

Enhancements Delivery Plan England and Wales

Entry Into Service (EIS) schedule

December 2020

Network Rail's obligation

The Enhancements Delivery Plan for England and Wales sets out the enhancements commitments that Network Rail has made to the Department for Transport and to other funders. Its purpose is to provide transparency about the status of these schemes and to provide visibility of our plans to customers, stakeholders and the public.

Network Rail's obligation is to publish Entry into Service (EIS) milestones which represent the completion of our works to change the capability of the railway infrastructure. It will be for passenger and freight operators to decide how and when to begin to use enhanced infrastructure.

In Control Period 6 we will agree enhancements with our funders through the Investment Decision Framework (IDF) and the Department for Transport's (DfT) Rail Network Enhancement Pipeline (RNEP) process. These have been developed following the Memorandum of Understanding which was developed and agreed between Network Rail and the DfT in 2016.¹

Network Rail and funders will only commit to the delivery of an enhancement once we have developed the programme sufficiently to have a good understanding of its outputs, cost and scope. This will allow us to make a Final Investment Decision (FID) to deliver these works. As such, EIS milestones will only be published in this plan once a scheme has passed a FID. It is only at this point that there is sufficient certainty of outputs that NR can reasonably be held to account for the delivery of the programmes.

For all programmes that are yet to reach the point of taking a FID, DfT publish these in their RNEP document, which is updated annually: <https://www.gov.uk/government/publications/rail-network-enhancements-pipeline-autumn-2019-update>

A separate Enhancements Delivery Plan is published to describe our Enhancements obligations in Scotland: <https://www.networkrail.co.uk/who-we-are/publications-and-resources/>

Contacting Network Rail

One of the reasons that Network Rail publishes an Enhancements Delivery Plan is to provide visibility of funded enhancements to potential third-party investors and to other railway undertakings to assist them in planning their businesses. Enquiries related to specific schemes for these purposes should be addressed to the Principal Programme Sponsor, or other listed contact, responsible for each programme. They are named in the document against each programme and their contact details are listed below.

General enquiries should be addressed to Network Rail using the contact details provided on our website: <https://www.networkrail.co.uk/communities/contact-us/>

Crossrail – Colin Prime, Principal Programme Sponsor – colin.prime@networkrail.co.uk

Thameslink – Elena Stebbings, Senior Development Manager – elena.stebbing@networkrail.co.uk

North of England Programme – Phase 5 – Andy Morgan, Principal Programme Sponsor – andrew.morgan@networkrail.co.uk

West Anglia Main Line Capacity, Kings Lynn to Cambridge 8 car, Felixstowe Branch Capacity Enhancement – Sarah Jane Crawford, Principal Programme Sponsor – sarahjane.crawford@networkrail.co.uk

East Coast Main Line Enhancements Programme – Ed Akers, Principal Programme Sponsor – edward.akers@networkrail.co.uk

Midland Main Line Programme, Market Harborough LSI – Gavin Crook, Principal Programme Sponsor – gavin.crook@networkrail.co.uk

New Cross Grid & Ashford to Ramsgate journey time improvement – Mark Ellerby, Senior Commercial Scheme Sponsor – mark.ellerby@networkrail.co.uk

Transpennine Route Upgrade (Intermediate Interventions only - Leeds Station Capacity improvements) – Kieran Dunkin, Principal Programme Sponsor – kieran.dunkin@networkrail.co.uk

Great Western Electrification and Capacity – Charles Varey, Principal Programme Sponsor – charles.varey@networkrail.co.uk

Thames Valley EMU Capability Works – Mike Foss, Principal Programme Sponsor – mike.foss@networkrail.co.uk

West of England DMU Capability – Michelle Scogings, Principal Programme Sponsor – michelle.scogings@networkrail.co.uk

Reading, Ascot to Waterloo train lengthening programme – Stewart Firth, Director, Route Sponsorship (Wessex) – stewart.firth@networkrail.co.uk

Peak Forest to London freight – Thomas Drury, Sponsor – tom.drury@networkrail.co.uk

Doncaster to Immingham W12 gauge clearance & Northern Ports and Transpennine Capacity – Richard Iggulden, Senior Development Manager – richard.iggulden@networkrail.co.uk

¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/509545/mou-dft-network-rail-rail-enhancements.pdf

Northern train lengthening – Lawrence Cheung, Senior Sponsor – lawrence.cheung@networkrail.co.uk

Gatwick Airport station – Stephen Diplock, Senior Commercial Scheme Sponsor – stephen.Diplock@networkrail.co.uk

Bristol East Junction Remodelling – Michelle Scogings, Principal Programme Sponsor – michelle.Scogings@networkrail.co.uk

South West Rail Resilience Programme – Julie Gregory, Senior Commercial Scheme Sponsor – julie.Gregory@networkrail.co.uk

Southampton Freight Train Lengthening – Lucy Phipps, Commercial Scheme Sponsor – lucy.phipps@networkrail.co.uk

Denmark Hill Station – Kate Warner, Director, Route Business Development & Sponsorship – kate.warner@networkrail.co.uk

London Euston Congestion Measures (platform 8-11 ramp) – Nick de Bellaigue, Programme Director – Nick.Debellaigue@networkrail.co.uk

Activities and Milestones

Ref. Code	Programme	Project	Network Rail Contact	Narrative	Output	Activity/ Milestone	Original Agreed Date	Updated Date(s)	Status
CR001	Crossrail	-	Colin Prime	The Crossrail project will deliver a new integrated railway route through central London from Reading and Heathrow in the west to Shenfield and Abbey Wood in the east. The joint sponsors of the Crossrail project, the DfT and TfL, have set-up a company called Crossrail Limited (CRL) to act as the delivery agent. Network Rail is one of CRL's delivery partners. The responsibility for the design and construction of the works outside of the central tunnel section - known as the 'On Network Works' (ONW) - was transferred to Network Rail when Royal Assent was granted to the Crossrail project in July 2008.	The Crossrail project benefits are as follows: <ul style="list-style-type: none"> • New Crossrail train services will provide direct links from Reading and Heathrow to Paddington in the west to Shenfield and Abbey Wood in the east. With up to 24 Crossrail trains an hour running through the central section in each direction (at peak times) a total of 10% will be added to London's rail-based transport capacity; and • 28 existing surface stations will be upgraded with many of these stations also receiving platform extensions. 	Key Output 6a - Full Infrastructure Capability to support Stage 4 operations with sufficient time for testing	May-20*	n/a	*Subject to change control
						Key Output 6b - Full Infrastructure Capability to support Stage 5 operations (including Ilford, Romford Stations) with sufficient time for testing	Dec-20*	n/a – project is on target	*Subject to change control
CR004	Thameslink	-	Elena Stebbings	The DfT Thameslink Programme aims to provide a step change in capacity on an extended Thameslink network thus providing new journey opportunities, congestion relief and capacity for future passenger demand.	High capacity infrastructure capable of providing 24 train paths per hour between St Pancras and Blackfriars stations.	EIS Infrastructure Authorised KO2 final milestone	Dec-18	n/a – project is complete	Complete
CR005	North of England Programme	Phase 5 – Manchester Victoria to Stalybridge	Andy Morgan	25kV AC overhead electrification between Manchester Victoria and the Bromley Street (Manchester) area, new grid supply point at Stalybridge, associated power cable from Stalybridge to Ordsall Lane for Phases 4 and 5 NWEF and infrastructure improvements to give journey time savings.	The North of England Programme (NoEP) delivers conditional outputs which provide additional capacity for more services, improvements to line speeds to reduce journey times and electrify specific routes in the region.	EIS – Infrastructure Authorised	Mar-19	Jul-19	Revised & Complete

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A003	West Anglia Mainline Capacity Increase	-	Sarah Jane Crawford	The project will relieve overcrowding on the West Anglia Main Line. This scheme is intended to address the medium-term demand arising from industrial and residential developments in the vicinity of Tottenham Hale, Northumberland Park and the new Meridian Water development.	Infrastructure to allow for an additional two trains per hour to operate from Tottenham Hale to Stratford compared to the December 2014 Timetable in which two trains per hour currently operate. Network Rail will also deliver infrastructure to allow these services to be extended beyond Tottenham Hale to a new station at Meridian Water (funded by external stakeholders)	EIS – Infrastructure Authorised	May-19	n/a – project is complete	Complete
A006	Kings Lynn to Cambridge 8 car project	-	Sarah Jane Crawford	The project is to deliver the infrastructure required to enable 8-car Govia Thameslink Railway (GTR) services to run on the King's Lynn to Cambridge route, during the peak hours.	These services will relieve current peak hour overcrowding and meet CP6 passenger demand forecasts. Currently the service is operated by 4-car units.	EIS – Infrastructure Authorised	Jul-20	11 th Dec-20	Revised & Complete
EC001	East Coast Main Line Enhancements Programme	Werrington Grade Separation	Ed Akers	The Programme is driven by a strategic priority to increase capacity, improve passenger experience and accelerate journey times between key cities. The outputs include implementation of the InterCity Express Programme on the East Coast Main Line, power supply upgrades and an improved track layout to the north of Peterborough. DfT have noted that the outputs listed here are to be treated as conditional as trade-offs may still be needed to be made as further work is completed by NR to develop the timetable.	DfT have agreed that the ECML Enhancements Programme should provide infrastructure which enables these outputs: • An increase in capacity from 6 to 8 Long-Distance High-Speed services (LDHS) between London King's Cross and Doncaster and from 5 to 6 LDHS paths between Doncaster and Newcastle per hour; • Maintaining 2 freight tph, using diversionary routes as far as practicable; • A reduction in journey times for the fastest LDHS services to 4 hours from London to/from Edinburgh and 2 hours to/from London to Leeds.	EIS Infrastructure Authorised	Apr-21	Nov-21	Revised & On target
		Power supply upgrade phase 2				EIS Infrastructure Authorised	Mar-24	n/a – project is on target	On target
		Kings Cross remodelling				EIS Infrastructure Authorised	Mar-21	Jun-21	Revised & On target
		Stevenage Turnback				EIS Infrastructure Authorised	May-20	Aug-20	Revised & Complete
EM001	Midland Main Line Programme - Key Output 1	London to Corby Electrification and Capacity Upgrade	Gavin Crook	This Enhancements Programme is part of a rail industry programme that aims to transform travel to and from London on the Midland Mainline during CP5 and CP6 and improve the links between the core centres of population and economic activity in the East Midlands and South Yorkshire.	Key Output 1 for Entry into Service Infrastructure Authorised: • Provision of 25kv electrification from the existing limits at Bedford to Kettering and Corby; providing traction power for 2 electric passenger train services. • Enabling of improved journey times through the delivery of key infrastructure schemes; • Additional capacity for a 6th Long-Distance High-Speed service to serve between St Pancras and	EIS Infrastructure Authorised - Platform Lengthening	May-20	Aug-20	Revised & Complete
						EIS Infrastructure Authorised - Kettering Stabling Facility	May-20	Jan-21	Revised & On target

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					Kettering / Corby; and 3 freight paths per hour between Bedford and Kettering. • The capability of the network will be enhanced through the extension of platforms at key stations south of Leicester.	EIS Infrastructure Authorised - Prioritised electrified route	May-20	Jan-21	Missed & On target
					• New stabling facilities will also be provided at Kettering.	EIS Infrastructure Authorised - Full electrified route	Aug-20	Jan-21	Revised & On target
ES003k	Market Harborough LSI	-	Gavin Crook	The driver for the project is to increase the line speed through Market Harborough in order to support a journey time improvement between London and Sheffield.	The project will provide infrastructure to increase the line speed between Kettering and Wigston South Junction timing points in order to enable a reduction in Sectional Running Time (SRT).	GRIP 6 Infrastructure Authorised	Jun-19	n/a – project is complete	Complete
K004	New Cross Grid	-	Mark Ellerby	The project will provide increased traction power supply capacity for DC electric services in South London, North Kent and Sussex. It is required to provide additional base capacity in the area for future train service increases.	The project is a strategic upgrade and is part renewal funded in its replacement of existing obsolete 66kV equipment and connections. To provide base traction power supply capacity for increased DC electric train services into London in line with predicted future growth.	GRIP 6 completion and EIS	Mar-20	n/a – project is complete	Complete
LNE001b	Transpennine Route Upgrade – Intermediate Interventions	Leeds Station Capacity improvements	Kieran Dunkin	Additional capacity at Leeds Station to support the operation of longer trains and additional services on several routes. Leeds Station Capacity Enhancements will also support the delivery of the DfT's infrastructure assumptions within the Northern and Transpennine franchise commitments. <i>Note that further outputs for the Transpennine Route Upgrade are being developed by Network Rail and will be published in this EDP as a separate programme (Transpennine Route Upgrade) once they have completed a Final Investment Decision.</i>	Leeds Station Capacity Enhancements - Additional capacity at Leeds Station to support the operation of longer trains and additional services on a number of routes. The project will be delivered in the following phased strategy: • Phase 1 - Recontrol of the signalling control system to the York Rail Operating Centre (ROC) • Phase 2 - The relocking of 8No. existing signalling interlockings to provide additional signalling capacity • Phase 3 - A new 8-car platform (platform 0) and longer train standages on platforms 6. Track remodelling and associated resignalling to the West end of the station to provide greater operational flexibility.	Phase 1 EIS	Dec-19	n/a – project is complete	Complete
						Phase 2 EIS	Dec-20	n/a – project is complete	Complete
						Phase 3 EIS	Dec-21	n/a – project is on target	On target
W001a	Great Western Electrification	Bristol Parkway to Cardiff (excl.	Charles Varey	The electrification of the GWML facilitates the introduction of electric train operation delivering	Extension of the electrification of the Great Western Main Line (GWML) from Maidenhead (the furthest	EIS Infrastructure Authorised	Nov-19	6th Jan-20	Missed & Complete

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		electric operation in the Severn Tunnel)		significant journey time improvements on key intercity routes and high seating capacity trains on suburban services including into London Paddington.	extent of the Crossrail infrastructure works) to Cardiff, including power distribution works and clearance works.				
		Wootton Bassett Junction to Chippenham East				EIS Infrastructure Authorised	CP6	Apr-19	Complete
		Severn Tunnel (electric operation)				Commission the fixed conductor beam in the Severn Tunnel	Enables Class 387 EMU's and other electric stock to operate between Bristol Parkway and Cardiff.	EIS Infrastructure Authorised	6th Jan-20
W002b	Great Western Capacity Enhancement Programme	IEP: Specific GWML Capacity schemes	Michelle Scogings	The project provides infrastructure capacity enhancements to enable the delivery of the Intercity Express Programme.	Infrastructure capacity enhancements as outlined in the client (DfT) remit "Infrastructure Output Specification" (IOS5) to enable the operation of an enhanced passenger timetable from December 2019. At Bristol Parkway station, an additional platform face, signalling and track works.	Bristol Parkway 4th platform - EIS - Infrastructure Authorised	Dec-19	n/a – project is on complete	Complete
WX003	Reading, Ascot to Waterloo train lengthening programme	Feltham Platform Extensions and Level Crossing Closure	Stewart Firth	The project supports the delivery of the 2012 HLOS capacity metric for London Waterloo which indicates that it is necessary to provide capacity to accommodate an additional demand of 9,700 passengers in the three-hour morning peak.	The project will provide infrastructure to enable the operation of 10 car services on the Reading to London Waterloo and Aldershot via Ascot to London Waterloo routes. This will relieve overcrowding, particularly between Virginia Waterloo and London Waterloo in the morning peak.	EIS Infrastructure Authorised	Dec-19	n/a – project is complete	Complete
F006a	Felixstowe Branch Capacity Enhancement	-	Sarah Jane Crawford	To relieve capacity constraints at the port of Felixstowe such that freight demand from Felixstowe in CP6 and CP7 can be met. The project will provide infrastructure to enable operation of up to 47 freight train paths per day in each direction on the branch line to and from the Port of Felixstowe.	The scope of works includes provision of a new 1.4km passing loop at Trimley, crossing upgrades, crossing closures, a new brideway bridge, new S&C units, provision of diversionary route for FTN and signalling enhancements for the new layout.	EIS Infrastructure Authorised	Dec-19	n/a – project is complete	Complete
F006b	Doncaster – Immingham W12 gauge clearance	-	Richard Iggulden	W12 gauge enhancement from Doncaster, (both Hexthorpe Jnc and Marshgate Jnc) to Immingham and Killingholme. There are 29 foul structures that need to be cleared to achieve W12 clearance.	Gauge clearance for W12 container traffic on the branch line between Immingham and the East Coast Main Line, connecting the port with the network of 'high gauge' container routes.	EIS Infrastructure Authorised	Jun-19	n/a – project is complete	Complete

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F006c	Northern Ports and Transpennine capacity	-	Richard Iggulden	Priority interventions to increase freight capacity between the Port of Liverpool and the WCML and Transpennine routes. An increase from 1 to 2 freight train paths between the Port of Liverpool and Earlestown.	Entails double tracking a 400m stretch at the port boundary and installing flashing yellow aspects at Earlestown to ease approach control.	EIS Infrastructure Authorised	Dec-19	Dec-20*	Revised & *Subject to change control
F006d	Peak Forest to London Freight (Buxton, Hindlow/ Dowlow)	-	Thomas Drury	Provision of an extended run round facility at Buxton to enable freight trains to be routed to/from the routes to Hindlow and Great Rocks.	Infrastructure to allow longer trains with a gross trailing weight of 2600 – 3000 tonnes between Peak Forest and the Midland Mainline and ultimately destinations in London and the South East.	EIS Infrastructure Authorised	May-19	n/a – project is complete	Complete
LNE001c LNW008	Northern train lengthening	-	Lawrence Cheung	Programme of works across LNW and LNE routes, with deliverables required for each timetable change from December 2017 to May 2020.	The work, which consists of extending c.120 platforms at 60 stations, will enable longer rolling stock to be operated by Arriva Rail North (ARN) to provide increased capacity for passengers.	EIS Infrastructure Authorised	Apr-20	n/a – project is on complete	Complete
IFDfT008	Gatwick Airport station	-	Stephen Diplock	The project will provide a new station concourse above the existing station platforms with increased space for passengers and an improved connection to Gatwick Airport South Terminal via the NR footbridge. It will also include additional platform work, refurbishment of the existing station concourse and overbridges. The project will enable improved passenger access via new stairs and lifts, while it also aims to provide increased circulation space and a modern open plan ticket retailing hub.	By improving pedestrian journeys within the station, the scheme will contribute to Network Rail's objectives to deliver a safe, efficient and reliable rail service. The scheme will help to meet Network Rail's commitment to put improved accessibility at the heart of its station re-designs. The scheme will also help to meet the Department for Transport's objectives for improving journeys and providing safe, secure and sustainable transport. The scheme was recommended by the Interim Report of the Airports Commission in 2013.	EIS Infrastructure Authorised	Nov-22	n/a – project is on target	On target
W016	South West Rail Resilience Programme	-	Julie Gregory	The South West Rail Resilience Programme aims to provide a resilient railway for the south-west of England. The only railway line connecting much of Devon and all of Cornwall to the rest of the UK	The output of this programme is to deliver a robust level of resilience for the next 100 years, considering climate change including sea level rise. The level of resilience to be delivered equates to reducing the	Phase 1 (Marine Parade, Dawlish) – Resilience delivered	Jul-20	n/a – project is complete	Complete

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				rail network runs along the vulnerable coastal section between Dawlish Warren and Teignmouth. This stretch of railway is subject to the twin threats of coastal and geotechnical encroachment. In 2014 the railway here was closed for 6 weeks following the breaching of the sea wall at Dawlish and a subsequent landslide of cliffs near Teignmouth.	probability of the railway being closed for more than a week to one in 100 years; the probability of a closure between 2 days and a week to no more than once every 20 years on average and all other smaller disruption events to be reduced compared to current levels.	Phase 2 (Colonnade to Coastguard's Ramp, Dawlish) – Resilience delivered	Aug-22	n/a – project is on target	On target
W015	Bristol East Junction Remodelling	-	Michelle Scogings	Remodelling of the Bristol East Junction has been identified as playing an important role in the future strategic development of the rail network in the Greater Bristol area and Western Region. Network Rail's Western Route study identified that additional services into Bristol Temple Meads were required to accommodate future rail demand. The remodelled layout of Bristol East Junction will provide additional capacity to support efficient running of future service enhancements such as MetroWest and optimise the capacity works already delivered in the route.	The outputs of the programme are: - Additional capacity to support service enhancements, including MetroWest, and thus, support future demand growth. - Resilience performance: de-confliction of moves at the station area and the removal of the bottleneck at Filton Bank, delivering better performance and a more reliable service for passengers. - Reduction of asset maintenance times. - An average two-minute journey time saving on some London Paddington to Bristol services.	EIS Infrastructure Authorised	Sept-21	n/a – project is on target	On target
F604	Southampton Freight Train Lengthening	-	Lucy Phipps	Enhance the network, enabling it to operate freight trains of up to 775 metres in length from the port of Southampton through to the West Midlands along the West Coast Main Line, thereby increasing capacity of existing freight trains by circa 20%, and supporting environmental targets by enabling larger volumes of goods to be transported across the country in a much more sustainable manner by freight operators utilising the rail network.	Most works are planned for delivery during January and February 2021, in three stages; Stage 1 is the introduction of a temporary buffer stop and putting out-of-use some Freight-only used lines. Stage 2 is the introduction of the Redbridge Goods Line and bringing the remodelled Maritime West to Redbridge into operational use. Stage 3 is the introduction of all remaining altered infrastructure into operational use and the raising of line speeds.	EIS Infrastructure Authorised	Feb-21	n/a – project is on target	On target

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S605	Denmark Hill Station	-	Kate Warner	After significant growth in passenger numbers in recent years, Denmark Hill's current station layout severely constrains pedestrian flow creating chronic congestion. This is as a result of growing employment in the area (including two major hospitals adjacent), a resulting increase in the number of services that call at the station, including the relatively recent introduction of London Overground services that now operate through the station.	The central aim of this project is to eliminate passenger crowding issues at the station entrances and within the station by the provision of a second northern station entrance/exit on Windsor Walk. There will also be changes to platforms including the provision of new canopies, that will encourage the use of the new entrance. Secondary aims are to reduce concerns over safety and dwell time performance on the platforms, by encouraging passengers to use the eastern end of the platforms more.	EIS Infrastructure Authorised	Jul-21	n/a – project is on target	On target
S636	Ashford to Ramsgate journey time improvement (Phase 2)	-	Mark Ellerby	Support economic development in East Kent by increasing the existing linespeed to reduce journey times.	Increase the current linespeed from 40 mph to 55 mph through track enhancements and level crossing works.	EIS Infrastructure Authorised	May-23	n/a – project is on target	On target
LNWS60 2b	London Euston Congestion Measures	Platforms 8-11 ramp widening	Nick de Bellaigue	The ramp, used by >40% of the station's passengers, is the most significant pinch-point at Euston and has been identified as the highest priority measure required to address station congestion and safety.	Demolition of three retail units and relocation of a platform level ticket office to increase the useable ramp width from 3.9 metres to the maximum achievable width of 9.0 metres.	EIS Infrastructure Authorised	May-21	n/a – project is on target	On target

We're transforming, making it easier for other organisations to invest in, and build on the railway.

Providing valuable opportunities for other organisations to invest in and build on the railway reduces the tax-payer burden. The increased competition drives down cost, while also increasing efficiency, creativity and innovation.

Further information on Network Rail's Open for Business initiatives can be found on our website: <https://www.networkrail.co.uk/industry-commercial-partners/third-party-investors/network-rail-open-business/>

Contact details for our Business Development Directors in each region can also be found on our website: <https://www.networkrail.co.uk/industry-commercial-partners/third-party-investors/network-rail-open-business/opportunities-for-third-parties/>