applicants will have a right of appeal against the Infrastructure Manager's decisions reflected in that timetable by referring the matter to be determined under the Disputes Resolution Agreement.

Train Operator Variations may be made during the period of operation of a Working Timetable. As a general rule, Train Operator Variations are given priority on a first in time basis; however, the Infrastructure Manager may exercise the Flexing Right to resolve conflicts between Train Operator Variations. If a Train Operator Variation is received by the Infrastructure Manager in relation to a sporting or other public event which, if accepted, would conflict with any train slot in the Working Timetable, the Infrastructure Manager shall consult with the TOC entitled to the train slot with a view to obtaining its consent to the Infrastructure Manager exercising the Flexing Right to accommodate the Train Operator

Variation. If, as a result of exercising its Flexing Right, the Infrastructure Manager is required to make any payment to a TOC under that TOC's Framework Track Access Agreement or Track Access Agreement, the TOC whose Train Operator Variation was accommodated by the exercise of that Flexing Right shall reimburse to the Infrastructure Manager the amount of that payment.

Each year, at the start of the timetable development process, the Infrastructure Manager is obliged to review the applicable Engineering Access Statement and applicable Timetabling Planning Rules and decide if any amendments should be made in respect of the period of the annual timetable commencing on the next Principal Change Date. In addition, each year, at the start of the process for development of the timetable changes applying from the Subsidiary Change Date, the Infrastructure Manager is obliged to undertake a more limited review of the applicable Engineering Access Statement and the applicable Timetabling Planning Rules 4.4.1.7 In respect of each Timetable Week, where the Infrastructure Manager requires restrictions of use in order to undertake engineering work on HS1, the Infrastructure Manager will notify TOCs of the changes it proposes to make to the allocation of capacity and timetable structure in the relevant week and whether it requires TOCs to submit Revised Access Proposals for timetable slots for that week. The Infrastructure Manager in consultation with TOCs will then compile a revised timetable taking into account any Revised Access Proposals received in the same timescale.

#### **4.4.2 Dispute Resolution Process**

See section 1.4.3 for information on the appeals procedure.

#### **4.4.3 Congested Infrastructure; Definition, Priority Criteria and Process**

Under regulation 23 of the Rail Regulations 2005, the Infrastructure Manager must declare the relevant element of HS1 to be congested if:

- (a) after the co-ordination of requests for capacity and consultation with the Applicants in accordance with regulation 20(4), it is not possible for the Infrastructure Manager to satisfy requests for infrastructure adequately; or
- (b) during the preparation of the Working Timetable for the next timetable period, the Infrastructure Manager considers that an element of HS1 is likely to become congested during the period to which that Working Timetable relates.

HS1 is currently not a congested network within the above definition.

In the event that all or part of HS1 becomes congested, the Infrastructure Manager will follow the process set out in the Rail Regulations 2005 to manage the congestion. The process comprises of the identification of the areas/times of congestion, capacity analysis, developing an understanding of the options with a capacity enhancement plan, and consulting with all affected parties.

Where HS1 has been declared congested under the Rail Regulations 2005, Condition J3 of the HS1 Network Code obliges the Infrastructure Manager and each TOC to work together with a view to developing amendments to the HS1 Network Code the purpose of which is to ensure that the Infrastructure Manager is not in breach or default due to such congestion.

#### **4.4.4 Impact of Framework Agreements**

Framework Track Access Agreements contain detail of the capacity allocated to that Operator, however the specific train path is determined through the timetabling process, and is subject to the process discussed in section 4.4.1.

#### **4.5 Allocation of Capacity for Maintenance, Renewal and Enhancements**

The process for establishing the allocation of capacity for maintenance, renewal and enhancements through the Engineering Access Statement is described in section 2.6.1.5 and the integration of these arrangements into timetable development is addressed in section 4.4.1.

Where it is necessary to refine the established Engineering Access Statement in order to deal with short-term changes relating to individual Possessions on HS1, either the Infrastructure Manager or TOCs may propose changes to the Engineering Access Statement through a process which is contained in Part D of the HS1 Network Code.

The relevant Framework Track Access Agreement or the Track Access Agreement will set out the provisions for the compensation to be payable by the Infrastructure Manager when it seeks to place restrictions of use on HS1 for the purposes of carrying out inspections, maintenance, repair, renewal and enhancement works on HS1.

Under the Possessions regime applicable on HS1, the relevant TOC will be entitled to recover its direct costs arising from a restriction of use placed by the Infrastructure Manager. The direct costs recoverable by a TOC for any restriction of use (other than a competent authority restriction of use and a network change restriction of use) each year are capped at 1% of an amount equal to the aggregate of total IRC and OMRC payable by such TOC in the relevant year in the case of a passenger TOC and 1% of the aggregate Freight OMRC payable by such TOC in the relevant year in the case of a freight TOC.

#### **4.6 Non-Usage/Cancellation Rules**

Part J of the HS1 Network Code provides a mechanism for a “use it or lose it” regime for HS1 which will enable the Infrastructure Manager to alter access rights held in a Framework Track Access Agreement where capacity is not being used. Under this mechanism capacity can be made available to other users if any TOC fails to bid for Train Slots as part of a timetabling process for two consecutive timetable years commencing on or after 11<sup>th</sup> December 2016 unless the TOC has a reasonable, commercial need for the unused capacity.

It will also require the surrender of Train Slots which are allocated but are not being utilised and such non-use exceeds certain thresholds. For the purposes of Regulation 18(9C) of the Rail Regulations 2005 the threshold quota is as set out in Condition J2.2.1 of Part 5 of the HS1 Network Code.

In case of such failure to bid for Train Slots or failure to use allocated Train Slots, the relevant TOC will be granted a rebate on its access charges.

Please contact the Infrastructure Manager for further information at the address set out in section 1.8.1.

#### **4.7 Exceptional Transport and Dangerous Goods**

The TOC is obliged to state whether the transport that it wants to run has a load of such nature that it must be run as an exceptional transport, or if the individual train is carrying dangerous goods as well as if the train itself is classified as a danger class. Please refer to sections 2.5 and 2.6 for further details.

#### **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 HS1 in accordance with the Working Timetable are set out in Part H of the HS1 Network Code.

##### **4.8.2 Operational Regulation**

When a Disruptive Event occurs, the Infrastructure Manager will 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 economic operation of trains and HS1. TOCs are required to co-operate as regards such actions, which may include the provision of trains/locomotives and train crew to clear the line. The Infrastructure Manager will lead the process of development and maintenance of contingency plans and codes of practice which can be implemented in cases of Disruptive Events. Where a Disruptive Event is expected to continue for an extended period it is usual for an amended timetable to be prepared by the Infrastructure Manager in consultation with the affected TOCs.

### **5 SERVICES**

#### **5.1 Introduction**

Regulation 7(1) of the Rail Regulations 2005 obliges the Infrastructure Manager to provide the following services to the TOCs:

- (a) the minimum access package (as set out in section 5.2 below); and
- (b) track access to service facilities and the supply of services (as set out in section 5.3 below).

Regulation 7(5) of the Rail Regulations 2005 provides that an infrastructure manager may offer and provide the additional services as set out in section 0 below.

Regulation 7(6) of the Rail Regulations 2005 provides that a TOC may request the supply of any of the ancillary services as set out in section 5.5 below from an infrastructure manager but the infrastructure manager is under no obligation to supply the services requested.

#### **5.2 Minimum Access Package**

The minimum access package as described in schedule 2 of the Rail Regulations 2005 comprises the following:

- (a) handling of requests for infrastructure capacity; and

- (b) the right to utilise capacity which is granted, in particular:
  - (i) the right to use running track points and junctions as are necessary to utilise that capacity;
  - (ii) train control including signalling, regulation, dispatching and the communication and provision of information on train movements; and
  - (iii) all other information required to implement or operate the service for which capacity has been granted.

### **5.3 Access to Service Facilities and Supply of Services**

#### **5.3.1 Access to Service Facilities**

##### **5.3.1.1 Passenger stations**

Please refer to section 3.3.1.3 for further details.

##### **5.3.1.2 Freight Terminals**

Please refer to section 3.6.2 for further details.

##### **5.3.1.3 Marshalling Yards and train formation facilities including shunting facilities**

Please refer to section 3.6.3 for further details.

##### **5.3.1.4 Storage sidings**

Please refer to section 3.6.4 for further details.

##### **5.3.1.5 Maintenance facilities**

The infrastructure maintenance depot for HS1 is located at Singlewell. This is not a rolling stock maintenance facility – it is operated by Network Rail (High Speed) for infrastructure related maintenance. Please contact the Infrastructure Manager for further information at the address set out in section 1.8.1.

Please refer to section 3.8.3 for further information on the facilities off HS1.

##### **5.3.1.6 Other technical facilities, including cleaning and washing facilities**

Please refer to section 5.3.1.5.

##### **5.3.1.7 Maritime and inland port facilities**

Does not apply to HS1

##### **5.3.1.8 Relief facilities**

Does not apply to HS1

##### **5.3.1.9 Refuelling facilities**

Does not apply to HS1.



## **5.3.2 Supply of services in service facilities**

### **5.3.2.1 Shunting**

Does not apply to HS1.

### **5.3.2.2 Other services**

Does not apply to HS1.

## **5.4 Additional Services**

### **5.4.1 Traction Current**

Traction electricity will be supplied to the TOCs by the Infrastructure Manager to facilitate the access rights granted to a TOC under the relevant Access Agreements. Please also refer to section 3.3.2.6 for further details.

### **5.4.2 Services for Trains (Preheating, Water Supply, Toilet Waste Handling, etc.)**

There are catering shore-base facilities at St Pancras International Station and shore supplies for watering on Platforms 1-4 at St Pancras International Station. Please contact the Infrastructure Manager for further information at the address set out in section 1.8.1.

### **5.4.3 Services for exceptional transports and dangerous goods**

A risk assessment service in respect of compatibility with HS1 may be provided by the Infrastructure Manager as part of the route acceptance procedure for exceptional transport and dangerous goods.

### **5.4.4 Other Additional Services**

Not provided on HS1.

## **5.5 Ancillary Services**

### **5.5.1 Access to telecommunication network**

TOCs have access to the HS1 Data Transmission Network. This includes the telecoms between stations, passenger information systems, HS1 route information systems. Please contact the Infrastructure Manager at the address set out in 1.8.1 for more information.

### **5.5.2 Provision of Supplementary Information**

There will be a charge for the provision of supplementary information which will be assessed on the nature and scope of the information being requested.

### **5.5.3 Technical Inspection of Rolling Stock**

Technical inspection of rolling stock is possible at the Temple Mills Depot. Please contact EIL for further information at the address set out in section 1.8.2.

### **5.5.4 Ticketing Services in Passenger Stations**

Ticketing services at stations are provided by TOCs, not by HS1 or NR (HS).

### **5.5.5 Specialized Heavy Maintenance Services**

Specialized heavy maintenance is possible at the Temple Mills Depot. Please contact EIL for further information at the address set out in section 1.8.2.

### **5.5.6 Other Ancillary Services**

Police services for HS1 are procured by the Infrastructure Manager. TOCs make their own arrangements for security on trains. International policing and security arrangements apply for international TOCs who must make their own arrangements in that regard except at the Stations.

Vehicle Health Monitoring Equipment ("VHME") is provided on HS1.

Please contact the Infrastructure Manager for further information at the address set out in section 1.8.1.

## **6 CHARGES**

### **6.1 Charging Principles**

The Secretary of State has established a charging framework for HS1 under the Rail Regulations 2005. The charges to be paid by the TOCs operating their railway services on HS1 are calculated and charged in accordance with such charging framework. HS1 Ltd has reviewed the charging structure as part of the periodic review process, and concludes that the charging structure is compliant with the Rail Regulation 2005. The ORR's final approval document for PR14 confirmed that HS1's charging structure is consistent with the Regulation. Please refer to section 1.12 to access a link to the ORR's final approval document.

The charging structure will be reviewed following the conclusion of discussions at the European Commission (e.g. Recast - 1<sup>st</sup> Railway Package). This Network Statement will be updated accordingly.

#### **6.1.1 Minimum Access Package**

The charges for the Minimum Access Package are set in accordance with the charging structure set out in section 6.2 and section 6.3.

#### **6.1.2 Access to Facilities Referred to in 5.3.1**

Please refer to the appropriate contact persons set out in 5.3.1.

#### **6.1.3 Services Referred to in 5.3.2**

Please refer to the appropriate contact persons set out in 5.3.2.

#### **6.1.4 Additional Services**

Traction current (EC4T) will be charged in accordance with the charges published on the HS1 website:

<http://highspeed1.co.uk/regulatory/track-passenger>

The charges for Services for Trains are determined annually as part of the Qualifying Expenditure charge for each station. For more detail please contact the Infrastructure Manager at the address set out in 1.8.1.

### **6.1.5 Ancillary Services**

Please refer to the appropriate contact persons set out in 5.5.

## **6.2 Charging System**

The track access charges to be paid by a passenger TOC for allocation of capacity and use of HS1 (except Stations) comprise the following components:

- a) Investment Recovery Charge;
- b) Operations, Maintenance and Renewal Charge;
- c) Traction Electricity Charge;
- d) Capacity Reservation Charge (including a potential rebate on such charge);
- e) Congestion Tariff;
- f) Other Services Charge;
- g) In the case of Franchised TOCs, the freight supplement; and
- h) Carbon Costs.

Track access charges for freight train services will consist of the following components:

- a) Freight OMRC;
- b) Traction Electricity Charge;
- c) Capacity Reservation Charge (including a potential rebate on such charge);
- d) Congestion Tariff;
- e) Other Services Charge; and
- f) Carbon Costs.

## **6.3 Tariffs**

### **Charges for Passenger Operators**

#### Investment Recovery Charge ("IRC")

##### **Principles**

The purpose of the IRC is to recover part of the long term capital costs of the HS1 project (i.e. in accordance with paragraph 3 of Schedule 3 to the Rail Regulations 2005);

##### **Approach**

The IRC will be charged on the basis of the chargeable journey time spent by a relevant TOC's trains on HS1. The chargeable journey time does not take into account any time scheduled in the Working Timetable for stopping at a Station. This is consistent with the approach of not imposing IRC on the use of the Stations by TOCs.

Volume risk in respect of the IRC rests with the Infrastructure Manager. As part of its strategy to manage this risk, the Infrastructure Manager may introduce schemes granting discounts, with reference to specific traffic flows, to encourage the use of HS1 as permitted by paragraph 6 of schedule 3 of the Rail Regulations 2005. The Infrastructure Manager has published a consultation document and the responses to the consultation in respect of its discount policy which is available on its website on the following link: <http://highspeed1.co.uk/regulatory/consultations>. Annex 3 of this Network Statement contains the final discount policy.

### **Implementation**

The IRC per train per minute will be £84.48 (February 2015 prices) subject to indexation. Indexation is applied semi-annually based on changes in the retail price index. This is the maximum IRC permitted to be charged under the Secretary of State's charging framework established under the Rail Regulations 2005. For each service group, the IRC per train per minute is multiplied by the chargeable journey time of a train, a discount factor (catering for any applicable discount) and an indexation factor. The resulting figure is then multiplied by the number of timetabled trains in the service group for the relevant period which gives the IRC to be paid by the relevant TOC in respect of that period and service group. Indexation is applied semi-annually based on changes in the retail price index.

The number of chargeable minutes per train to be used in the calculation of IRC will be specified by service group in the Framework Track Access Agreement or the Track Access Agreement for the relevant TOC. Total trains for each period will be calculated on the basis of the timetabled paths for the relevant period (as set out in the New Working Timetable (as defined in Part D of the HS1 Network Code) together with any services operated pursuant to a Train Operator Variation (as defined in Part D of the HS1 Network Code)) and not the actual paths used. The recovered charge will be adjusted annually to take account of the number of additional services operated by a TOC as a result of Train Operator Variations less any scheduled services which could not be operated by that TOC:

- (i) due to a restriction of use;
- (ii) as a result of a Suspension Notice (as defined in the HS1 Passenger Access Terms being served by the TOC); or
- (iii) as a result of the exercise by the Infrastructure Manager of its rights under Part J of the HS1 Network Code.

The following table shows IRC per passenger train service (February 2015 prices) on the basis of the chargeable journey times for services currently operating on HS1:

	<b>International passenger services</b>	<b>Domestic passenger services to Ashford International Station</b>	<b>Domestic passenger services to Ebbsfleet International Station (Up direction)</b>	<b>Domestic passenger services to Ebbsfleet International Station (Down direction)</b>	<b>Domestic passenger services to Springhead Junction</b>
Chargeable Journey Time	31 minutes	31 minutes	14 minutes	15 minutes	16.5 minutes
IRC per train service	£2,618.81	£2,618.81	£1,182.69	£1,267.17	£1,393.88

### **Review**

In the event that there is further investment in relation to HS1, the Infrastructure Manager will seek to recover this additional investment through an additional IRC, subject to the approval of the ORR. HS1 has recently sought additional investment for GSM-R which has resulted in new charges from 1 April 2015.

### **Current discounts available on HS1**

Our approach to providing discounts to IRC over HS1 is set out in Annex 3. Currently, the following discounts are being offered:

- (i) For services between St Pancras International and Brussels Midi. This is being offered for four years commencing from the December 2012 timetable change date at the following levels: year commencing December 2012 – 60% discount; year commencing December 2013 – 60% discount; year commencing December 2014 – 40% discount; and year commencing December 2015 – 40% discount.
- (ii) For services between St Pancras International and Provence. This is being offered for four years commencing on the December 2014 timetable change date at the following levels: Year commencing December 2014 – 60% discount; year commencing December 2015 – 60% discount; year commencing December 2016 – 55% discount; and year commencing December 2017 – 50% discount.

### Additional IRC (“AIRC”)

#### **Principles**

The purpose of the AIRC is to recover the cost of enhancements to route infrastructure on HS1 not covered through the renewals process.

#### **Approach**

The AIRC will be charged on the basis of the chargeable journey time spent by a relevant TOC’s trains on HS1. The chargeable journey time does not take into account any time scheduled in the Working Timetable for stopping at a Station. This is consistent with the approach of not imposing IRC on the use of the Stations by TOCs.

## Current Investments

At the time of publication of this Network Statement, the AIRC charge levied on relevant TOCs is solely for the purpose of recovering the capex costs of introducing GSMR track to train communications on HS1.

## Implementation

AIRC is levied in accordance with that set out for IRC; however it is not possible to obtain any discounts on AIRC.

The current AIRC is:

- £0.85 per minute (February 2015 prices) subject to indexation for international passenger services; and
- £0.31 per minute (February 2015 prices) subject to indexation for domestic passenger services.

	<b>International passenger services</b>	<b>Domestic passenger services to Ashford International Station</b>	<b>Domestic passenger services to Ebbsfleet International Station (Up direction)</b>	<b>Domestic passenger services to Ebbsfleet International Station (Down direction)</b>	<b>Domestic passenger services to Springhead Junction</b>
Chargeable Journey Time	31 minutes	31 minutes	14 minutes	15 minutes	16.5 minutes
IRC per train service	£26.35	£9.61	£4.34	£4.65	£5.12

## Operations, Maintenance and Renewal Charge ("OMRC")

### Principles

The purpose of the OMRC is to recover the operations, maintenance and renewal costs of HS1 (other than the Stations).

### Cost Apportionment

In determining the OMRC for passenger train services, a distinction has been drawn between:

- (i) costs directly incurred as a result of operating the train service (the charges for which are levied under the general charging principle); and
- (ii) common costs, which are apportioned between passenger services on the basis of chargeable minutes spent on HS1 (the charges for which are levied on the basis of the long-term costs of the operational phase of the HS1 project).

A further distinction is drawn between (a) costs which are “at risk” for the Infrastructure Manager and (b) costs which are passed through to TOCs “at cost” albeit subject to review by the ORR to confirm that they have been efficiently incurred. The charges for operation, maintenance and renewal costs that are “at risk” are determined at the outset of each control period (CP2 began on 01 April 2015, with each control period lasting 5 years) and the Infrastructure Manager bears the risk that outturn costs exceed the costs assumed for the purpose of setting that element of the OMRC. Charges for costs which are passed through to TOCs “at cost” are charged on an estimated basis with an annual “wash up” to adjust for the difference between estimated costs (used for setting charges initially) and outturn costs.

Annex 1 contains further details of the apportionment of the operations, maintenance and renewal costs between TOCs, including with respect to indexation.

### **Implementation**

Operations, maintenance and renewal costs are apportioned as set out above and the resultant OMRC expressed as an amount per train per minute.

The OMRC per train per minute will be multiplied by the chargeable journey time of a train and (except for those costs that are passed through to TOCs “at cost”) an indexation factor. The resulting figure is then multiplied by the number of timetabled trains in the service group for the relevant period which gives the OMRC to be paid by the relevant TOC in respect of that period and service group. For those costs which are “at risk”, indexation is applied annually based on the retail price index.

Those operations, maintenance and renewal costs that are directly incurred as a result of operating the train service will be recovered by the Infrastructure Manager initially on the basis of the New Working Timetable. The recovered charges will be adjusted annually insofar as they relate to variable (rather than avoidable) directly incurred costs to take account of the number of additional services operated by a TOC as a result of Train Operator Variations (as defined in Part D of the HS1 Network Code) less any scheduled services which could not be operated by that TOC:

- (i) due to a restriction of use;
- (ii) as a result of a Suspension Notice (as defined in the HS1 Passenger Access Terms);
- (iii) as a result of the exercise by the Infrastructure Manager of its rights under Part J of the HS1 Network Code; or
- (iv) as a result of any cancellation of a service which is attributed to the Infrastructure Manager.

As previously noted, those costs which are passed through to TOCs “at cost” will be recovered by the Infrastructure Manager initially on the basis of an estimate of such costs. The recovered charges will be adjusted annually to reflect any difference between estimated and outturn costs.

Indicative figures for OMRC per train per minute are shown in the following table (February 2015 prices), subject to indexation and to review as described below: <sup>2</sup>

	<b>International passenger services (Class 373/Class 374)</b>	<b>Domestic passenger services to Ashford International Station (Class 395)</b>	<b>Domestic passenger services to Ebbsfleet International Station (Up direction) (Class 395)</b>	<b>Domestic passenger services to Ebbsfleet International Station (Down direction) (Class 395)</b>	<b>Domestic passenger services to Springhead Junction (Class 395)</b>
Chargeable Journey Time	31 minutes	31 minutes	14 minutes	15 minutes	16.5 minutes
OMRC per train per minute	£49.63	£37.37	£37.37	£37.37	£37.37
OMRC per train service	£1,538.38	£1,158.49	£523.19	£560.55	£616.61

Please note: The table above provides indicative figures for OMRC train per minute for each category of services. The train per minute figures do not take into account adjustments as a result of the revised Operating Agreement. For further information, please refer to Outperformance Sharing section below.

These charges apply to 31 March 2020. Thereafter the charges approved by ORR for CP3 will apply, and the Network Statement will be updated as appropriate.

## **Review**

In accordance with the provisions of the Concession Agreement, the ORR conducts periodic reviews of the Infrastructure Manager's OMRC. The first such periodic review took effect on 1 April 2015 and thereafter periodic reviews will take effect at 5-yearly intervals. In addition, the Infrastructure Manager can ask the ORR to carry out an interim review of the OMRC if there is a material and significant change to the circumstances upon which the current OMRC was determined or approved such that the level of OMRC is materially insufficient to enable the Infrastructure Manager to comply with its obligations under the Concession Agreement. If the level of the operations, maintenance and renewal costs is revised pursuant to a periodic or interim review, the OMRC per train per minute will be revised by the Infrastructure Manager by apportioning the revised operations, maintenance and renewal costs among the TOCs on the basis described in Annex 1.

Under the Framework Track Access Agreements and Track Access Agreements, the Infrastructure Manager will also re-apportion operations, maintenance and renewal costs between TOCs on the basis described in Annex 1 in circumstances where:

<sup>2</sup> The figures in this table have been determined on the basis of the vehicle types currently proposed for these services – i.e. Class 373 for international and Class 395 for domestic services. Different vehicle types are likely to give rise to a different "cost directly incurred as a result of operating the train service" and hence a different OMRC, although the common cost element of OMRC will not be affected by this. Please contact the Infrastructure Manager at the address set out in section 1.8.1 to obtain indicative figures for different rolling stock types.



- (i) Total timetabled train movements on HS1 in respect of a new Timetable Period are at least 4% more or less than the number of total timetabled train movements in the 12 month period following the last such revision or re-apportionment; or
- (ii) Any TOC's timetabled train movements on HS1 in respect of a new Timetable Period are at least 4% more or less than such TOC's timetabled train movements in the 12 month period following the last such revision or re-apportionment.

### **Outperformance Sharing**

As part of PR 2014 (please refer to section 1.12), the Infrastructure Manager has established a formal mechanism to share outperformance with the TOCs in its regulatory framework for years 3, 4 and 5 of Control Period 2.

### **Traction Electricity Charge**

If traction electricity is procured by the Infrastructure Manager on behalf of the TOCs, all charges that the Infrastructure Manager incurs in respect of traction electricity will be passed through to the TOCs. The traction electricity charge is arrived at by calculating the product of the calibrated modelled consumption rate of the relevant rolling stock, a rate for traction current as published (on the HS1 website: <http://highspeed1.co.uk/regulatory/track-passenger>) by the Infrastructure Manager (including an uplift to that amount to take account of transmission losses and specific charges levied by the UK national grid provider) and the usage measured in vehicle-kilometres. There is an annual adjustment to reflect any difference between the modelled and actual cost of traction electricity.

TOCs have the option to procure their own traction electricity with the prior written consent of the Infrastructure Manager. The relevant TOC shall bear all expenses, payments, liabilities, costs and losses (including transmission losses) with regard to the procurement of traction electricity itself and of any additional metering equipment or system costs required for implementation and administration. To date this option has not been exercised, and in the event of a request to do so, the Infrastructure Manager will set up a working group to establish how it would work in practice.

### **Capacity Reservation Charge (including a potential rebate on such charge)**

Regulation 15 of the Rail Regulations 2005 authorises an infrastructure manager to levy an appropriate charge for capacity that is requested but not used. The Infrastructure Manager proposes to levy such reservation charges under the relevant Framework Track Access Agreement. The reservation charge per passenger train will be set at 25% of the full IRC per train path (ignoring any discount on IRC) whereas the reservation charge per freight train will be set at 25% of the full OMRC per train path. This will be a flat charge which does not vary by time of day or day of week.

A TOC may surrender some or all of its reserved capacity rights by providing notice to this effect to the Infrastructure Manager. Any such notice shall specify the number of the reserved capacity rights to be surrendered and shall take effect at the end of the timetable year following the timetable year in which the notice is served. When such notice takes effect the reserved capacity rights referred to in such notice as being surrendered shall cease to be firm rights.

Where a TOC ("TOC A") has reserved capacity which is utilised by another TOC ("TOC B") then TOC A is entitled to a rebate on its capacity reservation charge. This is calculated as 75% of the lower of:

- (a) the capacity reservation charge paid by TOC A; and
- (b) where TOC B is a passenger TOC, the amount of the IRC paid by TOC B or, where TOC B is a freight TOC, 75% of the OMRC paid by TOC B.

#### Congestion Tariff

Paragraph 1(8) of Schedule 3 of the Rail Regulations 2005 authorises an infrastructure manager to levy a charge to reflect the scarcity of capacity of the identifiable segment of the infrastructure during a period of congestion. If at any time HS1 becomes congested within the meaning of regulation 23 of the Rail Regulations 2005, the Infrastructure Manager will consider the possibility of conducting an auction for capacity on HS1, which could give rise to a congestion tariff.

#### Other Services Charges

There may be bespoke ancillary services provided to a particular passenger TOC. The actual costs incurred by the Infrastructure Manager in providing these services will be paid by the relevant passenger TOC to the Infrastructure Manager.

#### Carbon Costs

The Carbon Costs in a relevant period shall be the fair and equitable proportion (as determined by the ORR) of all costs, expenses and any other financial liabilities relating to the carbon reduction commitment (to be introduced pursuant to Part 3 of the Climate Change Act 2008) incurred by the Infrastructure Manager which relate to such period.

#### Station Access Charges

The Station Access Charges comprise:

- (a) Common charges; and
- (b) Exclusive charges.

**Common Charges:** The common charges are made up of the following components:

- (i) **Qualifying expenditure:** This is the operating and maintenance expenditure described in the Station Access Conditions and relevant Annexes incurred by the Infrastructure Manager during any accounting year/half accounting year calculated in accordance with the formula specified in the Station Access Conditions and relevant Annexes. The formula apportions the qualifying expenditure between TOCs by taking into account a combination of each TOC's vehicle departures at the Station and the relative size of the international, domestic and common areas at the relevant Station. The qualifying expenditure is levied on all TOCs using the relevant Station.
- (ii) **Long term charge:** The long term charge will reflect the Infrastructure Manager's costs of the renewal and repair activities at each Station. The

charge will be recovered from all TOCs whose services stop at the Station in proportion to the number of vehicle departures for each TOC and the relevant sizes of the different areas at the Station. The amount of the long-term charge will be specified in the relevant Annexes to the Station Access Conditions for each Station and will be reviewed as per the specified formula.

**Exclusive Charges:** These are the charges to be paid by the respective TOC for any bespoke services provided by the Infrastructure Manager to such TOC at the relevant Station.

## **Charges for Freight Train Services**

### Freight OMRC

Freight OMRC comprises only the costs directly incurred as a result of operating freight train services (the charges for which are levied under the general charging principle). These consist only of operations, maintenance and renewal costs which would not be incurred, or would be “avoidable”, in the absence of freight train services on HS1. In determining such avoidable costs, account has been taken of the cost of mothballing freight-only elements of HS1, with such costs being treated as common costs. Subject to the final two paragraphs of this section on Freight OMRC, freight operators will not be charged common costs.

Following the above charging principles, the freight OMRC charge per km for CP2 was set on the basis of spreading the relevant costs across 800 trains per year, with the possibility of a reopener to reset charges in the case of a Review Event. That is, when the actual number of trains run in the year is 12.5% greater or less than the forecast 800 trains (in the first year of CP2, or the immediately preceding year for each subsequent year of the Control Period). For 2014/15 the freight OMRC charge (based on 800 trains per year) was £5.36 (February 2015 prices) per train-km.

The Infrastructure Manager wishes to encourage the development of new high speed freight markets and does not preclude the possibility that the profitability of services in such markets would enable them to make an increased or full contribution to all costs. More generally, the Infrastructure Manager reserves the right to charge freight TOCs (whether high-speed or otherwise) a mark-up in accordance with paragraph 2 of schedule 3 of the Rail Regulations 2005. The ORR will approve the level of any such mark-up and any such sums received by way of mark-up will be used to offset the operations, maintenance and renewal charge payable by passenger operations for the use of HS1.

### Traction Electricity Charge

As per passenger operators.

### Capacity Reservation Charge

Regulation 15 of the Rail Regulations 2005 authorises an infrastructure manager to levy an appropriate charge for capacity that is requested but not used.

The Infrastructure Manager will levy a reservation charge in respect of capacity reserved by freight TOCs. This will be set at 25% of the operations, maintenance and renewal charge which the freight TOC would pay if it were to operate a train pursuant to the reserved right.

### Congestion Tariff

As per passenger operators.

### Other Services Charges

There may be bespoke ancillary services provided to a particular freight TOC. The actual costs incurred by the Infrastructure Manager in providing these services will be paid by the relevant freight TOC to the Infrastructure Manager.

### Carbon Costs

As per passenger operators.

## **Charges for Testing Train Services**

In so far as a TOC proposing to operate passenger services needs to operate non-passenger services during a testing period, it will be liable to pay all components of the track access charges as set out in section 6.1.1 above other than IRC and may be liable to pay an Additional Inspection Charge ("AIC"). The AIC will be payable by the TOC if a maintenance inspection is carried out as a direct consequence of the TOC carrying out the testing.

In so far as a TOC operates passenger services during a testing period, it will be liable to pay all of the components of the track access charges as set out in section 6.1.1 above and may also be liable to pay the AIC.

In so far as a TOC operates freight services during a testing period, it will be liable to pay all components of the track access charges as set out in section 6.2.1 above and may be liable to an AIC. The AIC will be payable by the TOC on the same basis as described above.

### Station Access Charges for Testing

In so far as a TOC proposing to operate passenger services requires station access as part of running non-passenger services during a testing period, the TOC will be liable to pay a fixed sum of £1 as the station access charge. For running passenger services during a testing period, the TOC will be liable to pay all of the components of the station access charges as set out in section 6.1.2 above.

A TOC proposing to operate freight services during a testing period will not be liable for any station access charges.

## **Charges for Special Services**

### Track Access Charges for Special Services

The charges for access to HS1 which a TOC will be liable to pay as a result of the operation of a Special Service will depend upon its nature and duration. Please contact the Infrastructure Manager for further information at the address set out in section 1.8.1.

### Station Access Charges for Special Services

Insofar as a TOC proposing to run a Special Service requires station access as part of its operation, the TOC will be liable to pay an access charge in respect of that station. The

form and level of access charge will depend on the nature and duration of the Special Service, as well as any exclusive station services (as described in section 6.1.2(b) above) requested by the TOC. Please contact the Infrastructure Manager for further information at the address set out in section 1.8.1.

## **6.4 Financial Penalties and Incentives**

### **6.4.1 Non Usage Charges**

Should a TOC not use all the Firm Rights allocated to them in the Track Access Agreement, they are liable to pay the Capacity Reservation charge – see 6.3.

Once a path is allocated through the timetabling process, it is not possible to remove it and therefore the full charges associated with that path will be borne by the TOC.

### **6.4.2 Cancellation Fees**

Once a path is allocated through the timetabling process it is not possible to remove it, regardless of whether the TOC runs the service. Therefore the TOC is still responsible for the full charges associated with that path.

### **6.4.3 Reduction fee for Framework Agreements**

There are no discounts to track access charges as a result of entering into a Framework Track Access Agreement.

## **6.5 Performance Regime**

Regulation 14 of the Rail Regulations 2005 provides that an infrastructure manager must establish a performance regime as part of the charging system to encourage railway undertakings and the infrastructure manager to minimise disruption and improve the performance of the railway network. The Infrastructure Manager has developed a performance regime which is incorporated in the relevant Framework Track Access Agreement or Track Access Agreement. Please refer to Annex 2 for more details.

Payments under the Possessions Regime are discussed in section 4.5.

## **6.6 Changes to Charges**

The applicable track access charges and station Long Term Charge were approved by ORR for Control Period 2 (01 April 2015 – 31 March 2020) and remain constant in real terms over this period. Each year the charges are adjusted by RPI.

The station Qualifying Expenditure charge is reviewed and set on an annual basis in agreement with the TOCs.

## **6.7 Billing Arrangements**

The Infrastructure Manager will invoice the TOCs. Unless operating a Special Service, payment of the IRC, OMRC and the capacity reservation charge is to be made by the passenger TOCs quarterly in advance and payment of other charges are to be made each period in arrears. Freight operators will pay all charges each period in arrears. Please contact the Infrastructure Manager for further information in relation to the billing arrangements for a Special Service at the address set out in section 1.8.1. Agreed terms

and conditions, including those relating to non-payment or late payment are set out in the relevant Access Agreements.

## OPERATIONS, MAINTENANCE AND RENEWAL CHARGE

In determining OMRC, the Infrastructure Manager has adopted the following approach:

1. First, a distinction has been drawn between:
  - those costs which are directly incurred as a result of operating train services, which are recovered through the general charging principle (i.e. in accordance with paragraph 1(4) of Schedule 3 to the Rail Regulations 2005); and
  - common costs, which are recovered on the basis of the long term costs of the operational phase of the HS1 project under the exception to the general charging principle specified in paragraph 3 of Schedule 3 to the Rail Regulations 2005 (the "Second Exception").

In order to do this:

- Directly incurred costs have been split into "variable" and "avoidable" costs. Variable costs are those costs which vary with the number and type of trains running on the line.
- To determine avoidable costs, train services have been grouped into a number of different "increments", i.e. "domestic passenger services", "international passenger services" and "freight services".
- Consideration has been given to what OMRC would not be incurred, or would be "avoidable", in the absence of each of these increments. In determining such avoidable costs, account has been taken of the cost of mothballing elements of HS1 required only by that increment, with such mothballing costs being treated as common costs. To be specific:
  - Those costs which would be avoidable if international passenger services were not to run on HS1 have been defined as being those costs which are directly incurred by international passenger services.
  - Those costs which would be avoidable if domestic passenger services were not to run on HS1 have been defined as being those costs which are directly incurred by domestic passenger services.
  - Those costs which would be avoidable if freight services were not to run on HS1 have been defined as being those costs which are directly incurred by freight services.

All such costs are recovered under the general charging principle.

- Those costs which remain after the process of defining increments and analysing avoidable costs (as outlined above) are treated as common costs. These costs are apportioned between international and domestic passenger train services on the following basis:
  - Common costs which increase as the length of the line increases (e.g. signalling maintenance) are apportioned between international and

domestic passenger train services on the basis of expected train minutes spent on those sections of HS1 used by both international and domestic train services (ignoring stopping time at stations). This is to prevent operators being unfairly penalised for time spent on sections of HS1 the cost of which will, for the most part, be recovered from such operators as costs directly incurred by them (i.e. under the general charging principle);

- Common costs which do not increase with the length of the line (e.g. office administration costs) are apportioned between international and domestic passenger train services on the basis of expected train minutes spent on the whole length of HS1 (ignoring stopping time at stations).

Common costs are recovered from passenger TOCs on the basis of the long-term costs of the operational phase of HS1 project under the Second Exception. Conventional freight services are not currently charged for common costs.

2. Second, a distinction has been drawn between:

- those operations, maintenance and renewal costs which are treated as being “at risk” for the Infrastructure Manager, in that charges for such costs are determined at the outset of each price control period (initially the period to 31 March 2015 and thereafter each period of 5 successive years) so that the Infrastructure Manager bears the risk that outturn costs exceed assumed costs; and
- those operations, maintenance and renewal costs which are passed through to passenger TOCs “at cost” (subject to review by the ORR to confirm that they have been efficiently incurred) because they are particularly difficult to control and subject to significant potential variation. For the first control period they include insurance, rates and non-traction, non-station electricity and amounts payable in respect of renewals under the Infrastructure Manager’s contract with UKPN (in order to cover renewal of the electricity sub-stations).

Dealing with these in turn:

- With respect to Control Period 2 (5 year period beginning 01 April 2015), an analysis has been undertaken, in conjunction with input from NR (HS), to ascertain what level of “at risk” costs relating to operation, maintenance and renewal it would be reasonable for the Infrastructure Manager to expect efficiently to incur. This analysis and input from NR (HS)) generated a profile of OMRC which declines in real terms over time, as a result of the impact of various efficiency initiatives. However, in order to make it easier for TOCs to plan their activities and to ensure that passenger TOCs have a clearer relationship between their own costs and likely changes to passenger fares, this declining profile of costs has been converted into a flat profile of costs with exactly the same present value. This flat profile is apportioned between domestic and international passenger services in the manner outlined above (i.e. distinguishing between directly incurred costs and common costs).
- Operations, maintenance and renewal costs which are passed through to passenger TOCs “at cost” and can be reviewed by the ORR to ensure that such costs have been efficiently incurred. No indexing of these costs is therefore necessary.



3. Third, once these overall levels of OMRC for domestic and international passenger trains have been calculated, they are converted into actual charges on the basis of timetabled train minutes. Conventional freight services are charged only directly incurred costs on a train-km basis.

## PERFORMANCE REGIME

As required by the Rail Regulations 2005, Framework Track Access Agreements and Track Access Agreements (as applicable) between the Infrastructure Manager and the TOCs will include a performance regime designed to encourage all parties to minimise disruption and improve the performance of HS1.

The performance regime has been designed to provide incentives to encourage all parties both to minimise the frequency of performance-disrupting incidents and to contain their impact when they occur.

### Measuring delays/cancellations

Performance will be measured using the TRUST monitoring system, with incidents of delay or cancellation allocated both to cause codes and responsible manager codes in accordance with the Delay Attribution Guide.

The regime will not normally take account of delays/cancellations arising off HS1. Hence, late presentation of trains onto HS1 will not be attributed against either the TOC or the Infrastructure Manager at the monitoring point at which a train enters HS1. The exception to this is where a delay or cancellation is directly caused by HS1 at a location proximate to the entry point on to HS1. Subsequent delays/cancellations to a train as a consequence of the late presentation will be attributed to the TOC whose train is presented late (subject to intervening or contributing incidents, which will be attributed in accordance with their on-HS1 root cause), whatever the primary underlying cause of the late presentation. Impacts of that train on other trains will be attributed in the same way.

Third party causes arising off HS1 and affecting network performance will be excluded (e.g. fires on adjoining property affecting operations) for both the Infrastructure Manager and the TOC.

### Infrastructure Manager caused delays/cancellations – Performance Payments by Infrastructure Manager (HS1 Ltd Performance Sum)

The Infrastructure Manager will make payments to a TOC in the event that the Infrastructure Manager attributed delays/cancellations (excluding TOC-on-TOC delays/cancellations) experienced by the TOC exceeds (i.e. is worse than) a defined threshold ("Poor Performance Threshold"). Payments will be equal to the product of (a) the difference between the average minutes delay and cancellation minutes per train which are attributable to the Infrastructure Manager in a given 28 day period and the Poor Performance Threshold, (b) a payment rate specific to the type of traffic affected and (c) the number of trains scheduled to be operated by the TOC during the period. The threshold will be defined to allow for an expected level of variability period-to-period (for example, it could be set according to the estimated standard deviation of delays over a year).

### Good network performance – Bonus Payments to the Infrastructure Manager (HS1 Ltd Performance Bonus)

The Infrastructure Manager will be entitled to a bonus payment from a TOC in the event that the sum of the Infrastructure Manager caused delay minutes and cancellation minutes per train and TOC-on-TOC delay minutes and cancellation minutes per train experienced

by that TOC is less (i.e. better) than a defined threshold ("Good Performance Threshold"). Bonus payments will be based on the difference between actual delays/cancellations per train and a Good Performance Threshold, but will be calculated at a reduced payment rate ("Bonus Payment Rate"). The Bonus Payment Rate will be 25% of the payment rate referred to above. This mechanism will provide a positive incentive for the Infrastructure Manager to manage disruption effectively. The Infrastructure Manager will not be entitled to receive a performance bonus from a TOC in the event that its performance sum payment to that TOC exceeds one thirteenth of the annual Performance Cap (as described below) in any period.

### **TOC caused delays/cancellations – Performance Payments by the TOC (Train Operator Performance Sum)**

Each TOC will be obliged to make a performance payment to the Infrastructure Manager in respect of the TOC-on-TOC delays/cancellations which it causes to another TOC (the "Affected TOC") subject to overall performance experienced by that TOC (i.e. both the Infrastructure Manager caused delays/cancellations and TOC-on-TOC delays/cancellations) being worse than a defined TOC on TOC Receipt Benchmark. Payments in respect of each Affected TOC will be equal to the product of (a) the number of minutes delay and cancellation minutes per train which are attributable to the TOC in a given 28 day period and (b) a payment rate specific to the type of traffic affected.

If there is only one Affected TOC then this payment will be paid by the Infrastructure Manager to that TOC. Where there is more than one Affected TOC, the payment will be split between those TOCs in proportion to their payment rate multiplied by the relevant TOC-on-TOC minutes delay and cancellation minutes which they have experienced. The payments made by the Infrastructure Manager to the Affected TOCs shall not exceed the performance payments it receives from TOCs responsible for the TOC-on-TOC delay/cancellations.

### **Payment rates**

Payment rates will be standardised for particular traffic types. They will not represent the so-called marginal revenue effect (the impact on revenue of a change in performance at the margin).

### **Caps on liability**

Payment by the Infrastructure Manager and the TOC in respect of their poor performance will be subject to a cap (the "Performance Cap") as follows:

- (a) in relation to the passenger operators in respect of the relevant year expiring on 31 March 2017 and each subsequent relevant year, 3% of an amount equal to the aggregate of total IRC and OMRC payable by such TOC in the relevant year, subject to a minimum of £500,000 (in February 2009 prices); and
- (b) in relation to freight operators in respect of the relevant year expiring on 31 March 2017 and each subsequent relevant year, 3% of an amount equal to the total OMRC payable by such FOC in the relevant year, subject to a minimum of £500,000 (in February 2009 prices).

In each year there will also be a quarterly cap (which will be based on the annual cap). Any unused element of the quarterly cap can be rolled forward within any year.

The Infrastructure Manager bonus payments will also be subject to an annual cap equal to 10% of the Performance Cap and a quarterly cap operating on the same basis as that applicable to Infrastructure Manager and TOC payments.

### **Performance improvement plans**

If either party's performance payment exceeds one thirteenth of the annual cap in any 3 out of 13 consecutive 28 day periods, or if its performance fails to satisfy certain other criteria in any 8 out of 13 consecutive 28 day periods, it will be required to submit a performance improvement plan.

### **Recalibration and review**

The performance regime will operate by reference to a number of parameters which are specified in the relevant Framework Track Access Agreement or the Track Access Agreement (as applicable). The parameters specified will reflect a reasonable expectation of each party's measured performance over a defined period. Ultimately, this will be determined on the basis of actual performance data but initial parameters have been set on the basis of a modelling exercise.

The performance regime can be reviewed after a material change or if another TOC's performance regime is revised. A material change for this purpose would include a physical modification to HS1, an increase or decrease of more than 4% in the number of train movements, or a significant change in the performance of the rolling stock operated by the TOC.

## DISCOUNT POLICY

### 1. Introduction

- 1.1 This annex to the HS1 Network Statement sets out HS1 Ltd's policy on offering discounted access charges on HS1 and the circumstances in which discounts may be offered.
- 1.2 It is HS1 Ltd's policy not to offer OMRC discounts as this would risk the under-recovery of costs for the operation, maintenance and renewal of HS1.
- 1.3 The legal basis for offering discounts on access charges is set out in Schedule 3 to the 2005 Railway Regulations.<sup>3</sup> Paragraph 6(3) provides that "The infrastructure manager may introduce schemes available to all users of the infrastructure, with reference to specified traffic flows, granting time-limited discounts to encourage the development of new rail services, or discounts encouraging the use of considerably under-utilised lines." Paragraph 6(2) provides that an infrastructure manager may also apply discounts by reference to administrative cost savings. HS1 Ltd does not offer discounts in line with paragraph 6(2) because any administrative cost savings would be reflected in the OMRC levels which are established through a periodic review every five years.
- 1.4 Any agreed discounts will be reflected in framework track access agreements. The Office of Rail and Road (ORR) must approve new framework track access agreements (and amendments to existing agreements) and so will need to approve any discounts agreed by HS1 Ltd and TOCs. In considering whether to approve discount applications, and in considering any appeals by TOCs, the ORR has indicated that it would expect to take HS1 Ltd's published discounts policy into account.

### 2. Principles for the application of discounts on HS1

- 2.1 HS1 Ltd's policy on discounts is based on a set of principles.

***Principle 1: Discounts will be offered on a fair, transparent and non-discriminatory basis***

- 2.2 In line with paragraph 6(6) of Schedule 3 of the 2005 Railway Regulations, similar discount schemes will be applied to similar services, regardless of which TOC operates the relevant service.
- 2.3 By setting out its discount policy in this Annex to the HS1 Network Statement, the basis on which HS1 Ltd offers discounts will be clear to all potential and existing TOCs. The key terms of agreed discount schemes, including start and end dates, will also be published in the HS1 Network Statement, as will notifications of the general availability of discount schemes in specific years.

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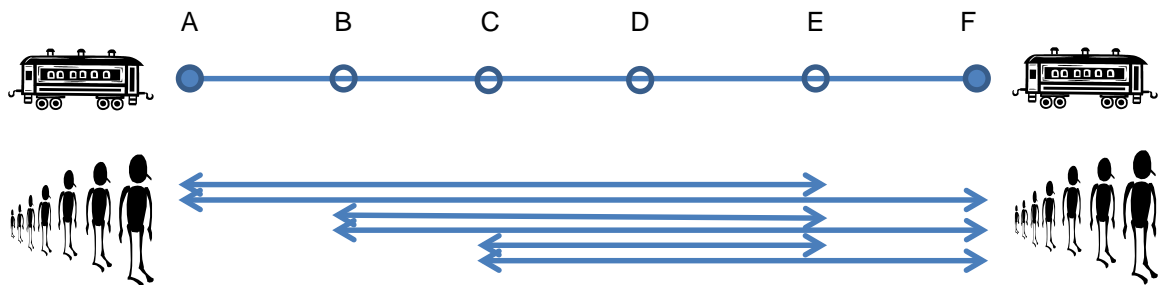
<sup>3</sup> Railways Infrastructure (Access and Management) Regulations 2005, as amended by the Railways Infrastructure (Access and Management) (Amendment) Regulations 2009.

**Principle 2: Specific criteria will be applied in order to determine whether or not a discount will be offered**

- 2.4 The criteria are aimed at encouraging the development of services that would not otherwise be viable, in order to improve the utilisation of HS1. This accords with the 2005 Railway Regulations provision that discounts may be offered “to encourage the development of new rail services, or discounts encouraging the use of considerably under-utilised lines”.<sup>4</sup>

**Principle 3: The criteria will be based on identifying rail services, rather than traffic flows**

- 2.5 HS1 Ltd’s criteria for the application of discounts are based on the identification of rail services. Use is made of both the terms “services” and “traffic flows” in the 2005 Railway Regulations. While the concept of “traffic flows” has been used by UK and EU competition authorities, normally referring to passenger demand and to origin-destination or point-to-point passenger flows, it is considered by HS1 Ltd that specific and clear criteria for the application of discounts can be developed more readily by reference to rail services. HS1 Ltd is of the view that this is consistent with the 2005 Railway Regulations.
- 2.6 The term “traffic flow” is taken to represent individual point-to-point passenger flows, i.e. individual journeys by passengers from a defined origin to a defined destination. A rail service, by contrast, is defined by the starting point, end point and stopping pattern of that rail service – which may provide for a variety of different passenger traffic flows. In considering discounts, HS1 Ltd is prepared to differentiate between peak and off-peak services, daytime and night-time services and services that only operate on specific dates.
- 2.7 Even on a relatively simple rail service such as those which operate on HS1, given that there are intermediate station calls on many services, there is not necessarily an exact correspondence between rail services and traffic flows. For example, on the rail service below between destinations A and F, the passenger (traffic) flows include A – E, A – F, B – E, B – F, C – E and so on.



- 2.8 Given that a TOC’s profitability is much more readily determined at the rail service level than at the (passenger) traffic flow level, discount criteria have been developed by reference to rail services, in order to identify the likelihood that a service would not proceed

<sup>4</sup> Paragraph 6(3) of Schedule 3 of the 2005 Railway Regulations.

in the absence of a discount. However, in doing so, HS1 Ltd will be mindful of ensuring that competition between TOCs in specific markets is not distorted.

***Principle 4: Discounts should not prevent best use being made of HS1 capacity.***

- 2.9 In particular, discounts will not be offered for new services where this risks crowding out other well-used and/or profitable services. This means that it may be necessary to restrict the availability of discounts to all TOCs when HS1 is approaching high levels of utilisation.

***Principle 5: HS1 Ltd's commercial interests, as a private company with responsibilities to its shareholders, need to be protected.***

- 2.10 In general, HS1 Ltd will offer discounts where this is expected to increase total revenues for HS1 Ltd, through encouraging more services to be operated than would otherwise be the case. This may mean, for example, that discounts for new services will not be offered when these would also apply to existing services on HS1 that do not currently benefit from discounts. Exclusions will also need to be made for those domestic services specified by Government in franchise agreements.

- 2.11 In addition, HS1 Ltd needs to protect its commercial position in the event of an adverse legal or regulatory decision in relation to discounts. HS1 Ltd therefore reserves the right to review and withdraw all discounts offered by it in the event of any regulatory or legal determination with respect to HS1 Ltd's obligations under the provisions of 2005 Railway Regulations relating to discounts or under EU or UK competition law relating to the discount principles, which would or is likely to have a material adverse impact on the economics of HS1 Ltd's business. These are the only circumstances in which it is envisaged that existing agreed discount schemes could be withdrawn.

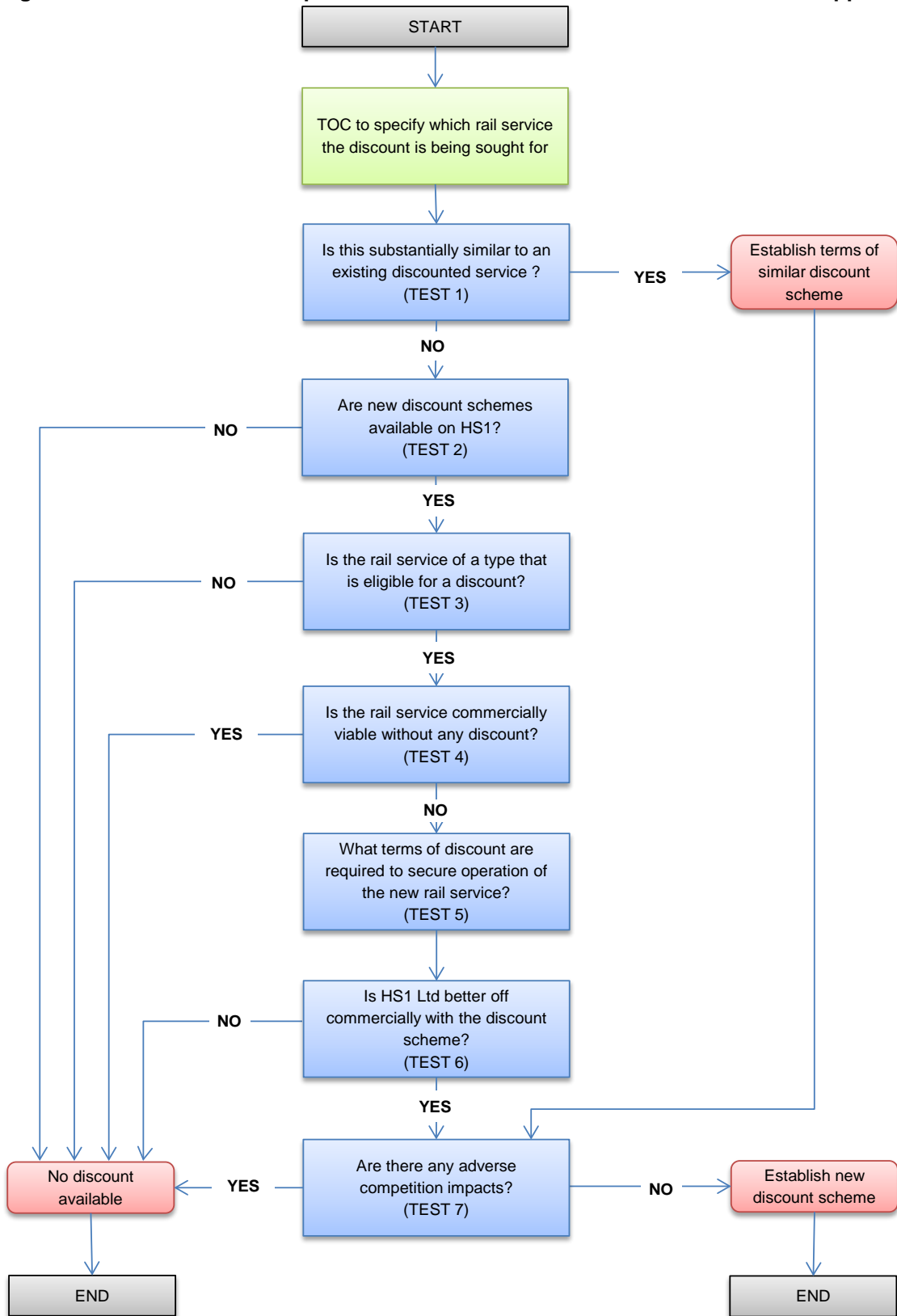
***Principle 6: Discounts will be time-limited.***

- 2.12 Through offering discounts, HS1 Ltd aims to facilitate the development of rail services that will be sustainable in the long-term, rather than subsidising services that are unlikely ever to be profitable. For this reason, discounts will only be offered for specific time periods, with clearly defined start and end dates.

**3. Discounts criteria**

- 3.1 The process for consideration of applications for IRC discounts is summarised in Figure 1 below. HS1 Ltd will apply a series of seven tests to determine whether a discount is applicable; each test is described further in the remainder of this section. The tests are sequential, and will be carried out in the order indicated in Figure 1.

**Figure 1 – Decision process for consideration of discount applications**





***Test 1: Is the rail service substantially similar to an existing discounted rail service?***

- 3.2 The 2005 Railway Regulations require that Infrastructure Managers apply "similar discount schemes" to "similar services", so the first test determines whether an existing discount scheme will apply to a new rail service (rail service being defined as described in paragraph 2.6 above). If a new rail service is considered to be similar to an existing one that is in receipt of a discount, in order to act in a fair and non-discriminatory manner, HS1 Ltd will offer similar discounts regardless of whether or not the rail service satisfies the other tests.
- 3.3 There are three criteria that will be considered by HS1 Ltd in determining whether a new rail service is similar to an existing one:
- (i) The passenger traffic flows (origin-destination flows) served and whether they are similar;
    - o By 'similar' this is generally taken to be the case if, in respect of each of the existing service and the new rail service, passenger revenues from traffic flows common to both services comprise at least 75% of total passenger revenues on the relevant service;<sup>5</sup> and
    - o In defining whether traffic flows are similar, the substitutability of stations or destinations will be taken into account. For example, Paris Gare du Nord will not be considered to be a substitutable destination for Marne la Vallée.
  - (ii) The rail service pattern and whether it is the same for most trains;
    - o Taking into account the origins, destinations, stopping patterns and journey times of the rail services; and
    - o Standard regular services will be taken into account, rather than infrequent variations in stopping patterns.
  - (iii) Any specific market segment(s) targeted by the rail service, such as the business or leisure markets, or special services operated only on specific days or at specific times (including peak or off-peak services).
- 3.4 If a TOC considers that it should receive a discount on the basis that its rail service is similar to an existing rail service that already benefits from a discount, then it should provide HS1 Ltd with details of the planned rail service and an analysis of expected traffic flows and revenues, as described above. HS1 Ltd will compare this with its own information on the relevant existing rail service in order to determine whether or not the two rail services are similar.
- 3.5 If a rail service is considered to be similar to an existing service that benefits from a discount, a similar discount scheme will be established, applying the terms of the existing discount to the new service, in terms of the level of discount and the start and end dates. In order to offer the same terms to TOCs serving the same markets, the end date for the new discount scheme will be the same as for the existing scheme regardless of the commencement date of the new service. For example, TOC 1 may be provided with a discount from December 2012 to December 2016 for a particular rail service. In December

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<sup>5</sup> Appendix A sets out an example of how this will be calculated.

2014 TOC 2 starts a new service that is considered by HS1 Ltd to be similar under the three criteria above. TOC 2 will receive the discount from the commencement of its service through to December 2016, rather than for a four-year period. This will ensure that at any one point in time all TOCs receive similar discounts for similar services.

- 3.6 Any conditions to obtaining the discount will also apply to both services (see Test 5). In the case of a condition on minimum service levels, TOC-specific minimum levels will apply, based on the plans set out in the TOC's discount application. If a similar discount scheme is established under this Test 1, Tests 2-6 will not be applied but Test 7 will still be applied.
- 3.7 If a rail service is not considered to be similar to an existing rail service that benefits from a discount, Tests 2-7 will be applied, in sequential order, to determine whether or not a new discount scheme should be established by HS1 Ltd.

***Test 2: Are new discount schemes available on HS1?***

- 3.8 To enable HS1 Ltd to decline to offer new discounts when HS1 is nearing capacity, Test 2 is designed to allow the general availability of discounts to be withdrawn. This may be necessary when there is a risk that the operation of discounted services could crowd out better used and/or more profitable undiscounted services. This test considers the general availability of discounts to all TOCs and will be applied consistently to all TOCs and all discount applications.<sup>6</sup>
- 3.9 The availability of new discount schemes will be reviewed internally by HS1 Ltd, normally on an annual basis, although the availability may also be changed by HS1 Ltd when there is a material change in circumstances, in particular which results or is expected to result in a significant change in the utilisation of HS1. HS1 Ltd's internal review of the availability of new discount schemes will not involve industry consultation, although the determinations, which will specify in which years discounts are available, will be notified to the ORR and set out in the HS1 Network Statement.
- 3.10 When determining whether or not new discount schemes should generally be available, HS1 Ltd will consider the availability of spare capacity on HS1. Where HS1 has been declared to be 'congested' (under Regulation 23 of the 2005 Railway Regulations), it is expected that new discount schemes will not be available, although HS1 Ltd may wish to restrict the availability of new discount schemes before HS1 becomes fully utilised. In general, if HS1 is considered to be 'considerably under-utilised', as referenced in the 2005 Railway Regulations, HS1 Ltd would expect to offer new discount schemes.
- 3.11 While in principle, HS1 has the capability for 20 international rail services or 16 domestic rail services per hour in each direction, in practice capacity on HS1 is more limited than this because of the mix of services, in terms of operating speeds and stopping patterns, or constraints on other railway infrastructure networks. Whether or not HS1 is considerably under-utilised will therefore be determined by HS1 Ltd by assessing:
- The proportion of capacity currently being utilised;
  - The ability to satisfy new requests for services without significant disruption to existing service patterns/timetables;

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<sup>6</sup> Except where a similar discount scheme is to be applied to a similar service, as under Test 1.

- Likely future growth in demand for train paths for existing and planned rail services; and
  - Market conditions.
- 3.12 Ultimately, the decision whether or not to make discount schemes generally available will be at the commercial discretion of HS1 Ltd. If discount schemes are to be offered, they will be made available to all TOCs on a transparent and non-discriminatory basis, applying the criteria described in this Annex. If at any time, HS1 Ltd decides that new discount schemes are not to be offered, any existing discount schemes will remain in place until their agreed termination date, subject to paragraph 2.11 above.
- 3.13 Discount schemes will normally be offered over the entirety of HS1 infrastructure, for the purposes of defining the 'specified infrastructure section' under paragraph 6(6) of Schedule 3 of the 2005 Railway Regulations, although HS1 Ltd reserves the right to specify that discounts are only available over specific sub-sections depending on the assessment of capacity described above.

***Test 3: Is the rail service of a type that is eligible for a discount?***

- 3.14 Discounts will not be offered for domestic rail services that are specified by Government in the South Eastern franchise agreement (or in any equivalent instrument that replaces it) because the provision of discounts for such services would neither encourage the development of new services nor improve the utilisation of HS1. The only exception to this is where additional services are specified by Government over and above the services specified in the 2006-2018 South Eastern franchise agreement and where a case can be made by Government that these additional services are only viable with an IRC discount.
- 3.15 IRC discounts may also be available to a domestic franchise operator for services that are not specified by Government, where the effect of offering a discount would be to encourage the operation of additional services.
- 3.16 All other rail services, existing and proposed, that would normally be charged IRC are eligible to be considered for discounts.

***Test 4: Is the rail service commercially viable without any discount?***

- 3.17 This test is designed to ensure that discounts are targeted at encouraging rail services that might not otherwise have a commercial case and which could not operate sustainably without a discount. If, without being offered a discount by HS1 Ltd, a rail service is assessed as not being commercially viable in the short term (during the proposed discount period), taking into account revenues, costs and any public sector subsidy, but if it has reasonable prospects of long-term viability, then it will be eligible for a discount on IRC. TOCs will not normally be offered discounts for rail services that are commercially viable over the discount period and the full IRC is expected to be charged for profitable services.
- 3.18 Criteria that will be considered in determining whether or not a rail service is commercially viable over time include:
- Forecasts of passenger demand and revenues and any significant uncertainties in the forecasts;

- Forecast operating costs, including staff costs, rolling stock costs and infrastructure charges (including any other discounts), together with any necessary investments and their payback period;
- The availability of any public sector support – which may improve commercial viability for the TOC; and
- The expected profit/loss of the rail services during the proposed discount period, taking into account the above factors, and expected changes over time.

3.19 In order to satisfy these criteria, applicants will be expected to provide evidence of:

- The market for the rail service and forecasts of traffic and revenue;
- The likely demand response to any reduction in fares facilitated by IRC discounts, such as fares elasticities;
- Estimated operating costs and the relative importance of HS1 infrastructure costs;
- Any expected public sector support, or requests for discounts from other infrastructure managers; and
- The business case for the rail service.

3.20 Any evidence provided will be held in confidence by HS1 Ltd and will not be released other than to the ORR for the purposes of the approval of framework track access agreements or in the event of an appeal or dispute.

***Test 5: What terms of discount are required to secure operation of the rail service?***

3.21 Under this test, the appropriate level, profile and duration of any discount will be determined and, once agreed, will be published in the HS1 Network Statement. In general, HS1 Ltd will offer the minimum level and duration of discount required to secure the sustainable operation of the rail service, taking into account the following factors:

- Any financial contribution towards securing the viability of rail services is expected to be shared between HS1 Ltd (in the form of discounted IRC), the TOC, other infrastructure managers and, where appropriate, the relevant public authorities;
- The duration of the discount period will normally be between one and four years, unless a strong case for an alternative duration is put forward by the TOC. Discounts will always be time-limited;
- It may be appropriate to profile the level of discount over time to reflect anticipated improvements in commercial viability or major uncertainties in the forecasts; and
- Discount levels will be capped to reflect any Capacity Reservation Charge that may be foregone if new services are operated.

3.22 At the end of the discount period, the discount scheme will cease and a new application would need to be made in advance to secure any further continuation of discounts by way of a new discounting scheme. However, it is considered unlikely that discounts would be extended in this way as HS1 Ltd wishes to encourage the development of services that will be sustainable in the long run, rather than subsidise services that are unlikely ever to be profitable.

3.23 The terms of the discount may also include conditions on the TOC, such as:

- The operation of minimum rail service levels during the period of discount, based on the TOC's plans as submitted in the discount application, subject to a limited degree of flexibility for the TOC;
- The provision of appropriate information to HS1 Ltd, for monitoring the effects of any discount scheme, and to enable HS1 Ltd to better develop discount schemes in the future. This data, which will be held in confidence, may include:
  - Passenger numbers and revenue per seat; and
  - Cost per seat.

3.24 If any agreed conditions are breached, HS1 Ltd will normally require to be held harmless financially. Subject to the agreement of the ORR, it therefore reserves the right to review and amend the terms of the discount scheme in order, for example, to adjust IRC discount levels to compensate for lower than agreed rail service levels or for costs incurred in data collection. In these circumstances, the adjusted IRC levels will not exceed the full undiscounted IRC on a per train basis.

***Test 6: Is HS1 Ltd better off commercially with the discount scheme?***

3.25 HS1 Ltd is a commercial company, with responsibilities to its shareholders, and needs to ensure that any agreed discount schemes are in its commercial interests. This means in practice that HS1 Ltd will require the impacts of any discount schemes to increase usage of HS1 in order to at least offset the impacts of discounting IRC for a particular service.

3.26 In determining the financial impacts on HS1 Ltd, the following factors will be taken into account:

- The number of trains that would be operated with the discount in place compared with the number of trains that would be operated in the absence of any discount;
- IRC revenues with and without the discount scheme, taking into account expected numbers of trains and discounted or full IRC levels;
- Any consequential impacts on the applicant's Capacity Reservation Charges; and
- The impact on HS1 Ltd's IRC revenues for any existing or planned rail services, including any discounts that might apply to those existing services.

3.27 In considering the final point above, HS1 Ltd may take into account any market information provided by other TOCs currently operating services on HS1 or by TOCs planning to operate such services in future.

3.28 It may also be necessary to consider any knock-on impacts on HS1 Ltd's revenues from OMRC payments or the performance regime, as these may change when new services are introduced. This is particularly the case if the introduction of a new service results in a change in total train movements of more than 4%, as this would result in recalibration of both OMRC and the performance regime.

3.29 If it is not in HS1 Ltd's commercial interests to offer discounts for a specific service, then a discount scheme will not be established. This does not override the obligation to provide similar discounts for similar services (Test 1).

### ***Test 7: Are there any adverse competition impacts?***

- 3.30 The final test is to ensure that any discount awarded for the operation of services over HS1 would not infringe EU or UK competition law.
- 3.31 HS1 Ltd will assess discount schemes in order to identify whether they might result in HS1 Ltd charging one TOC a higher amount than another in relation to a relevant market on which both TOCs compete and, if so, whether the difference in charges is objectively justified. This assessment will be carried out using the market information provided by the applicant and also HS1 Ltd's knowledge of the rail markets served by other existing or potential TOCs on HS1. HS1 Ltd will not award a discount if it is considered likely to infringe EU or UK competition law, and where necessary it may modify the terms of a proposed new discount scheme in order to ensure compliance with EU and UK competition law.
- 3.32 If there are considered to be no adverse competition impacts, then either a new discount scheme will be established under the terms determined in Test 5 or a discount scheme similar to an existing one will be established according to the terms in Test 1, as appropriate.

## **4. Process for applying for discounts**

- 4.1 HS1 Ltd will be responsible for assessing TOCs' applications for discounts and determining whether or not a discount will be offered, in line with this discount policy. Discussions will be held between HS1 Ltd and TOCs where necessary to clarify any aspects of the application. Any discounts agreed between HS1 Ltd and a TOC will need approval from the ORR, as will new or amended framework track access agreements. TOCs can also appeal to the ORR if they are unable to reach agreement with HS1 Ltd on whether a discount should be provided, or the terms of such a discount. Approved discount schemes will be published in the HS1 Network Statement.
- 4.2 The discount application process for TOCs will be as follows:
- (i) **Informal discussions with HS1 Ltd.** TOCs are encouraged to engage informally with HS1 Ltd at an early stage in order to gain an understanding of whether a discount might be available in principle. If required, a meeting will also be held with ORR, at this stage or later in the process.
  - (ii) **Formal application to HS1 Ltd.** HS1 Ltd does not require an application form or a specific format of application, but the information set out below in paragraph 4.5 should be provided.
  - (iii) **HS1 Ltd indicative response and consultation.** Within six weeks of all necessary information being provided by the TOC, HS1 Ltd would generally expect to provide an indicative response to the applicant. At the same time, HS1 Ltd would generally expect to notify any TOCs that are currently operating rail services on HS1 (and any TOCs that HS1 Ltd is aware are considering operating rail services in future) that a discount has been requested for the relevant rail service. No confidential or more detailed information would be provided, but consultees would be invited to make any general representation to HS1 Ltd that they

considered relevant to decision-making around the possible granting of the discount.

- (iv) **HS1 Ltd decision.** If, within two weeks of the indicative response and consultation, any new information is provided by TOCs in response to the consultation on the draft discount scheme, this will be reviewed and a final decision made on whether a discount scheme will be offered and on what terms.
  - (v) **Request for approval of discount scheme to the ORR.** HS1 Ltd will draft the necessary elements of the track access agreements, or a supplemental agreement as appropriate, incorporating the terms agreed with the TOC. HS1 Ltd will need to consult on the framework track access agreement or supplemental agreement in accordance with ORR's criteria and procedures.<sup>7</sup> HS1 Ltd will then submit a request to the ORR for approval of the proposed discount. This may include some or all of the information provided by the TOC in its application to HS1 Ltd.
  - (vi) **ORR approval of framework track access agreement.** The ORR will determine whether it approves the framework track access agreement or supplemental agreement, including the proposed discount scheme, in accordance with its published criteria and procedures for the approval of framework agreements for HS1.
- 4.3 The minimum time required to reach agreement on a discount application, from receipt by HS1 Ltd of a fully detailed application to approval by the ORR of the framework track access agreement, is expected to be around four months. If the discount scheme application refers to a new service, requiring a new framework track access agreement, the process will take longer, in line with the general procedures set out in ORR's criteria and procedures.
- 4.4 The discount application process will need to take place in parallel with processes for the application for track and station access and, in the case of a new TOC, any required operating licences, vehicle acceptance processes and other general safety requirements.
- 4.5 The information that will need to be provided to HS1 Ltd in a discount application has already been described in section 3 above, but for completeness is summarised below:
- Details of the proposed rail service:
    - Origin, destination, stopping pattern, frequency, duration, nature of service; and
    - Level of service that will be operated if discount is not offered.
  - Evidence that the proposed rail service is not commercially viable without discounted charges, including in relation to:
    - The market for the rail service and detailed forecasts of traffic and revenue;
    - The likely demand response to any reduction in fares facilitated by discounted access charges;

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<sup>7</sup> Office of Rail Regulation (January 2011), ORR's criteria and procedures for the approval of framework agreements for HS1.

- Estimated operating costs and relative importance of HS1 infrastructure costs;
- Any expected public sector support or contribution from other infrastructure manager(s); and
- Business case for the proposed rail service – presenting the case with and without the discount.
- Proposed terms of discount:
  - Percentage discount on IRC; and
  - Profile and duration of discount.

4.6 Information provided by TOCs in support of applications for discounts will be held in confidence by HS1 Ltd except if it is required to be released to the ORR as part of the approval process of a framework track access agreement or supplemental agreement as appropriate (or in relation to any dispute or appeal).



## Appendix A: Calculation of Common Traffic Flows under Test 1

*Example 1: Common traffic flows provide more than 75% of revenues on both services.*

1. In this example, TOC X operates service 1 and currently benefits from a discount scheme for the service. TOC Y is planning to start a new service, service 2, to the same origins and destinations, with only minor differences in stopping patterns (service 2 does not serve station C) and wishes to understand whether a similar scheme would apply to service 2 on the basis that it is a similar service.
2. The flows common to both services are A – B, A – D and B – D. These comprise 78% of revenues on service 1 and 100% of revenues on service 2 as the services are targeting similar markets. Therefore, for the purposes of criteria (i) of Test 1, the two services are considered to be similar and a similar discount scheme may be established. An assessment would also need to be made as to whether the services are similar under criteria (ii) and (iii) of Test 1, although that is not considered here.

TOC X: Service 1			TOC Y: Service 2		
Flow	Revenue	% of total revenue	Flow	Revenue	% of total revenue
Flow A – B	50	11%	Flow A – B	20	9%
Flow A – C	50	11%			
Flow A – D	200	44%	Flow A – D	150	68%
Flow B – C	50	11%			
Flow B – D	100	22%	Flow B – D	50	23%
<b>Total revenue</b>	<b>450</b>	<b>100%</b>	<b>Total revenue</b>	<b>220</b>	<b>100%</b>
<b>Common traffic flows</b>	<b>350</b>	<b>78%</b>	<b>Common traffic flows</b>	<b>220</b>	<b>100%</b>

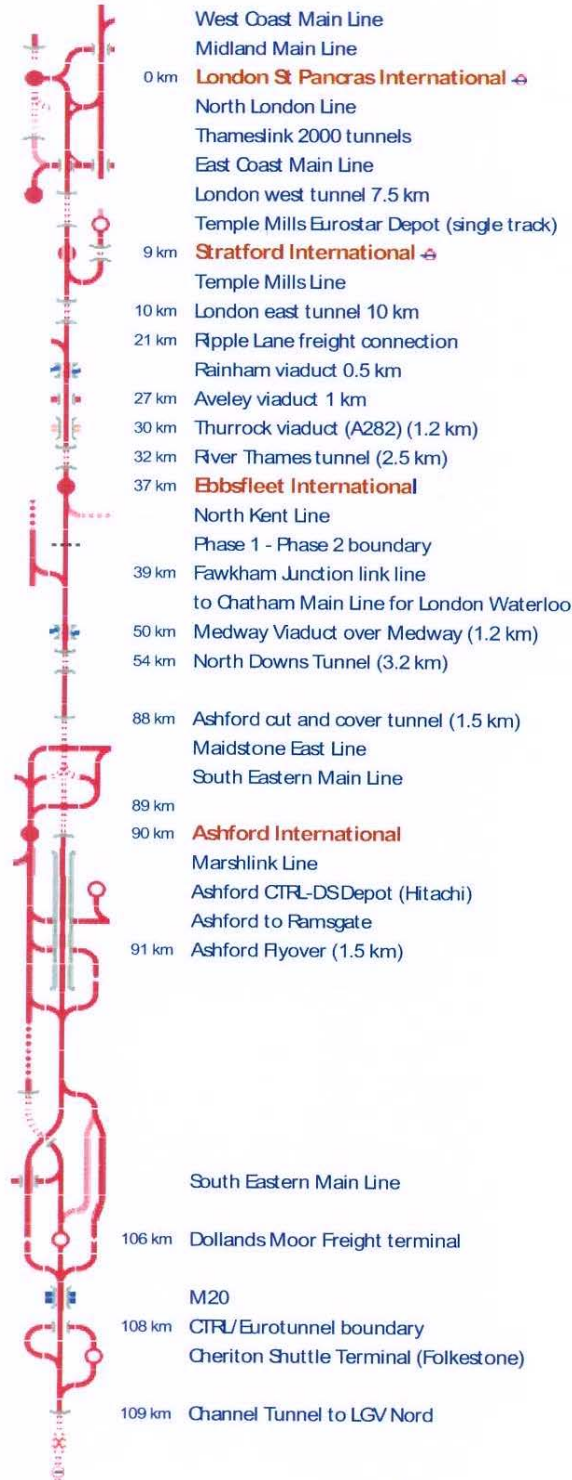
*Example 2: Common traffic flows do not provide more than 75% of revenues on both services.*

3. In this example, the two services again serve a set of common traffic flows, A – B, A – D and B – D. However, in this instance, traffic flow A – C is much more important in the overall route economics of service 1, contributing half of total revenue, and this means that common traffic flows only provide 33% of revenue for this service. HS1 Ltd would therefore assess that services 1 and 2 are not similar as they are focusing on different markets and so a similar discount scheme will not be applied to service 2, regardless of whether it satisfies the other two criteria of Test 1.

TOC X: Service 1			TOC Y: Service 2		
Flow	Revenue	% of total revenue	Flow	Revenue	% of total revenue
Flow A – B	50	8%	Flow A – B	20	9%
Flow A – C	300	50%			
Flow A – D	50	8%	Flow A – D	150	68%
Flow B – C	100	17%			
Flow B – D	100	17%	Flow B – D	50	23%
<b>Total revenue</b>	<b>600</b>	<b>100%</b>	<b>Total revenue</b>	<b>220</b>	<b>100%</b>
<b>Common traffic flows</b>	<b>200</b>	<b>33%</b>	<b>Common traffic flows</b>	<b>220</b>	<b>100%</b>

4. Service 2 may nevertheless be eligible for a new discount scheme, if TOC Y can demonstrate that it satisfies Tests 2 – 7.

ROUTE MAP OF HS1



## TIMETABLE DEVELOPMENT CALENDAR

Weeks Prior (D)	Activity	December 2016 PCD	May 2017 SCD	December 2017 PCD
67	HS1 issue timetable process dates for the Principle Change Date	28/08/2015	N/A	26/08/2016
55	TOC advice to HS1 of significant change to the timetable	20/11/2015	29/04/2016	18/11/2016
48	Provisional handover of paths between ET/NRIL	08/01/2016	17/06/2016	06/01/2017
36	Priority Date (TOCs bid)	01/04/2016	09/09/2016	31/03/2017
26	NRIL Formal Offer of NRIL leg of HS1 journey	10/06/2016	18/11/2016	09/06/2017
22	HS1 Formal D22 Offer (NWT Published)	08/07/2016	16/12/2016	07/07/2017
0	Change Date	11/12/2016	21/05/2017	10/12/2017