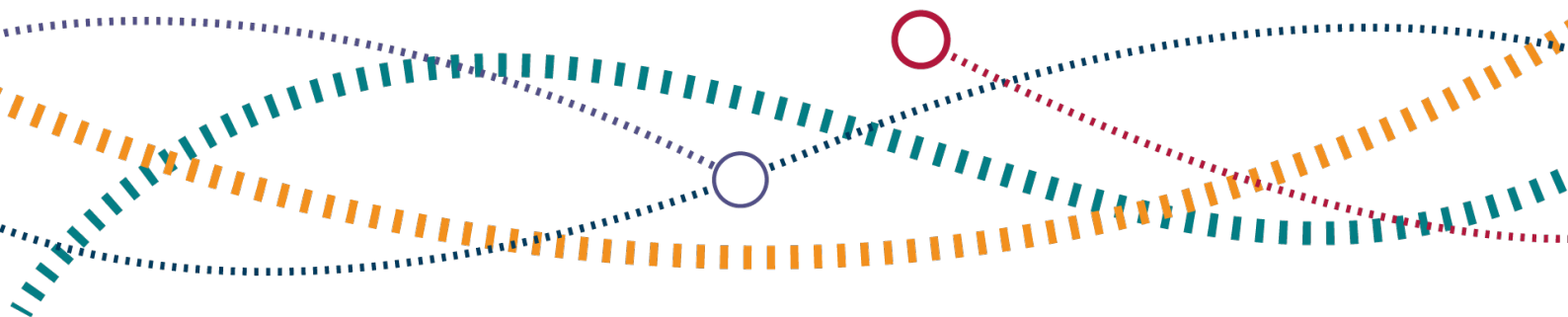




Annual Assessment of Network Rail April 2021 to March 2022

Glossary

20 July 2022



Glossary

Term	Explanation
AC traction power	Alternating current of a lower frequency than the public supply (see 'traction power').
Access Rights (track)	The agreement by which the terms of a train operator's use of Network Rail's railway lines is formalised.
Active warning systems	Provides advanced warning of approaching trains to work groups operating within a Protected Area. The main objective of the system is to ensure the safety of the employees on site.
Asbestos	Is a naturally occurring mineral composed of flexible fibres that are resistant to heat, electricity and corrosion. These qualities make the mineral useful. However, asbestos exposure is highly toxic. We monitor Network Rail's management of asbestos.
Ash dieback	A fungal disease of ash trees in Europe.
British Transport Police (BTP)	A national special police force that polices railways and light-rail systems in England, Wales and Scotland, for which it has entered into an agreement to provide such services.
Capital Investment Capability Framework (CICF)	In 2019 ORR, Network Rail and Nichols (independent reporter) collaboratively developed the Capital Investment Capability Framework to provide a maturity model to assess the capability of Network Rail routes to specify both enhancements and renewals effectively, identify areas for improvement, and to establish benchmarks across routes for comparison. A baseline assessment of Network Rail's capability was delivered in 2019, with a 'temperature check' assessment completed in 2022 to provide assurance that Network Rail is addressing the outcomes of the 2019 assessment.
Cancellations	The percentage of planned trains which either did not run their full planned journey or did not call at all their planned station stops. This measure is a score which weights full cancellations as one and part cancellations as half. A lower cancellations score reflects better reliability.
Civil Engineering Framework Agreement (CEFA)	A framework agreement in construction is an agreement a buyer or group of buyers makes with multiple suppliers to establish terms of governing contracts that may be awarded during the lifetime of the framework. It is the terms and conditions agreed by the two parties for making specific purchases.

Term	Explanation
Composite Reliability Index (CRI)	Measures the short-term condition and performance of assets. It is presented as the percentage change in reliability since the end of Control Period 5 (CP5).
Composite Sustainability Index (CSI)	Network Rail needs to secure the maintenance, renewal, and replacement of the network so it is safe and operable and do so in a way that is sustainable and efficient over the long-term. In Control Period 6 (CP6), we test this using a measure of asset sustainability, the Composite Sustainability Index (CSI). CSI shows the percentage improvement of asset sustainability compared to the end of Control Period 4 (CP4). Depending on the asset type, asset sustainability is measured either by remaining life of the asset or by asset condition score and is weighted by the replacement value of the asset.
Conductor rail	Provides traction current for rail vehicles and is often used underground where the extra height and clearances required for overhead electrification is undesirable or of exceeding cost.
Consistent Region Measure for Performance (CRM-P)	Measures the delay minutes to in service passenger trains attributed to Network Rail from incidents occurring in each Network Rail Region, per 100 train kilometres. A lower score reflects better performance.
Control Period	<p>A control period is the period to which an access charges review (e.g. a periodic review) applies. Control periods are typically five years in length, but maybe shorter or longer depending on what the regulator decides as part of the review:</p> <ul style="list-style-type: none"> • CP7 covers from 1 April 2024 to 31 March 2029 • CP6 covers from 1 April 2019 to 31 March 2024 • CP5 covers from 1 April 2014 to 31 March 2019 • CP4 covers from 1 April 2009 to 31 March 2014
Coronavirus (COVID-19)	The infection (or disease) caused by SARS-CoV-2 virus.
Maintenance Delivery Units (MDUs, also referred to as “Delivery Units”)	The purpose of an MDU is to provide a physical base for maintaining the railways. MDUs come in many forms and are design specific in nearly all situations.
Electrification and fixed plant	Equipment provided to supply electrical traction energy to trains, such as feeder stations, transformers, overhead lines, and conductor rail.
Earthworks	Refer to a variety of engineering techniques designed to allow trains to pass over difficult terrain and steep hills. In most cases, this means adding or removing soil to create a flat surface.

Term	Explanation
Effective volumes	This refers to the volume of work undertaken in seven key areas, attributing weightings based on the life added to the asset by each type of work. For example, in the area of plain line track, a full renewal would be given a higher weighting than replacing one individual element.
Efficiency	This compares the relationship between expenditure on core business activities (operations, support functions, maintenance and renewals) and outputs on a like-for-like basis over time.
Enhancements	Described as investments in new or improved infrastructure that enable service changes and other benefits. These investments will enhance the capability of the railway, typically adding increased or new capacity or providing technical improvements to the way the railway runs.
Environmental Sustainability Index (ESI)	Comprises waste recycled, waste diverted from landfill, non-traction energy usage, and reduction in non-traction carbon emissions.
Fatalities and Weighted Injuries (FWI)	The common way of measuring harm to people on Britain's mainline railways. FWI is an index representing workforce safety, using fatalities and non-fatal injuries per hour worked. A lower FWI represents better performance.
Final Determination	Our final determination sets out our overall package of decisions for the periodic review 2023 (PR23 – see 'Periodic Review').
Financial Performance Measure (FPM)	This compares the actual income and expenditure of a region or function to its CP6 delivery plan across most items of income and expenditure, and it ensures that the region or function does not benefit from underspend by delaying work to a later date if that work will still need to be done.
Freight Operating Company (FOC)	Companies that use the rail network to move their goods.
Freight Delivery Metric for a Region (FDM-R)	Measures the percentage of commercial freight services that arrive at their planned destination within 15 minutes of their booked arrival time, or with less than 15 minutes of delay caused by Network Rail or another operator that is not a commercial freight operator.
Freight Safety Improvement Portfolio (FSIP)	Is a £22 million fund to deliver safety improvements during CP6. The fund will see 30,000 radio frequency identification tags fitted to both sides of freight locomotives and wagons. When the tagged train passes a reader on the side of the track (at one of 22 sites), information regarding each wheelset is captured. This is then sent

Term	Explanation
	to engineers via cloud-based technology to see if any maintenance work is needed.
Global Positioning System (GPS)	Is a United States-owned utility that provides users with positioning, navigation, and timing services. This system consists of three segments: the space segment, the control segment, and the user segment.
Hand-Arm Vibration Syndrome (HAVS)	Hand-arm vibration is a debilitating disease which is caused by prolonged exposure to vibration from the use of hand-held power tools (painful and disabling disorders of the blood vessels, nerves and joints).
Heavy axle weight	The axle weight in relation to an axle of a vehicle is the total weight transmitted by the several wheels attached to that axle to the surface on which the vehicle rests. A heavy axle weight in rail is over the weight specified by the Route Availability (RA) of a route.
High Level Output Specifications (HLOSs)	The documents published by the Secretary of State and Scottish Ministers setting out what they want railway activities to achieve during the proposed control period. The Scottish Ministers' HLOS relates solely to Scotland, whereas the Secretary of State's HLOS relates to England and Wales (but to Great Britain as a whole in respect of any safety requirements).
High Output (renewals)	Use of specialist engineering trains to deliver high volumes of work.
High Speed Trains (HSTs)	Trains composed of Class 43 Diesel Locomotives and Mark 3a coaches or other similar trains when authorised.
High Speed 1 (HS1)	First purpose-built high-speed line.
High Speed 2 (HS2)	Second purpose-built high-speed line. This line is still under construction.
Improvement Notice	<p>A notice issued under the Health and Safety at Work Act setting out an improvement required in a prescribed timescale.</p> <p>ORR inspectors normally enforce health and safety standards by giving advice on how to comply with the law. Sometimes they must order people to make improvements by issuing them with a notice, for example an improvement notice, which allows time for the recipient to comply.</p>
Incident Learning Reviews	An investigation launched by Network Rail or operators following a significant event that caused delays to train services and the operation of the network (i.e. severe weather, derailments).

Term	Explanation
Independent Reporter	A consultant whose role is to provide ORR with independent, professional opinions and advice relating to Network Rail's (as the railway licence holder) provision or contemplated provision of railway services, with a view for ORR to rely on those evidence-based opinions or advice when carrying out its functions.
Joint Performance Improvement Plan (JPIP)	A plan produced jointly based on a two-way obligation of Network Rail and the train operating company (TOC) to improve performance. JPIPs tend to focus on a specific delay category (e.g. external incidents, fleet, severe weather, etc.).
Leading indicators	Measures used to assess the likely success (or otherwise) in delivering planned renewals and efficiencies across the control period as a whole.
Level Crossing	Where a railway crosses a road or right of way on the level; meaning without the use of a tunnel or bridge.
Lost Time Injury Frequency Rate (LTIFR)	Is the number of lost time injuries occurring in a workplace per 100,000 hours worked.
Minimum Viable Product (MVP)	Is a product with enough features to attract early-adopter customers and validate a product idea early in the product development cycle.
Moving Annual Average (MAA)	The average of the last 13 four-week time periods in rail.
National Functions	Network Rail's National Functions refer to centralised business units of Network Rail, which provide various services on behalf of each of the regions and the System Operator. These functions include: the Chief Financial Officer (CFO) function (services include finance, business planning and legal), the Technical Authority (services include company technical standards and safety protocols) and Route Services (services include procurement and IT).
Network Code	Is a common set of rules and industry procedures that apply to all parties who have a contractual right of access to the track owned and operated by Network Rail. It covers those areas where all parties are obliged to work together to the same standards and timescales (e.g. timetable development, making changes to the network or vehicles, environmental protection, etc.).
Network Licence	Network Rail operates under a network licence, which contains a set of conditions under which Network Rail must operate. As the operator and owner of the national rail infrastructure, it has a key role to play in railway safety and improving railway performance

Term	Explanation
	and efficiency. The network licence is a tool we have for holding Network Rail to account.
Network Rail Assurance Panel (NRAP)	This body governs a number of Network Rail processes on behalf of Network Rail's Executive. These processes help Network Rail comply with its statutory responsibilities and Health and Safety Management System when a change is introduced that could change the risk profile of Network Rail Infrastructure.
Non-track assets	Includes infrastructure and all other assets associated with the rail estate, excluding track (e.g. train detection systems, stations, depots, plant and equipment).
Non-traction carbon emissions	Carbon missions resulting from operation of buildings and infrastructure associated with the rail estate (such as stations, depots, maintenance vehicles and plant), but excluding emissions resulting from the use of power for movement of trains.
Non-traction energy usage	Energy use associated with the operation of buildings and infrastructure associated with the rail estate (such as stations, depots, maintenance vehicles and plant), but excluding energy demand required for movement of trains.
Omicron	Variant of the SARS-CoV-2 virus (see 'coronavirus').
On Time	The percentage of recorded station stops arrived at early or less than one minute after the scheduled arrival time.
Operating Expenditure (OPEX)	Refers to ongoing costs incurred by Network Rail to maintain the railway infrastructure. Examples of OPEX include costs incurred in timetabling and signalling.
Outperformance	If a region has spent less and, or, has received more income than its delivery plan (for what it has delivered), it will report financial outperformance.
Outturn	Refers to an amount achieved in a certain time, in contrast with the amount that might have been predicted or estimated.
Overhead Line Equipment (OLE)	The electrical infrastructure that delivers power to rail vehicles via cables suspended overhead the track. An assembly of metal conductor wires, insulating devices and support structures used to bring traction supply current to suitably equipped traction units. The conducting wires are normally strung between masts or poles in some form of catenary arrangement, but simple systems may have a single trolley wire.

Term	Explanation
Overlay miniature stop lights (OMLSs)	Are designed to be a cost effective and safe level crossing system using red and green light indications. OMLSs are designed to provide protection to the right of way user by means of red and green lights plus an audible warning. The equipment is design to be independent of all other signalling infrastructure, therefore it is only suitable for simple configurations of railway.
Passive crossing	A crossing that does not have flashing lights or automatic gates.
Performance Innovation Fund (PIF)	A fund designed to support innovative ways to drive performance improvements.
Performance Improvement Management System (PIMS)	Is a whole industry programme looking at the capability of the industry to improve train performance.
Performance strategy	An overarching document which includes jointly prepared plans agreed between Network Rail and a train operator to improve performance. This document outlines how performance will be managed throughout a reporting year, governance plans in place and how specific projects will benefit performance.
Periodic Review (PR)	Review of Network Rail relating to a specific control period (e.g. PR18 is the 2018 periodic review of Network Rail relating to CP6, PR23 is the periodic review of Network Rail relating to CP7).
Plain line track	A stretch of railway track that does not have any junctions, crossovers or points on it.
Precursor Indicator Model	Is a tool used to track the impact of safety improvements and to identify concerns that require further investigation or action.
Programme Management Office (PMO)	A PMO helps an organisation prioritise and manage its investments in its portfolios, programmes, and projects.
Project SPEED (Swift, Pragmatic and Efficient Enhancement Delivery)	Rail Project SPEED was jointly developed by the Department for Transport and Network Rail. Infrastructure projects at different stages of development have been reviewed to identify how government funding could go further and work could be carried out faster. This approach identified 10 key themes to lower costs and speed up the delivery of infrastructure schemes, such as rapidly increasing the use of innovative construction methods and removing complexity from planning processes.
Public Performance Measure (PPM) [Generic]	Is the percentage of planned trains arriving at their final scheduled destination early or less than five minutes after their scheduled arrival time (less than 10 minutes for trains in the Long-Distance sector) having called at all their planned station stops.

Term	Explanation
Public Performance Measure (PPM) [for use with reference to Scotland only]	Is the percentage of planned trains arriving at their final scheduled destination early or less than five minutes after their scheduled arrival time having called at all their planned station stops.
Red zone unassisted lookout work	Open Line working (formerly known as Red Zone) means working when the rail lines are open to train movements. Unassisted lookout work means working without the assistance of a lookout person as protection.
Renewals	Any activity undertaken by Network Rail which is treated as capital investment.
Rail Accident Investigation Branch (RAIB)	A British government agency that independently investigates rail accidents in the United Kingdom and Channel Tunnel in order to find a cause, not to lay blame.
Rail Delivery Group (RDG)	The British rail industry membership body that brings together passenger and freight rail companies, Network Rail and High Speed 2.
Risk Management Maturity Model (RM3)	ORR developed RM3 in collaboration with the rail industry as a tool for assessing an organisation's ability to successfully manage health and safety risks, to help identify areas for improvement and provide a benchmark for year-on-year comparison. RM3 is helping guide the rail industry towards excellence in health and safety risk management. Best performing companies are those which have fully integrated health and safety practices into their culture. RM3 sets out criteria for key elements of a health and safety risk management system which describe the steps used to evaluate a company's progress from ad-hoc to excellent health and safety management capability.
Rail Management Maturity Model for Performance framework (RM3-P)	Is a self-assessment tool focusing on the processes supporting train performance improvements. This tool looks at five areas: policy, governance and leadership, monitoring, audit, and review.
Rail milling	Is a rotational cutting process that results in the formation of metal chips which are collected and stored on the train for recycling.
Rail Safety and Standards Board (RSSB)	Is an independent, industry-wide body established under the licences of Network Rail and the passenger and freight train operators. RSSB is involved in understanding and modelling risk, guiding standards, managing research and development, and industry collaboration.

Term	Explanation
Regulatory floor	We monitor delivery of measures for each region against an annual target and a regulatory minimum level of performance, referred to as the regulatory floor. This minimum level of performance signals the point at which we are highly likely to consider a formal investigation.
Right Time	Measures the percentage of planned trains arriving at their final scheduled destination early or less than one minute after the scheduled arrival time having called at all their planned station stops.
Right Time Arrival	Right Time performance measures the percentage of trains arriving early or within 59 seconds of schedule. 'Right Time Arrival' (RTA) is the specific measure for Caledonian Sleeper (a Scottish Train Operating Company – see 'TOC') as set out in the Scottish High Level Output Specifications (see 'HLOS').
Safety Risk Model	A model that helps people in Great Britain rail take sound, risk-based decisions. It describes and quantifies the different risks associated with railway operations and maintenance. It helps decision makers set safety priorities and analyse safety-related costs and benefits so they can confidently and demonstrably meet legal requirements and wider business objectives.
Scorecards	Network Rail measures its company-wide and regional performance using scorecards. The scorecards help to align its priorities with those of its customers and incentivise its management teams to deliver those priorities.
Schedule 4	The schedule included in track access contracts between Network Rail and train operators that sets out the arrangements for compensation paid to operators when Network Rail takes temporary possession of the network (e.g. for engineering purposes).
Schedule 8	The schedule included in track access contracts between Network Rail and train operators that sets out the arrangements for compensating train operators for unplanned service disruption caused by Network Rail and other train operators.
Signals Passed at Danger (SPADs)	One of the criteria on which the safety of the national rail network is measured. It relates to the occasions where a train passes a signal at which it should have stopped and runs the risk of compromising safety.
Standage	The amount of space a facility such as a platform has to accommodate trains.

Term	Explanation
Sunk cost	A cost that has already been incurred and cannot be recovered.
Switches and crossings	Moveable sections of track that guide trains from one track to another and allow them to cross paths. They have an especially limited lifespan because trains cause wear and deformation when they travel across them.
System Review Panels (SRPs)	These are change review bodies within Network Rail.
Targeted Assurance Review (TAR)	Is a risk-based assurance review used to provide insight into ongoing and emerging risks and issues within Network Rail.
Temporary speed restriction (TSR)	The object of a TSR is to reduce the speed of rail traffic to ensure safe passage over a section of track when the track is not safe for normal speed.
Traction power	The propulsion energy required to operate trains.
Train performance	<p>We use a range of metrics to assess overall performance within the regions but focus on two consistent measures to compare performance across regions:</p> <ol style="list-style-type: none"> 1. a consistent region measure for passenger services known as CRM-P. This is the delay minutes to in service passenger trains attributed to Network Rail from incidents occurring in each Network Rail Region, per 100 train kilometres. A lower score reflects better performance; and 2. a freight delivery metric for each region known as FDM-R. This is the percentage of commercial freight services that arrive at planned destination within 15 minutes of their booked arrival time, or with less than 15 minutes of delay caused by Network Rail or another operator that is not a commercial freight operator. <p>We monitor delivery of these measures for each region against an annual target and a regulatory minimum level of performance, referred to as the regulatory floor. This minimum level of performance signals the point at which we are highly likely to consider a formal investigation.</p>
Train Operating Company (TOC)	TOCs hold an agreement to run passenger trains and services on the network.
Underperformance	If a region has spent more and / or has received less income than its delivery plan (for what it has delivered), it will report financial underperformance.

Term	Explanation
W12	Freight gauges are described by the 'W' (wagon) series of gauges. W12 gauge relates to the transporting of 9'6" high x 2600mm (often refrigerated) containers, as well as a number of other loads, on a specific set of wagons.
Wavelength	Wavelength is the rail industry's customer service monitoring and measuring tool. Wavelength identifies opportunities for improvement through an ongoing process of assessment and improvement. Wavelength ensures the industry will build a deeper and more meaningful understanding of what drives customer experience.
Whole life carbon	The carbon emissions resulting from the materials, construction and the use of a building over its entire life, including its demolition and disposal.
Whole Life Cost model	A form of investment analysis; an economic assessment considering all agreed projected significant and relevant cost flows over a period of analysis expressed in monetary value. The projected costs are those needed to achieve defined levels of performance, including reliability, safety and availability.



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