



## Heathrow Network Statement - Rail

Heathrow Airport Limited

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## Glossary of Terms

CSR	means Cab Secure Radio
CTA	means Central Terminal Area
Engineering Access Statement	means details of the planning rules applicable to access on the HAL infrastructure; areas and restrictions of the infrastructure affected by inspections, maintenance and renewals.
ETCS	means European Train Control System
Group	means subsidiaries of Heathrow (SP) Limited
GSM-R	means Global System Mobile Communications – Railway
HAL	means Heathrow Airport Limited
HAL Network Code	means a common set of rules that apply to parties who have a contract for rights of access to the track owned by HAL
HAL infrastructure	means the rail infrastructure in respect of which HAL is the facility owner and which is situated in England
Heavy Rail Station	means HAL infrastructure station differentiating from the London Underground station
HECR	means Heathrow Express Control Room
HEOC	means Heathrow Express Operating Company
LUL	means London Underground Limited
NR	means Network Rail Infrastructure Limited
ORR	means Office of Rail and Road
Principal Change Date	means the date the working timetable comes into force annually
Regulations	means the Railways Infrastructure (Access and Management) Regulations 2005, as may be amended from time to time
ROGS	means Railways and Other Guided Transport Systems (Safety) Regulations 2006
SAC	means Station Access Contract
SMS	means Safety Management System
SNRP	means Statement of National Regulatory Provisions
TAC	means Track Access Contract
Timetable Planning Rules	means rules regulating the standard timings and other matters enabling trains to be scheduled in the working timetable
T4	means Terminal 4 (Heathrow Airport)
T5	means Terminal 5 (Heathrow Airport)
Train Operator	means a Train Operating Company that is authorised to provide passenger rail services in the UK
Wider UK Rail Network	means the network owned and operated by NR to which the HAL infrastructure abuts

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Terms not defined in this Network Statement shall have the meanings given to them in the Regulations.

## 1 General

### 1.1 Company Information

Heathrow Airport is owned and operated by HAL. Heathrow is a subsidiary of Heathrow (SP) Limited and, together with the issuer, Heathrow (AH) Limited and HEOC constitutes the "Group".

LHR Airports Limited ("LHR Airports") employs staff for HAL and provides services at Heathrow airport as well as central support services for HAL and HEOC. Unlike HAL, HEOC employs its own staff. HEOC, a wholly owned subsidiary of HAL, undertakes the operation of the Heathrow Express rail service. HAL owns the rail infrastructure on which the Heathrow Express rail service is operated other than that section of the route owned and operated by NR.

### 1.2 Introduction

#### 1.2.1 Infrastructure

HAL is the owner of the HAL infrastructure and NR is the asset manager under the Regulations. This "Network Statement" has been made in respect of the HAL infrastructure in satisfaction of the requirements of Regulation 11(4). HAL has appointed NR under contract to carry out its operational asset manager obligations in respect of the HAL infrastructure including those obligations set out in ROGS.

- The diagram below shows how the HAL infrastructure is constructed.

The "HAL Network Systems" table provides information on the owner, operating, managing and maintaining party

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Diagram of HAL infrastructure

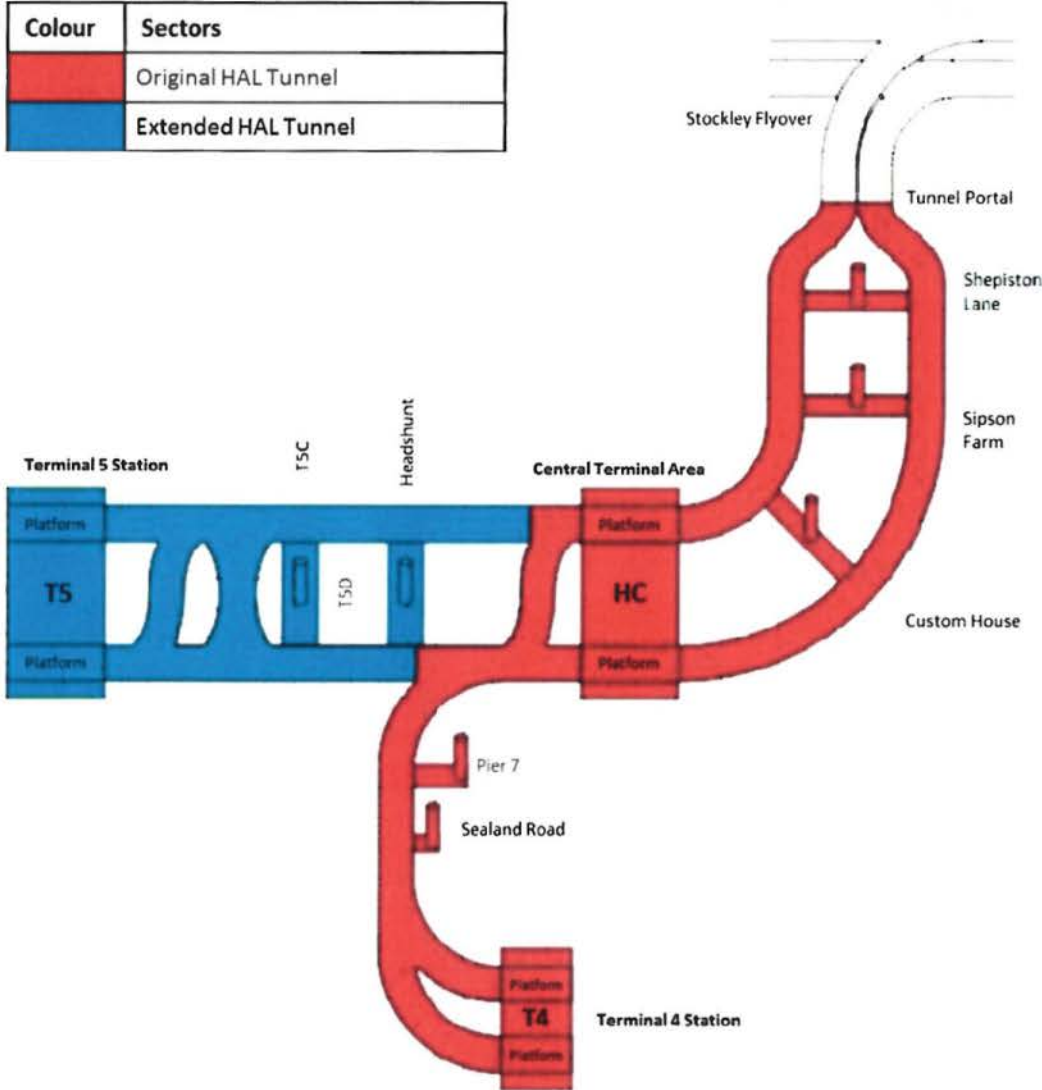


Figure 1

3.5km from the tunnel portal there is an intermediate station (the Heathrow CTA station (the "CTA Station") which provides passenger access to Heathrow Terminals 1, 2 and 3. From the CTA Station a 2.5km long single bore tunnel connects to the T4 station and a 2.6km km tunnel connects to the T5 station. All stations have two platforms, with the T5 station having potential to increase capacity to four platforms if required.

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## HAL Network Systems

System	IM = Infrastructure Manager, AM = Asset Manager, Op = Operates			
	HAL	HEOC	NR	
Track	IM		AM	
Tunnels Structures	IM		AM	
Railway Communication Systems	IM		AM	
Ventilation	IM	Op	AM	
Non-Railway Communications Systems	IM	Op		
HECR	IM	Op		
Signalling	IM		AM / Op	
Stations	IM	Op / AM		
Overhead Lines	IM		AM / Op	

Figure 2

### 1.2.2 Current Services

There are two services currently running on the HAL infrastructure;

- Heathrow Express – a non-stopping service between London Heathrow Airport and Paddington operated by the HEOC. It is an open access operator and not subject to franchising. It runs every fifteen minutes throughout the day and evening.
- Heathrow Connect - provided jointly by HEOC and First Great Western, connecting Heathrow Airport with Paddington station. The service follows the same route as the non-stop Heathrow Express service calling at intermediate stations between the airport and Central London. It runs every half-hour throughout the day and evening. A change to this service is scheduled in May 2018 on the introduction of Crossrail services going to 4 trains per hour.



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## 1.3 Objective of the Network Statement

The objectives of this Network Statement are to satisfy the requirements of Regulation 11(4) and to provide a single source of the essential information which will be required by a railway undertaking or prospective railway undertaking wishing to operate train services on the HAL infrastructure. It provides general information about the HAL infrastructure; conditions of access and the criteria for capacity allocation and associated payments.

## 1.4 Legal Framework

Any party seeking access to the HAL infrastructure must satisfy the requirements set out by the relevant regulating bodies.

Heathrow Express is exempted from designation under section 23(1) of the Railways Act 1993 in relation to passenger services eligible for franchising.

### 1.4.1 Charging Regime

The Regulations establish a broad charging framework. Where relevant, and subject to the charging framework agreed with the ORR, HAL will seek to determine charges for use of the HAL infrastructure by reference to this charging framework.

## 1.5 Legal Status

### 1.5.1 General Remarks

This Network Statement is provided in compliance with HAL's obligations under the Regulations. It is not intended to be an invitation to treat or to be an offer to enter into a contract. However, when a railway undertaking enters into a TAC with HAL, the TAC will give contractual force to documents such as the HAL Network Code, Engineering Access Statement and Timetable Planning Rules that are referenced in this Network Statement.

### 1.5.2 Liability

Reasonable efforts have been made to ensure that the information provided in this Network Statement is accurate. HAL does not accept any liability for errors, omissions or inaccuracies. Errors which are notified to HAL will be reviewed and corrected where appropriate in the next issue of the Network Statement.

### 1.5.3 Appeals Procedure

Any dispute for matters covered by the HAL Access Disputes Resolution Rules ("ADRR") is dealt with in accordance with the procedure prescribed in such rules, annexed to the HAL Network Code. The procedure addresses disputes arising out of TACs and SACs. The Access Disputes Committee for the Wider UK Rail Network provides services under the ADRR. The charges for the provision of such services are passed on to railway undertakings in TACs and SACs.

Any disputes in relation to other matters covered by the ADRR shall be dealt with in accordance with the procedure prescribed in that agreement. The ADRR provide 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 Regulations should any applicant for capacity believe it has been discriminated against or treated unfairly.

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## 1.6 Structure of the Network Statement

This Network Statement has been developed, using a common structure in line with Rail Net Europe publications, to enable railway undertakings to find information generally under the same headings in each network statement.

## 1.7 Validity and Updating Process

### 1.7.1 Validity Period

This Network Statement is valid from September 2015 and will be reviewed annually from December 2016.

### 1.7.2 Updating Process

This Network Statement will be updated and re-published on the HAL web site [www.heathrow.com/rail-regulation](http://www.heathrow.com/rail-regulation) as and when changes are made.

## 1.8 Contact and further details

Should you require further information or have any additional questions relating to this Network Statement, the HAL Network Code and/or the nature of or access to the HAL infrastructure please contact the HAL Rail Project Manager:

James Cornelius  
mailto: Rail Project Manager  
Heathrow Airport Limited  
Compass Centre  
Nelson Road  
Middlesex  
TW6 2GW

[rail@heathrow.com](mailto:rail@heathrow.com)

Should a hard copy of the Statement be required, HAL are able provide this, but reserve the right to charge the cost of production.

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## 2 Conditions for Access

### 2.1 Introduction

Access to the Wider UK Rail Network is principally governed by the Regulations. This regime also covers rail infrastructure outside the Wider UK Rail Network unless exempted.

HAL appoint NR as their contracted agent for delivering the relevant rail services included within the HAL Network Code to enable the two infrastructures to operate seamlessly. The scope of these services and the contractual agreements are incorporated within the Infrastructure Management Agreement and Connection Agreement between HAL and NR.

HAL remain accountable for the delivery of services within the HAL Network Code whilst NR has responsibility for managing and delivering those services.

### 2.2 General Access requirements

In order to secure access to and operate on the HAL infrastructure, an applicant will have to fulfil the requirements set out below.

#### 2.2.1 Requirements in relation to applying for a train path

The timetabling process is open to two classes of applicant; those party to an existing TAC with HAL and those who have made a good faith commitment to enter into such a TAC.

Applicants will not need to satisfy the requirements referred to below to participate in the initial timetabling process, but compliance must be achieved prior to actual use of the train path(s).

Following an approach from a current or potential railway undertaking, HAL will advise the applicant of the likelihood of train paths being available. This will be based on the working timetable in operation at the time. If the desired train paths are available, or are likely to become available, HAL will guide the applicant through the timetabling process.

#### 2.2.2 Who is allowed to carry out train operations

Any applicant wishing to operate trains on the HAL infrastructure must satisfy the relevant legal requirements. The principal requirements include having:

- a railway undertaking's licence or licence exemption;
- a SMS provided for under ROGS;
- appropriate insurance; and
- a TAC in place with HAL.

#### 2.2.3 Licences

The Railways Act 1993 (as amended) makes it an offence to act as the operator of a train in the United Kingdom without holding a licence or a licence exemption granted in accordance with the Act. This licencing requirement shall be deemed satisfied where a person seeking to act as the operator of passenger trains, within the scope of the Regulations, has the benefit of a European licence.

A European licence may be granted by the ORR or under the implementing legislation of another Member State. To operate train services in the United Kingdom, European licence holders must also hold an SNRP. Applications for licences, exemptions or SNRPs should be made to the ORR.

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## 2.2.4 Safety Certificate

Applicants seeking to operate trains in the United Kingdom will be required to establish and maintain an appropriate safety management system and hold a safety certificate meeting the requirements of the ROGS. These will be assessed and reviewed by the ORR.

Part A of the EU safety certificate is recognised for such purposes whilst Part B is granted by the ORR. Applications for a safety certificate under the ROGS should be made to ORR and copied to affected parties including NR.

## 2.2.5 Insurance

A railway undertaking's licence (or SNRP) will specify the requirements to be imposed on the railway undertaking with regard to insurance against third party liabilities.

The minimum level of indemnity insurance for railway undertakings is approved by the ORR, with the current level being £155m. Recent ORR general approval requirements shall apply unless specific individual variations to the general approval have been granted.

## 2.3 General Business/Commercial Conditions

### 2.3.1 Access Contracts

Except for emergency access, each applicant must enter into a TAC, and a SAC with HAL to cover the full scope of the intended operations.

Where an applicant wishes to enter into an access agreement they should contact the HAL Manager at the earliest opportunity to discuss the requirements.

### 2.3.2 HAL Network Code

The HAL Network Code is a common set of rules that is incorporated into each TAC. The TAC governs the legal relationship between HAL and relevant railway undertaking. In the event there is a conflict of interpretation between the HAL Network Code and any TAC, the HAL Network Code shall prevail.

The HAL Network Code provides scope for HAL and/or railway undertaking to amend:

- the working timetable;
- the rolling stock to be operated;
- the HAL infrastructure; and
- the HAL Network Code itself.

In addition, the HAL Network Code details the mechanisms whereby performance monitoring systems and/or procedures to be applied in the event of an operational disruption may be established.

## 2.4 Operational Rules

### 2.4.1 Engineering Access Statement

The Engineering Access Statement sets out the rules regulating access to the HAL infrastructure when affected by inspection, maintenance, renewal or other works. The statement is set by NR as HAL's appointed asset manager.

The statement is divided into two parts, the first detailing the planning rules applicable to those requiring engineering access to the HAL infrastructure, while the second specifies the areas of the HAL

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infrastructure to be affected by planned inspections, maintenance and renewal, together with details of planned restrictions of use.

## 2.4.2 Timetable Planning Rules

HAL will, in consultation with all relevant railway undertakings and with a view to achieving the optimal balance between access availability and robustness of service performance, prepare the Timetable Planning Rules to apply to the HAL infrastructure.

Final Timetable Planning Rules will be issued with timetable bidding information prior to the commencement of the development timetable period, in readiness for the Principle Change Date, and shall remain in place for 12 months.

Revised Timetable Planning Rules, reflecting changes agreed subsequent to the original Timetable Planning Rules will be issued with bidding information prior to the commencement of the subsidiary timetable development period. The Timetable Planning Rules may only be changed twice yearly.

## 2.4.3 Railway Operational Code

The industry network Railway Operational Code, in accordance with Section H of the HAL Network Code, covers operational procedures, contingency plans and control arrangements required during "out of course" events. The Heathrow Emergency Plan, (the "HEP") describes the arrangements that are specific to the HAL infrastructure and relate to the interfaces between the HAL infrastructure and Heathrow Airport. The obligations within the HEP are sub contracted out to HEOC under ROGs. Both the Railway Operational Code and the HEP arrangements share the objective of sustaining operation of train services on the HAL infrastructure in accordance with the working timetable, as well as where necessary restoring operation in accordance with the working timetable, having regard to the needs of passengers; the interests of safety and security; the efficient and economical operation of the HAL infrastructure and of trains operating on it; and criteria published by the ORR.

The arrangements included within the Railway Operational Code and HEP cover:

- a procedure for notification of and communication in relation to disruptive events and/or reasonably foreseeable disruptive events;
- train policies;
- emergency timetable procedures in the event of extended disruption;
- arrangements for clearance of track blockages and assistance for failed trains; and
- interfaces between HAL infrastructure and Heathrow Airport

## 2.4.4 Heathrow Rail Standards and Rules

All applicable NR standards must be complied with in conjunction with the HAL SMS requirements.

The HAL SMS can be found on the HAL website [www.heathrow.com/rail-regulation](http://www.heathrow.com/rail-regulation)

## 2.5 Rolling Stock Compatibility Guidelines

Any party wishing to introduce a new vehicle onto the HAL infrastructure or make a change to the operation or engineering of an existing vehicle must consider the effect of this on all other railway undertakings and on the Infrastructure Manager.

To aid railway undertakings in the discharge of this function they must first satisfy the NR process in full. HAL will then undertake a review of the outcome to confirm the railway undertaking's qualification to operate on its infrastructure. In the unlikely event that HAL imposes a more onerous requirement than NR, further confirmations, information or tests may be required.

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## 2.5.1 HAL-ARP

The Heathrow Airport Limited Assurance Review Panel ("HAL-ARP") is an independently chaired, competent panel assembled to assess engineering and operational applications in relation to the HAL infrastructure including the introduction of a new Train Operator and rolling stock onto the HAL infrastructure.

The HAL-ARP shall work in accordance with the principles of "Engineering Safety Management" [20], CENELEC Standards BS EN 50126, 50128 and 50129 [17,18,19], ORR Approvals Process, Construction (Design and Management) Regulations [22], EC Directive for Conventional railway routes [23] and HMRI Railway Safety Principles and Guidance Blue Book [24], and in accordance with the processes defined in the HAL-ARP Terms of Reference and Process, and their relevance to HAL owned assets and HAL operations.

## 3 Infrastructure

### 3.1 Introduction

The HAL infrastructure connects Heathrow Airport to the Great Western Main Line. Trains divert from the mainline at Airport Junction onto the HAL infrastructure which starts at the tunnel portal and is 19.913km from Paddington. There are three stations on the HAL infrastructure:

- the CTA Station for connections to Terminals, 2 and 3;
- the T4 station for connections to T4; and
- T5 station for connections to T5.

The HAL infrastructure consists of a twin-bored tunnel to the CTA and T5 stations. A single-bored tunnel connects the T4 station to the network south of the CTA Station. All stations have two platforms, although the T5 station does have the potential for capacity to be increased to four platforms if required.

### 3.2 Extent of the HAL Infrastructure

The Network Statement covers the entire railway infrastructure that is owned by HAL. The infrastructure extends from tunnel portal through to the T4 and T5 stations as shown in *figure 2*.

### 3.3 HAL Infrastructure Description

#### 3.3.1 Rail Tunnels

The northern tunnel is generally used for trains travelling towards London with the southern tunnel used for Heathrow-bound services. The tunnels can be operated in a bi-directional manner, with facilities to crossover at the tunnel portal, CTA and T5.

The route runs entirely within tunnels. The majority of the tunnels have been bored with the remainder being constructed using the cut and cover method.

The track formation within the tunnels utilises a concrete slab track-bed, rail lubrication and top of rail friction management is provided at several locations. The route is equipped throughout with overhead line electrification equipment, providing a traction current at 25kV.

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Intervention shafts are provided at locations allowing egress and access for emergency services. Intervention points also exist at the tunnel portals and at the stations. Cross passages link the twin tunnels. All the tunnels have emergency walkways, at track level for emergency services and at platform level for passengers. A tunnel ventilation system provides a supply of fresh air removes stale air and enables the direction of air flow to be controlled. The ventilation is controlled from the HECR.

A wet fire main is provided throughout the running tunnels to provide the emergency services with a water supply for fire fighting purposes should a fire break out on a train. This is supplemented by a forced ventilation system to ensure that passenger escape routes and access routes for emergency services are kept clear of smoke.

The maximum line speed is 80mph.

In addition further technical information is available in the NR Western Rail Sectional Appendix – route section reference GW180.

## 3.3.2 Rail Stations

HAL maintains the assets within the rail stations at Terminals 2&3, Terminal 4 and Terminal 5. The operational safety and management responsibilities for the stations are sub- contracted to HEOC.

Access to the stations is managed by HAL. Details that describe the requirements for requests for access are included within the HAL Site Access Permit arrangements document. Access is only granted with the relevant permits and issued on the basis that the requirements within are met. The management of permits is managed on site by the Heathrow Rail Control Centre.

Access to HAL stations is controlled by doors at the main entrances which are not supported by automatic ticket gates. Access to platforms is via lifts and escalators. All areas are designated as non-smoking and this policy is reinforced through signs, staff presence and CCTV monitoring. Barriers are in place to prevent passenger luggage trolleys being taken onto station platforms.

Platform design includes tactile strips to enable visually impaired passengers to assess the closeness of the platform edge. The platform edge clearances are subject to derogation from the NR standard to minimise the gap between platform and train step-boards with a height of 1100mm. Platform gap fillers are being installed as part of a programme of works during 2015 to reduce the risk of passengers accidents. This will impact the platform train interface when introducing other services.

Emergency services equipment cabinets are provided throughout the station concourses. These contain emergency telephones, hydrants, hose reels, portable fire extinguishers and emergency equipment. Station lighting is powered by two independent sources.

Systems are in place to ensure that stations are kept clean and free from refuse. All storage rooms are locked and access restricted. The storage of cleaning and maintenance materials is strictly controlled.

The CTA Station complex comprises two platform tunnels separated by a mid-concourse tunnel with a platform length of 204m. Access and egress is at either end of the station by way of fixed staircases, corridors, subways, lifts or escalators. At the southern end of the platform and concourse tunnel a combination of lifts and escalators lead to the passenger subways giving access to Terminal 3. At the northern end lifts and escalators give access to Terminals 2 & 3.

An emergency services intervention shaft is provided which contains a dedicated fire fighting lift and an intervention staircase, which also serves as an emergency escape stair. Additional emergency escape stairs are provided at the north end of the station and at two intermediate points along the station. Access for emergency vehicles is provided at intervention shafts and all escape routes.

The T4 station consists of two platform tunnels, with platform lengths of 204m and 200m respectively, separated for part of their length by a concourse tunnel. Access and egress is via the north end of the station by way of fixed staircases, corridors, subways or escalators. Cross passages at the northern end

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provide access between the platforms and concourse. Lifts connect the station concourse to T4 arrivals and departures. The escalators connect to T4 arrivals via a separate lobby.

An emergency services intervention shaft is provided which contains a dedicated fire fighting lift and intervention staircase, which also serves as an emergency escape stair. Emergency escape stairs are also provided at an intermediate point along the station. Escape cross passages provide access between the platforms and the emergency escape staircases. Access for emergency vehicles is provided at intervention shafts and all escape routes.

The T5 station consists of two platform tunnels, situated within the station box and separated by the station concourse, with a useable platform length of 217m. In addition, there is a separate LUL station, comprised of two platform tunnels within the station box. This operation is fully segregated from the Heavy Rail Station by reinforced glass and concrete panels. The station box is constructed between the main T5 car park and T5 itself. Access and egress to both the LUL and main line stations is through separate access points within the T5. The T5 station layout consists of four levels; platforms, mezzanine, arrivals and departures. Accommodation is provided on the mezzanine level including welfare, offices and station management systems.

Access and egress from the T5 station concourse is provided by a central vertical circulation core consisting of four lifts serving arrivals and departures and an alternative escalator route. Platforms are separated from the main concourse area by reinforced glass panels with dedicated access points at the eastern and western ends of the main concourse. Emergency egress routes are provided at three points off the concourse. Egress is provided by fixed stair routes to designated places of safety within the T5 complex. Passenger lifts are used as the means of escape for mobility impaired persons and as access for emergency services under key control. Vehicle access is via the Wellington Road service route and is only available to those with security clearance who have completed the access protocols.

### 3.3.3 Rail Control Centres

There are two control centres managing the activities on the HAL infrastructure. For train dispatch, ventilation, engineering and operational access to the infrastructure the control is managed from the CTA. Train-running control is managed in NR's control centre in Swindon.

### 3.3.4 Loading Gauge

The nominal track gauge is 1435mm. The HAL infrastructure can accommodate trains that fit within NR's W10 gauge with an axle weight limit of 25.4T.

### 3.3.5 Signalling

The route is equipped with multiple aspect track circuit block signalling with automatic train protection. All lines are signalled to allow bi-directional working. The maximum permissible line speed is 80 mph, with lower permanent speed restrictions at stations and between the CTA Station and T4 station. By 2019 this system will be superseded by the new signalling system, known as the ETCS, currently under development by NR. Permissive working is now active at some platforms.

Only rolling stock fitted with the following train protection and communications systems (or equivalent) are permitted to operate on the Heathrow Branch Infrastructure; GSM-R, GW ATP or ETCS.

### 3.3.6 Communication Systems

The current communication system in use is CSR. This system interfaces with the signalling train describer system and allows signalling staff to address drivers of individual trains. During 2015/16, GSM-R will be introduced and supersede CSR.



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## 3.3.7 Availability of the Infrastructure

The HAL infrastructure remains closed on 25 December except by special arrangements between railway undertakings and HAL. The Engineering Access Statement primarily governs consumption of capacity on the HAL infrastructure for the purposes of its maintenance and other activities in the interests of quality, reliability and availability of the HAL infrastructure.

## 3.3.8 Connecting Network

The HAL infrastructure is connected to the Wider UK Rail Network at the tunnel portal. The Wider UK Rail Network is owned and operated by NR.

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## 4 Capacity Allocation

### 4.1 Introduction

HAL is responsible for the allocation of capacity through grants of TACs and will be responsible for all aspects of the allocation process, including confirming that the applicant complies with all relevant national technical, operational and safety requirements.

### 4.2 Description of Timetabling Process

When allocating capacity HAL will prioritise in the following order:

- maintaining connecting paths from/to the Wider UK Rail Network;
- existing track access capacity allocation;
- future track access capacity commitments; and
- other passenger services.

### 4.3 Description of the timetabling process

HAL will sub-contract out the responsibilities for managing access to the HAL infrastructure, such as the responsibilities for path allocation, co-ordination and validation of the timetable to NR as described in the relevant Parts of the HAL Network Code. These responsibilities are undertaken by NR under instruction from HAL. Access to the HAL infrastructure requires entry from the Wider UK Rail Network and therefore applicants for access must not only seek rights from HAL but also from NR. For simplicity the timescale for access requests on HAL infrastructure mirrors the timetable employed on the Wider UK Rail Network. Details of NR's timetabling process are set out in Annex A.

### 4.4 Timetable Development

#### 4.4.1 Co-ordination process

In line with its obligations under the Regulations, HAL's procedures for dealing with requests for capacity allocation (including ad-hoc requests) are designed to ensure that all current and potential railway undertakings are treated in a fair and non-discriminatory way.

Each year HAL circulates detailed plans covering the implementation of maintenance and renewal schemes to its access right holders and will make these available for any new access applicant upon request. HAL consults with access right holders from October to March for the following December timetable when access right holders are required to make a formal declaration of their aspirations for train paths provided under their TACs. In accordance with Schedule 4, paragraph 2(1) of the Regulations, timetable decisions will not be made until the end of the consultation period. The timetable planning process for HAL infrastructure adopts NR's industry process to allow for alignment of train paths with main line services. For the avoidance of doubt, Train Operators will bid for paths under one process through NR for both the Wider UK Rail Network and HAL infrastructure as if the HAL infrastructure and the Wider UK Rail Network were one and the same.

NR, as HAL's agent will provide publication of any key documents, policies and procedures required to manage the timetabling process. These documents include but are not limited to:

- The HAL Engineering Access Statement
- Timetable Planning Rules

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- Working timetable and variations to the working timetable
- Possession strategy notices
- Sectional appendix
- Weekly operating notices
- Performance Data Accuracy Code
- Delay Attribution Guide
- Railway Operational Code
- Railway Systems Code

## 4.4.2 Ad-hoc requests

In addition to making an application for a path in accordance with the annual timetable process, the potential applicant may submit variation requests for one-off individual train paths to HAL's appointed contractor, HAL or their appointed contractor will respond as quickly as possible, and at all times within five working days of receipt of a request.

Requests made more than two days prior to the day the train is proposed to run will be dealt with under short term planning arrangements within the NR's industry process. Any requests made on the day of running or on the two preceding days will be dealt with by the local operational control team.

## 4.4.3 Future Access Options

A separate TAC, known as an Access Option, must be entered into with HAL where an applicant wishes to operate trains for which specific infrastructure enhancement is required on the HAL infrastructure and for which the applicant will be making a significant investment. Activation of the contract will be subject to the investment and the works having taken place.

## 4.4.4 Access Dispute Resolution

As described in the Appeals Procedure at 1.5.3, any dispute concerning matters covered by the ADRR is dealt with in accordance with the procedure prescribed in such rules, annexed in the HAL Network Code. The procedure addresses disputes arising out of the TAC and SAC and provision has been made for the referral of any dispute to a technical, operational or financial panel, as appropriate.

If any Train Operator bids result in disputed paths, these will be raised by the Train Operator through NR who will notify HAL of the dispute. It is the responsibility of HAL to respond to those disputes in accordance with the procedure within the HAL Network Code.

Where any Train Operator Bids and access is not available, NR will notify HAL of the unavailability of the access and HAL will notify the affected Train Operators.

## 4.4.5 Congested Infrastructure

The Regulations require HAL to declare areas of its network as congested where, after the co-ordination of requests for capacity and consultation with applicants, it is not possible to satisfy all access requests. HAL is not declaring any congested areas at this time. However, should there be congestion, HAL will review the situation in accordance with the Approach to Capacity Management.

With the exception of additional platforms at T5, there is no further opportunity to create capacity over and above the "as built" status on HAL infrastructure.

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## 4.5 Approach to Capacity Management

The Regulations require HAL to put in place procedures to be followed should the HAL infrastructure become congested. In determining how to allocate capacity fairly, in a non-discriminatory manner, HAL will apply the prioritisation criteria set out at 4.2.

## 4.6 Allocation of capacity for maintenance, renewal and enhancements

HAL are responsible for the allocation of capacity for maintenance, renewal and enhancements will be published annually as part of HAL's maintenance and renewals plan. The capacity requirement for such work is published within the Engineering Access Statement and managed as part of the train planning process. Route maintenance is restricted to periods when there are no timetabled services running or as agreed by all parties.

In the event that any restriction on capacity as a result of maintenance, renewal or enhancements occurs in a period when a timetabled service is scheduled, HAL will allocate capacity in a fair and non-discriminatory manner and will apply the prioritisation criteria set out at 4.2.

## 4.7 Non Usage / Cancellation

Part J of the HAL Network Code provides a means to rescind access rights in the event that a railway undertaking fails to use them (unless due to non-economic reasons beyond the relevant railway undertaking's control).

The access rights may be voluntarily surrendered by the railway undertaking if it has no current or foreseeable reasonable commercial need.

## 4.8 Special measures in the event of disturbance

### 4.8.1 Principles

When a disruptive event occurs, NR, acting in conjunction with HAL, is responsible for deciding the appropriate actions to restore the working timetable as soon as is reasonably practical. This is set out in the Operational Resilience Plan and Railway Operational Code. NR will undertake the responsibilities for train regulation to minimise delays in line with standard industry practise. Railway undertakings are required to co-operate as regards such actions, which may include the provision of traction and train crew to clear the line.

### 4.8.2 Operational Regulation

NR, acting on behalf of HAL, develops and maintains train regulation policies so as to provide a framework to enable regulating decisions to be made by signallers in a way that is fair, consistent and in the best interests of all railway undertakings and their passengers, as far as can reasonably be achieved.

Train regulation policies are established by HAL in consultation with railway undertakings who may propose variations to them.

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## 5 Services

### 5.1 Introduction

The Regulations provide applicants with an entitlement to a set of services for rail traffic provided by HAL. The Regulations create a presumption of access and provide any applicant with a right to apply for access to a range of services and facilities to operate rail services.

The Infrastructure Manager is obliged to provide: (a) the minimum access package; (b) track access to service facilities; and (c) services.

### 5.2 Minimum Access Package

The minimum access package comprises:

- a) Handling of requests for infrastructure capacity; and
- b) The right to utilise such capacity as it is granted and, in particular:
  - the right to use such running track, points and junctions as may be necessary to utilise that capacity;
  - train control including signalling, train regulation, dispatching, communication and the provision of information on train movements; and
  - all other information necessary to implement or operate the service for which capacity has been granted.

### 5.3 Track access to service facilities and supply of services

#### 5.3.1 Use of Electrical Supply Equipment for Traction Power

HAL provides the rail infrastructure to distribute the traction power and the Train Operator procures that traction power from NR. For a further description of the HAL infrastructure and facilities please refer to Section 3.

HAL provides the infrastructure to distribute the traction power to Train Operators. The HAL infrastructure is treated as part of the Wider UK Rail Network for EC4T charges. NR will subsequently charge Train Operators for power consumption on HAL infrastructure on behalf of HAL. The charge for EC4T for Heathrow will be included within the billing arrangements that Train Operators undertake with NR for services that operate on the Western route.

The use of HAL infrastructure for the provision of traction power charges are included within the capital cost recovery charges and are not included within the EC4T charge administered by NR on HAL's behalf.

#### 5.3.2 Refuelling Facilities

Does not apply to HAL

#### 5.3.3 Passenger, Stations, Building and other Facilities

Please refer to Section 3

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## 5.3.4 Freight Terminals

Does not apply to HAL

## 5.3.5 Marshalling Yards

Does not apply to HAL

## 5.3.6 Train Formation Facilities

Does not apply to HAL

## 5.3.7 Storage Sidings

Does not apply to HAL

## 5.3.8 Maintenance and Other Technical Facilities

Does not apply to HAL

## 5.4 Additional Services

### 5.4.1 Traction Current

As described in 5.3.1

### 5.4.2 Supply of Fuel

Does not apply to HAL

### 5.4.3 Services for Trains

Does not apply to HAL

### 5.4.4 Shunting and Other Services

Does not apply to HAL

### 5.4.5 Services for Exceptional Transports and Dangerous Goods

Does not apply to HAL

### 5.4.6 Any Other Additional Services

Not provided by HAL

## 5.5 Ancillary Services

### 5.5.1 Provision

No provision is made for ancillary services. Where there are further requirements please contact the HAL at the address shown in Section 1.8

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## 6 Charges

### 6.1 Charging Principles

This section sets out the current charging principles for access to the HAL infrastructure, applicable from 1<sup>st</sup> September 2015 until 31<sup>st</sup> December 2016.

#### 6.1.1 Framework and Track Access Charges

While the ORR is responsible for the applicable charging framework as prescribed by the Regulations, HAL is responsible for calculating track access charges within this framework.

The track access charges will be determined so as to be consistent with a position in which, under normal business conditions and over a reasonable time period, HAL's income from such charges shall at least enable the recovery of all efficiently incurred costs.

HAL will levy a range of track access charges on franchised passenger and open access railway undertakings. These charges will take the form of a per movement charge, in order to be both transparent and practicable while allowing for HAL to recover all efficiently incurred costs.

In order to aid transparency and ensure HAL meets its obligations in respect of non-discriminatory access and regulations, the track access charge will include the following elements:

- Fixed Track Access Charge ("FTAC")
- Common Cost Charge ("CCC")
- Capacity Reservation Charge

#### 6.1.2 Fixed Track Access Charge

##### **Approach**

The purpose of the FTAC is to allow HAL to recover historic investment on rail infrastructure, in accordance with paragraph 3 of Schedule 3 of the Regulations.

The calculation of the FTAC includes the following steps:

- Calculation of the current value of rail Infrastructure Manager Assets using standard UK economic regulatory practice.
- Indexation of current value of rail Infrastructure Manager Assets using the Cost of Capital for the Q6 period, as determined by the CAA, to achieve return on assets.
- Calculation of forecast depreciation for the chargeable period.
- The sum of the return on assets and forecast depreciation creates the lump sum of FTAC that HAL will recover through TACs.
- Finally the lump sum of FTAC is divided by forecast number of train movements. This results in an FTAC of £597.30 (2015 prices) per movement.

##### **Implementation**

The FTAC per movement is £597.30 (2015 prices) irrespective of the operating company using the HAL infrastructure. The FTAC is a fixed per movement charge. Any movement in or out of Heathrow will pay the FTAC.

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## Review

The FTAC will be reviewed in December 2016, alongside the rest of the parameters which comprises the calculation of the TACs. The 2016 review will incorporate investment in the HAL infrastructure over the period from September 2015 to December 2016. The FTAC update will follow the same principles applied to calculate the charges presented in this document.

## 6.1.3 Common Cost Charge

### Approach

The purpose of the CCC is to allow HAL to recover operational expenditure ("Opex") needed to manage the HAL infrastructure. Opex comprise a number of different elements; staff costs, maintenance costs, station management costs, non-traction electricity and rates costs.

A high-level summary of the Opex elements is presented below:

Opex element	Description
Staff costs	Infrastructure Manager overhead staff
Maintenance costs	Contracted soft and hard maintenance works
Station management costs	Contracted station management works
Non-traction electricity costs	Station electricity costs
Rates costs	Business rates

The nature of HAL's Opex forecast is predominantly fixed (i.e. it does not vary with traffic). HAL incurs all the above costs irrespective of the actual amount of the movements in the HAL infrastructure, as these are necessary to maintain the HAL infrastructure in operation throughout the whole day. Therefore any ad-hoc cancellation would not materially reduce the total amount of Opex incurred by HAL.

Nevertheless, HAL considers that at the margins, particular individual elements of the Opex forecast could change should there be a significant step increase in traffic. For example where the HAL infrastructure handles 10 trains per hour rather than the current performance of 6 trains per hour.

Since the nature of the Opex forecast is predominantly fixed and HAL does not anticipate any significant increase/decrease in traffic in the coming 17 months HAL will aggregate all the Opex elements into a single fixed charge, the CCC.

Another important consideration is HAL's ability to influence the evolution of each of the Opex elements. Those elements over which the Infrastructure Manager has almost no control are usually considered as pass through elements, i.e. the Infrastructure Manager recharges the Train Operator exactly the amount paid for these elements. Those elements are considered to be "at cost". In HAL's Opex forecast, rates costs and non-traction electricity are considered to be outside of HAL's control.

The opposite concept is "at risk" costs, these are the costs that the Infrastructure Manager is able to influence, and hence it is exposed to the risk of over/underperformance of them. In HAL's Opex forecast these are all elements other than non-traction electricity and rate costs.

HAL considers that given the relatively small scale of the "at cost" elements within the Opex forecast and the complexity that true mechanisms entails, for simplicity it is best to treat the entire Opex forecast as a single element "at risk". Therefore HAL will aggregate all the Opex elements together into a single fixed "at risk" charge, the CCC.



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## Implementation

The CCC per movement is £138.40 (2015 prices) irrespective of the operating company using the HAL infrastructure. The FTAC is a fixed per movement charge. Any movement in or out of Heathrow will pay the CCC.

## Review

The CCC will be reviewed in December 2016, alongside the rest of the parameters which comprises the calculation of the TACs. The 2016 review will be based on the latest Opex forecast.

HAL will review the performance of the CCC, in particular:

- The need for a specific pass-through element within the CCC; and
- The degree that CCC charges vary with traffic.

### 6.1.4 Capacity Reservation Charge

Heathrow will not implement any capacity reservation charge over the period comprising September 2015 to December 2016. However, in accordance with the Regulations HAL reserves the right to implement a Capacity Reservation Charge in future.

### 6.1.5 Incentives

HAL is keen to further incentivise the efficient and effective use of infrastructure, to that end HAL is exploring the possibility of incentive schemes. For example, these might take the form of a reduced charge based on an increasing volume of services provided by train undertakings.

The table below refers to the average TAC for the Q6 period (2016 – 2018)

Average charge for Q6 period (£ 2015 prices)	16 movements per hour	20 movements per hour	24 movements per hour
FTAC	£574	£460	£383
CCC	£138	£111	£92
<b>Total</b>	<b>£712</b>	<b>£570</b>	<b>£475</b>

## 6.2 Performance Scheme

The Regulations require the Infrastructure Manager to establish a performance scheme as part of its charging system. The performance scheme must be designed so that railway undertakings and the Infrastructure Manager are incentivised to minimise disruption and improve the performance of the railway network.

### 6.2.1 Measurement

The performance of the HAL infrastructure is captured within the NR monitoring systems. The process of capture and fault designation will continue in place and will be reported and managed on behalf of HAL by NR. The process reflects the current general practise throughout the Wider UK Rail Network.

The performance of the service will be measured in terms of its punctuality in accordance with the published timetable.

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Railway undertakings will compensate HAL for its delays/cancellations to itself enabling HAL to compensate other railway undertakings delayed by the offending train undertaking.

## 6.2.2 Calculation

Railway undertaking payment rates will be calculated based on an estimate of the impact of the performance of the relevant railway undertaking on other service operators using the HAL infrastructure, taking account of HAL's liability to those other operators. The payment rates will be based on minutes late x £per movement / journey time levied after 3 minutes delay. Any train delayed later than the service following will be considered a cancelled service for the purpose of determining the Payment Rate and will be subject to the cancellation levy equal to an additional movement charge.

## 6.2.3 Valuation of Performance

Where any delay is attributed to a HAL infrastructure failure and causes late presentation of a train to the Wider UK Rail Network, HAL will compensate train undertakings at a rate agreed within the relevant NR TAC.

## 6.2.4 Recalibration and review

The performance regime is subject to a review each year. In addition to this the regime can be reviewed after a material change or if the Wider UK Rail Network regime is altered in any way.

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## Annex A – Schedule of dates, timetabling process

Timetable dates for 2016 (Extract from NR Production Schedule covering 2015 to 2017)

The timetable below is provided by NR for the Wider UK Rail Network and will apply to the HAL infrastructure. Any replacement or modified timetable issued by NR in accordance with the applicable procedures for such replacement will have effect under the Network Statement.

**TIMETABLE DEVELOPMENT DATES – December 2016 and May 2017  
TIMETABLES**

<b>Timetable Development Dates</b>	<b>Principal Change</b>	<b>Subsidiary Change</b>
D73 - Formal Notification of Process Dates	17.07.2015	
<b>Revision of Timetable Planning Rules</b>		
D64 – Start of NR Consultation of Proposed Changes to Rules	18.09.2015	26.02.2016
D60 – End of NR consultation of proposed changes to Rules	16.10.2015	25.03.2016
D59 – Publish 'Draft Rules'	23.10.2015	01.04.2016
D54 – Operator Responses to 'Draft Rules'	27.11.2015	06.05.2016
D54 to D44 – NR review Operator Responses		
D44 – Publish 'Final Rules'	05.02.2016	15.07.2016
D41 – End of Period in which an appeal can be made for the 'Final Rules'	26.02.2016	05.08.2016
<b>Initial Consultation Period</b>		
D55 – Publication of Strategic Capacity Statement	20.11.2015	29.04.2016
D55 – Notification by TT Participants of major TT changes	20.11.2015	29.04.2016
D55 – Start of Initial Consultation Period	20.11.2015	29.04.2016
D45 – NR to provide copy of 'Prior Working Timetable'	29.01.2016	08.07.2016
D48 – Notification of Provisional International Paths	08.01.2016	
D40 – Priority Date	04.03.2016	12.08.2016
<b>Timetable Preparation Period</b>		
D40 – Start of Timetable Preparation Period	04.03.2016	12.08.2016
D37 - Timetable Change Risk Assessment Group	25.03.2016	02.09.2016
D32 - Timetable Change Assurance Group	29.04.2016	07.10.2016
D26 – NR Publish New Working TT	10.06.2016	18.11.2016
Timetable Commencement Date	11.12.2016	21.05.2017
Timetable End Date	20.05.2017	09.12.2017
<b>Other Notable Dates (Non Contractual)</b>		
New WTT and associated system files available to ATOC	10.06.2016	18.11.2016
Operator responses to New WTT	24.06.2016	02.12.2016
D22 – End of Appeal Period 'New Working Timetable'	08.07.2016	16.12.2016
D15 - Timetable Briefing process complete	26.08.2016	03.02.2017
D14 - CIF Electronic Data available	02.09.2016	10.02.2017
D9 - Timetable Extract taken for NRT Edit	07.10.2016	17.03.2017
D8 - Corresponding Day Timetable Dates Proposed to Operators	14.10.2016	24.03.2017
D4 - NRT Data sent to publishers	11.11.2016	21.04.2017
<b>Calendar of Events (D7)</b>		
D64 – Publication of draft Calendar of Events	18.09.2015	26.02.2016
D54 – Publication of Final Calendar of Events	27.11.2015	06.05.2016
<b>International Freight Train Notice (D9)</b>		
D70 Publish the Initial International Freight Train Notice	07.08.2015	
D70 to D65 NR Consult the Initial International Freight Train Notice	11.09.2015	
D60 NR to provide an updated International Freight Train Notice	16.10.2015	