

1. Programme/Project Management Case

1.1 Introduction

This Management Case sets out the arrangements for the delivery of the East Coast Main Line (ECML) Enhancements Programme, the project controls including the governance structure and how the project plan, risks, issues, and stakeholder communications are managed.

1.2 Background

The Rail Investment Strategy (High Level Output Specification) published in 2012 set out the Government's intention to increase connectivity and capacity on the ECML as well as reduce journey times.

The ECML requires additional capacity along its length to cope with the growth in passenger demand. To enable the introduction of the Intercity Express Programme (IEP) trains and other electric and bi-mode rolling stock, power supply upgrades are required together with supporting infrastructure such as depots.

The outcomes expected from the Programme are:

- Long Distance High Speed (LDHS) seating capacity into London increased by 38% from approximately today's 2900 to 3950 seats per hour;
- An increase in capacity from 6 to 8 LDHS services between London King's Cross and Doncaster and from 5 to 6 LDHS services between Doncaster and Newcastle per hour;
- Maintain freight capacity for current and Freight Market Study¹ forecast demand, using diversionary routes as far as practicable; and,
- A reduction in journey times for the fastest LDHS services in each hour to 4 hours between London and Edinburgh and 2 hours between London and Leeds.

1.3 Programme Scope

The Programme consists of a number of infrastructure interventions along the line of route, which fall into three specific categories:

- IEP enabling works: These schemes are mostly delivered and consist of the works required in order to physically operate the Government-procured IEP rolling stock when it is introduced in 2018, replacing the ageing East Coast franchise fleet. This includes gauge clearance to ensure that the trains are compatible with the existing infrastructure, platform lengthening, balises and depot connections.
- Power supply upgrades: A power supply upgrade at the south end of the route is already delivered. An additional intervention will provide an increase in the capacity of the power supply north of Doncaster, enabling LDHS and local services to operate in electric on the East Coast.
- Capacity enabling works: This consists of a number of schemes focusing on resolving known bottlenecks at locations along the line of route, delivering an increase in track capacity for LDHS services. This includes the grade separation

¹ Network Rail Freight Market Study, 2013

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of Werrington Junction, enabling an uplift in passenger and freight services on the route.

The Programme consists of the following schemes:

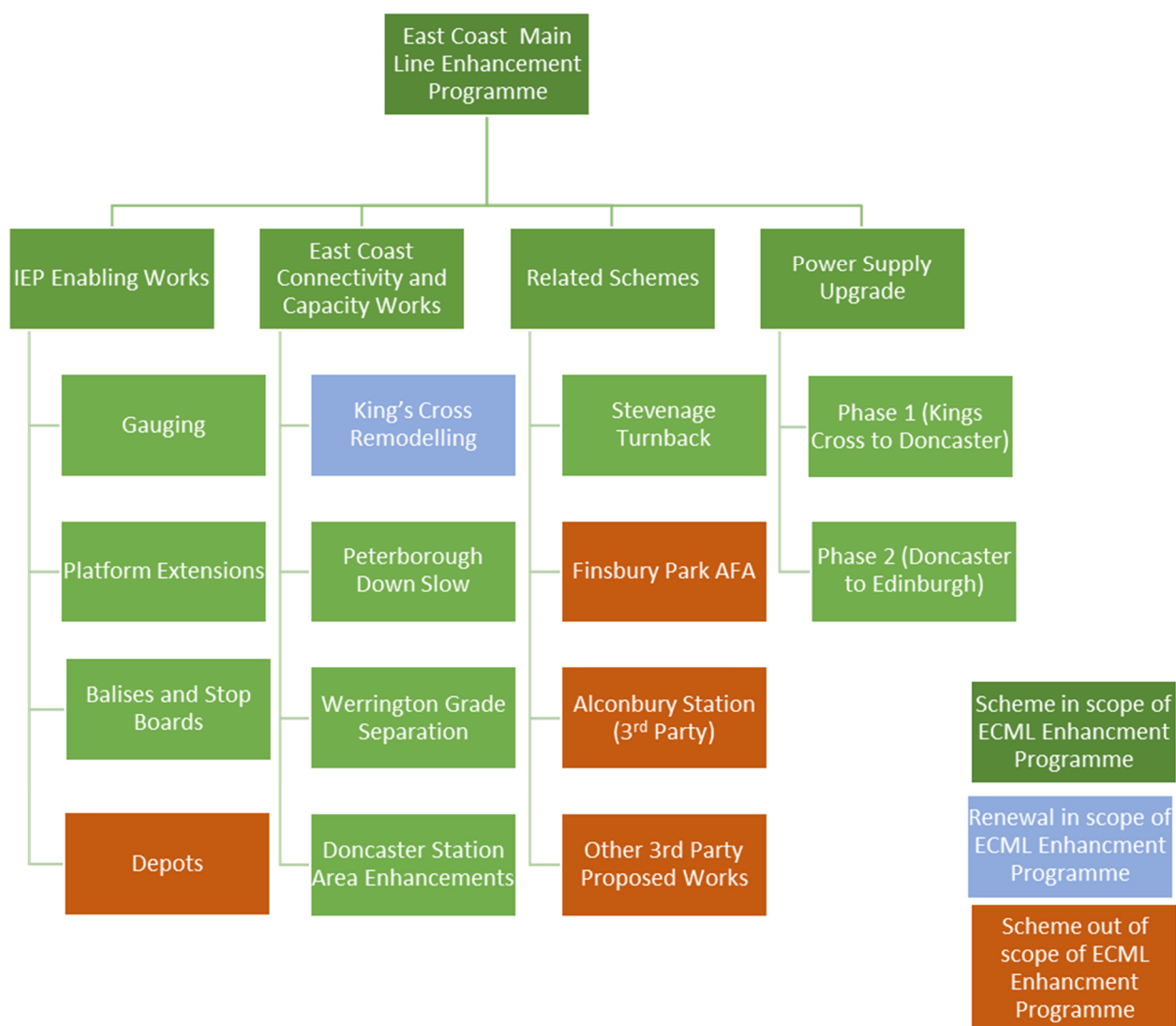


Figure 1 ECML Enhancements Programme Work Breakdown Structure

The King's Cross Remodelling work is primarily a renewals scheme with a proportion of the cost from enhancements funding [REDACTED] (cash prices)). The Intercity team will continue to review this renewal with Network Rail (NR) to ensure the enhancement outputs required are delivered; however, NR remains the main client for renewals work overseen by the Office of Rail and Road (ORR).

1.4 Integration Approach

The Department for Transport (DfT) retains the accountability to integrate the outputs of the delivery organisations to provide the new capabilities that are required to realise the business case benefits, while delegating responsibility to NR. Within this context, integration activities for the ECML Enhancements Programme are undertaken at three levels:

1. Strategic integration (DfT accountable and responsible) - e.g. *"What's the best way to add more capacity to the ECML?"*

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2. Programme integration (DfT accountable, NR responsible) - e.g. “Are the dates for IEP delivery, driver training and gauge clearance aligned?”
3. Technical integration (NR accountable and responsible) - e.g. “Is the new OLE compatible with the legacy OLE?”

1.5 Roles and Responsibilities

The DfT’s Senior Responsible Owner for the ECML Enhancements Programme is the Director of Network Services. He is the individual responsible for ensuring that the Programme meets its objectives and delivers the projected benefits.

The objectives of the ECML Enhancements Programme have been developed to enable the Intercity Express Programme to meet, in turn, its objectives and to deliver its projected benefits. The Senior Responsible Owner for IEP is the Director of Rail Major Projects.

The projected benefits of the ECML Enhancements Programme and IEP will be realised, in large part, through the introduction of new franchised passenger services. The Director of Passenger Services is responsible for the introduction of these new services.

The NR Managing Director for the London North East and East Midlands Route is responsible for the development, design and delivery of the upgrades within the ECML Enhancements Programme.

1.6 Joint Governance and Meetings

The ECML Enhancements Programme is subject to joint governance between DfT’s Rail Group and NR in accordance with the Memorandum of Understanding that was executed between the parties in 2016. The existing governance of both organisations prevails and takes precedence. The joint governance arrangements are illustrated in the figure below:

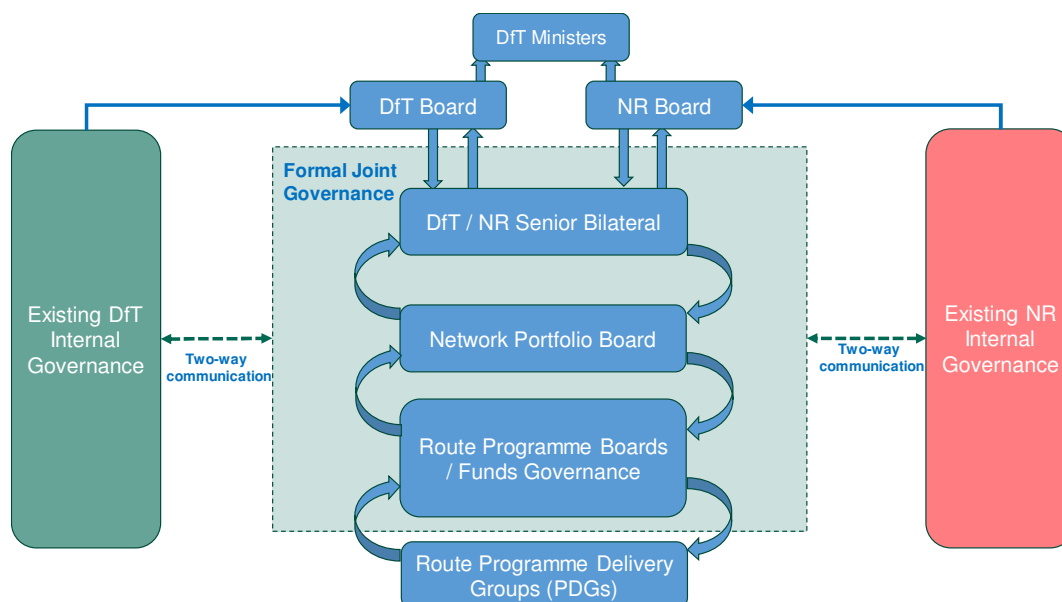


Figure 2 NR and DfT Joint Governance Arrangements

The Network Portfolio Board provides joint governance and strategic oversight of the Enhancements Portfolio, ensuring alignment with the Government’s strategy and optimising benefits within affordability and deliverability constraints.

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Three programme boards have an interest in the ECML Enhancements Programme:

1. The ECML Programme Board provides governance and manages the delivery of the Programme's benefits and its business case. The Board meets six weekly and is attended by senior stakeholders from the DfT, Transport Scotland, the ORR, NR and train and freight operating companies. An update on progress with the infrastructure projects is provided at the Board and papers are presented seeking commit to develop, commit to design and commit to deliver decisions. Change controls are endorsed by the Board for approval by the Network Portfolio Board.
2. The IEP Delivery Board is normally scheduled to follow immediately after the ECML Programme Board. The IEP Delivery Board is attended by senior stakeholders from the DfT, the ORR, NR, the Intercity East Coast franchise, Agility Trains and Hitachi Rail Europe. It provides governance and management of the interface between the Intercity Express Programme, the ECML Enhancements Programme and train operator activities focussed on ensuring that the first IEP services are implemented. The Board's standing agenda includes updates from each of the key stakeholder groups.
3. The One Rail Programme Board (ORPB) was established to agree the scope of, and give oversight to, the One Railway Programme ensuring that the UK has an integrated railway with alignment between the existing rail network and future High Speed 2 services. Meetings are held monthly and are attended by representatives from DfT's Rail Group and High Speed Rail Group. Representatives from NR and HS2 Ltd may attend for specific agenda items.

Each of these boards is supported at the working level by a delivery group or equivalent:

1. The ECML Programme Delivery Group (PDG) provides working level oversight and management of the delivery of the infrastructure enhancements to time, cost and quality. The PDG meets six weekly and is attended by the DfT, ORR, NR and the train and freight operating companies. The PDG endorses papers for the Programme Board's approval and makes recommendations for the endorsement of change control submissions.
2. The IEP East Coast Task Force convenes weekly to bring together representatives from the DfT, VTEC, Agility Trains and Hitachi Rail Europe. The Task Force manages the critical path and key actions to achieve delivery of the first IEP train into service on the East Coast in December 2018.
3. The Train Service Specification Focus Group (TSSFG) meets every three weeks to co-ordinate analysis to assess the deliverability of the train service assumed in the business case of HS2, particularly where HS2 trains travel on the existing conventional network. The meeting is attended by representatives from DfT, HS2 Ltd and Network Rail. Participation in this Focus Group is the principal way by which the Intercity East Coast team ensures the ECML Enhancements Programme remains aligned with the development of HS2 Phase 2. The TSSFG endorses papers for approval by the ORPB.

In addition to the programme boards and delivery groups outlined above, a series of working groups have been convened:

1. The DfT's ECML Integration Group meets every six weeks to provide a forum for information to be shared across DfT's Rail Group and for interdependencies to

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be identified and managed. The aim of the Integration Group is to ensure that plans relating to the ECML are compatible and deliverable and will meet the Government's objectives. This provides integration across the in-life and future franchises, open access operators, IEP and Digital Railway.

2. An Industry Planning Group (IPG) for the ECML was convened in 2017, with representation from the DfT, Network Rail and the train and freight operating companies. The IPG meets monthly and has adopted a methodical approach to the development of the May 2021 timetable - the ECML Enhancements Programme end state - to identify the required choices and trade-offs between journey times, capacity and performance. Identified choices and trade-offs will be presented to the ECML PDG and Programme Board for consideration. The decisions of those meetings will set the direction for a future Event Steering Group to implement the new timetable. IPG members are consulted on proposed amendments to the Timetable Planning Rules applicable to the ECML.
3. A working group has been formed to integrate activities across DfT, NR, VTEC, Agility Trains and Hitachi Rail Europe relating to the installation of Eurobalises on the ECML. These devices are required to enable the Automatic Selective Door Opening and Automatic Power Changeover Operation functions to operate correctly and accurately on the IEP trains.

Further detail on the governance arrangements are given in section 1.8.

Table 1 below shows the working level accountabilities (NS is Network Services, and PS is Passenger Services).

Table 1 – DfT Working Level Accountabilities

Task/workstream	Accountable directorate (Deputy Director lead)
Client and fund NR Enhancements – Lead	Network Services Intercity Deputy Director
Commercial relationships with Train Operating Companies – Lead	Passenger Services Market Leads and Rail Strategy for Open Access
Integrated business case for ECML Enhancements Programme – proving that at least one viable service pattern and business case exists to justify the investment in enhancements	Network Services Intercity Deputy Director
Realising benefits through franchises	Passenger Services Market Leads

A systems integration function has recently been procured by NR which will provide a more consistent mechanism for identifying and managing interfaces between infrastructure, rolling stock and train services and ensure benefits are maximised across DfT's ECML Enhancements Programme and IEP.

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1.7 Programme/Project Dependencies

The key Programme inter-dependencies are provided in the tables below. Accountable individuals for each of these dependencies are shown.

Table 2 – ECML Programme Dependencies

No	Dependency	Description	Source / Destination	Date Required	Accountable DfT Person (team)
1	Delivery of IEP rolling stock	This will be a phased introduction - IEP Delivery meets timeframes assumed to enable new timetable / journey times.	DfT/Hitachi ICEC franchise	Dec 2018 (first train into passenger service) to May 2020 (last train into passenger service)	Project Director Crossrail and IEP
2	Delivery of new rolling stock	Class 802 delivery meets timeframes assumed to enable new timetable / journey times.	TPE franchise	2019	Commercial Manager Rail North
3	Power Supply Funding	■■■■ funding of Hambleton Junction power upgrade to be provided from TransPennine Route Upgrade. This is assumed in the CP6 budget assumptions for ECML Enhancements Programme.	TRU Upgrade / ECML Programme	2019	Network Services North Deputy Director
4	Delivery of IEP depots inc. Network Connections	Delivery of IEP depots and their connection to the network to enable the introduction of IEP rolling stock.	Hitachi ICEC franchise	Dec 2018	Project Director Crossrail and IEP
5	Delivery of planned renewals	Delivery of planned renewals which East Coast enhancements are dependent on as set out in the NR Enhancement Delivery Plan.	Network Rail	Dec 2018	No DfT accountable person
6	Changes to franchises	Delivery of franchise changes to align with planned infrastructure and configuration states.	DfT EC Operators	From mid 2017	Passenger Services Market Leads
7	Trained drivers for new services	Trained drivers available for electric rolling stock operation for December 2019 timetable change.	ICEC and TPE franchises	From summer 2018 onwards	Passenger Services Market Leads
8	Trained drivers available for rolling stock test and acceptance	Sufficient trained drivers available to enable on track test and acceptance of new electric rolling stock to be performed.	ICEC and TPE franchises	April 2018	Passenger Services Market Leads

Table 3 – Other Programmes’ Dependencies on the ECML Enhancements Programme

No	Dependency	Description	Source / Destination	Date Required	Accountable DfT Person (team)
1	Power Delivery - South (PSU1)	Delivery of additional power between London and Bawtry.	Network Rail GTR Franchise	May 2018	Network Services Intercity Deputy Director
2	Power Delivery - North (PSU2)	Delivery of additional power between Bawtry and Edinburgh.	Network Rail ICEC and TPE franchises	From Sept 2019	Network Services Intercity Deputy Director
3	Delivery of track and turnback at Stevenage	Delivery of infrastructure to allow a train service between Stevenage and the Hertford Loop.	Network Rail GTR Franchise	Dec 2018 Likely delivery - late 2021	Network Services Intercity Deputy Director
4	Capacity Scheme Delivery - South	Delivery of infrastructure schemes south of York to deliver sufficient capacity for 8 LDHS per hour to and from KGX.	Network Rail	May 2021	Network Services Intercity Deputy Director
5	Delivery of IEP Enabling Works	Delivery of IEP infrastructure enabling works (on network works) as set out in the Infrastructure Output Specification (IOS).	Network Rail ICEC franchise	Dec 2018	Network Services Intercity Deputy Director

1.8 DfT Governance, Structure and Roles

1.8.1 DfT Governance

In addition to the governance that is operated jointly with Network Rail identified above, the published DfT governance prevails for all DfT funded and sponsored programmes. The ECML Enhancements Programme is a Tier 1 programme requiring approval from the Board Investment and Commercial Committee (BICC) in order to proceed. Once approved, changes to the Programme baseline (scope, cost, time) may be approved by Boards with a lower authority, such as the Rail Investment Board (Tier 2) and Network Services Board (Tier 3). Changes to the scope, cost or timescales of the Programme will also be considered by the Network Portfolio Board as stated above.

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<p>BICC Tier 1</p>	<ul style="list-style-type: none"> •Thresholds: <ul style="list-style-type: none"> •Financial: Highways England and Network Rail major projects and maintenance spend (Resource and Capital) over £500m. All other projects and programmes with a whole life cost of over £100m. All contracts which provide third party gross revenue or gross subsidy of over £200m over the life of the contract •Other: High risk, novel or contentious; GMPP Programme •Approval: Board Investment and Commercial Committee (BICC) •Review: Centres of Excellence Business Case Review and Procurement Assurance, including the Procurement Assurance Board (PAB)
<p>RIB Tier 2</p>	<ul style="list-style-type: none"> •Thresholds: <ul style="list-style-type: none"> •Financial: Roads and Network Rail £50m-£500m; Motoring Services £10m-£100m; High Speed Rail £30m-£100m; Contract with third party of over £100m-£200m; all other £50m-£100m •Other: Medium risk •Approval: Group Level Investment Boards •Review: Centres of Excellence Business Case Review and Procurement Assurance, including the Procurement Assurance Board (PAB)
<p>NSB Tier 3</p>	<ul style="list-style-type: none"> •Thresholds: All other •Approval: Individual Project Boards and Managers •Review: To be determined by Project Boards and Managers

Figure 3 Key decision making bodies within DfT

1.8.2 Board Investment and Commercial Committee (BICC)

BICC is a sub-committee of the DfT Board. It has delegated authority to exercise functions of oversight, challenge and scrutiny in respect of the Department's 'Tier 1' programmes and projects and to approve recommendations to Ministers at key approval stages in the life-cycles of these projects.

In addition to its core function role in scrutinising the assurance provided for Tier 1 projects before recommending that they be approved to proceed at certain stages (or not), BICC is also developing a wider portfolio management role providing oversight over the Tier 1 portfolio. This portfolio management role will include a view of the future pipeline of investments and evaluation of implemented projects, as well as monitoring the progress and performance of the projects during implementation, and ongoing evaluation of their impact.

1.8.3 Rail Investment Board (RIB)

RIB has delegated authority for Tier 2 programmes and projects. It has authority to approve recommendations to Ministers at key approval stages in the life-cycle of the programme or project. It has endorsed the ECML Enhancements Programme before it is considered by BICC.

Changes to the ECML Programme which do not affect the broad benefits and costs agreed by BICC may be considered by RIB. It will also be used to ensure alignment between the ECML Enhancements Programme, Intercity Express Programme, Franchises and HS2 Programme.

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1.8.4 Network Services Board (NSB)

NSB has delegated authority for Tier 3 programmes and projects. It has authority to approve changes to the ECML Enhancements Programme baseline, subject to the governance of NR and DfT.

Individual schemes within the ECML Enhancements Programme, such as Stevenage, will be considered by the NSB when they fall below the threshold for RIB (£50m).

The NSB will also be used to provide a forum for sharing lessons learnt and best practice between projects and project leaders across the Enhancement Portfolio.

Where issues and decisions need to be referred to a higher tier of governance such as RIB or BICC, the NSB will provide recommendations.

1.8.5 DfT Structure and Roles

1.8.5.1 Network Services

Network Services comprises five divisions as listed below:

- North
- West
- London and South East
- InterCity
- Rail Digital Services

England and Wales has been divided into four geographical regions for the purposes of enhancements to the rail system. Rail infrastructure enhancements to the East Coast region is the responsibility of the InterCity team. The ECML Enhancements Programme has direct interfaces with the infrastructure enhancement schemes of both the North region and London and South East region.

Network Services is also supported by a Programme Management Office (PMO) which is responsible for the coordination of management information and for overseeing the assurance of the Network Services portfolio of projects and programmes.

The Director of Network Services has delegated authority from the Permanent Secretary to assume the role of SRO for the ECML Enhancements Programme.

Responsibility for the delivery of the Programme's outcomes has been delegated to the Deputy Director of the InterCity team who acts as the Programme Director.

1.8.5.2 InterCity

The ECML Enhancements Programme client team sits within the InterCity team and is responsible for the delivery of the outcomes of the Programme.

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The Programme's client team develops the business case for the ECML enhancements, establishes the Programme's baseline and manages changes to the business case and the Programme via the governance boards described above.

The roles and responsibilities of the InterCity ECML team are outlined below. With the exception of the participation in the Programme from the Rail Group support functions (e.g. PMO, CoE, Rail Analysis and special advisors), no additional full time resource is anticipated.

- **Programme Director**

The Programme Director is responsible for delivery of the Programme's business case on behalf of the SRO.

The responsibilities of the Programme Director include:

- Deputising for the SRO;
- Chairing Programme Delivery Group;
- Approving the business case;
- Delivery of outcomes;
- Realisation of benefits via Passenger Services;
- Providing oversight of long term planning for the route;
- Leading effective programme governance in accordance with the MoU between Network Rail and the Department;
- Ensuring that the Programme is effectively resourced and securing the correct skills to deliver the outcomes;
- Ensuring the effective management of risks and issues and escalation to the SRO as necessary and ensuring that effective mitigation measures are developed and put into place;
- Leading the interaction with other departments and programmes that have a relationship to the ECML Enhancements Programme;
- Ensuring effective communication to the Programme's stakeholders; and
- Ensuring that effective assurance is in place and that there is an approved Integrated Assurance and Approval Plan (IAAP) and Risk Potential Assessment (RPA).

- **Principal Programme Client**

The Principal Programme Client is responsible for the day to day management of the Programme.

The responsibilities of the Principal Programme Client include:

- Representing the Department at key industry meetings including Programme Delivery Group and Programme Board;
- Chairing the East Coast Main Line Integration Group;
- Developing the business case for the Programme;
- Managing dependencies and interfaces with other enhancement programmes;
- Coordination with franchise competition programmes;
- Ensuring that the design of the Programme will deliver the business case and the passenger benefits;

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- Ensuring that changes are managed and approved in accordance with the approved governance;
- Ensuring effective assurance and overseeing the development of the IAAP and RPA.

• Programme Clients

The responsibilities of the Programme Clients include:

- Attending key industry meetings including Programme Delivery Group and Programme Board;
- Managing risks, issues and dependencies;
- Developing and maintaining the Programme's baseline definition;
- Developing the business case for the ECML Enhancements Programme;
- Monitoring Programme performance and taking remedial actions as necessary;
- Producing ministerial briefings, answering Parliamentary Questions (PQs) relevant to the ECML route and managing relevant Freedom of Information (FOI) requests;
- Management of Programme benefits and benefits realisation; and
- Development of the IAAP and RPA and ensuring that effective assurance is performed in accordance with the IAAP.

• Planning and Investment Manager

The responsibilities of the ECML Planning and Investment Manager include:

- Defining the long term strategy for the ECML, including leading on CP6 planning and providing an interface for NR's ECML Route Study;
- Working with stakeholders on development of SOBCs for schemes on the ECML;
- Developing an HS2 released capacity specification on ECML in conjunction with HSR Group;
- Leading on the development of Digital Railway interventions on the ECML;
- Leading on the development of the 2021 ECML timetable, via the Industry Planning Group and Event Steering Group; and
- Managing the interface with 3rd party schemes on the route.

• Briefing and Communications Manager

The responsibilities of the Briefing and Communications Manager include:

- Coordination of communications with franchise teams, HS2 and other ECML programmes;
- Coordination of ministerial briefings; and
- Coordination of responses to PQs relevant to the ECML route and relevant FOI requests.

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- **Assistant Programme Client**

The responsibilities of the Assistant Programme Client include:

- Managing and reporting on the delivery of particular schemes;
- Secretariat function for the ECML Programme Board;
- Programme management support including programme control, benefits, risks, stakeholder engagement; and
- ECML team support including team milestones and actions.

1.8.5.3 Rail Digital Services

Rail Digital Services oversee the national programme for the implementation of digital services within the rail sector. Digital services include European Rail Traffic Management System (ERTMS), on-train Wi-Fi and passenger information systems.

1.8.5.4 Rail Analysis

Rail Analysis are responsible for the Value for Money (VfM) assessment of the economic case developed for the works proposed to deliver the Programme outcomes. Rail Analysis also provide advice during the development of the business cases.

Additionally, the Rail Statistics department produce industry performance reports that are used to contribute to the demonstration of benefits realisation.

1.8.5.5 Passenger Services

Passenger Services are responsible for franchise competitions and the management of franchises that have been awarded.

Passenger Services are also responsible for implementing the suite of strategic policies that originate both from Rail Strategy and Security and from Passenger Services within each of the franchise agreements.

The Train Operating Companies will implement the necessary changes to business operations. For further details of benefits realisation, please refer to section 1.19 below.

1.8.5.6 InterCity Express Programme

The Intercity Express Programme, as part of DfT Rail Group Major Projects, is a complex PFI style programme which will deliver the next generation of Intercity trains to replace the ageing Intercity 125 and 225 rolling stock.

Delivery of the Programme is enabled by a range of infrastructure upgrades being delivered by NR as part of the CP5 Enhancements Delivery Plan on both the Great Western and East Coast routes. This is governed by the Network Services ECML and Great Western Programme Boards on which the IEP team sit.

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The DfT has entered into contract (MARA - Master Availability and Reliability Agreement) with the Train Service Provider (Agility Trains) who are responsible for train availability to the operators (currently Great Western Railway and Virgin Trains East Coast). The new rolling stock is being designed, built and will be maintained by Hitachi Rail Europe.

The DfT IEP team is responsible for managing Agility Trains' delivery of the MARA requirements.

The responsibilities of the IEP team therefore includes:

- Contract management of Agility Trains;
- Co-ordination and liaison with stakeholders including Hitachi Rail Europe, Train Operators and Network Rail; and
- Management of the IEP risks, issues and interdependencies.

1.9 Key Programme Documents

A range of Programme documentation has been worked up including a benefits strategy and map, issues, risks and dependencies registers and an IAAP. Some of the documents, such as the IAAP, are living documents and will be revised through the life of the Programme.

A high level schedule is set out in at **Annex A** and after the FBC a Programme Delivery Statement will be agreed with NR to codify the ongoing relationship between NR and DfT and the outcomes required from the Programme. As programme maturity increases, this more contractual and formal approach will aim to aid delivery of the enhancements.

1.10 Schedule Management

The top level integrated programme schedule at **Annex A** shows the key interactions and approval points of each of the related programmes is produced and managed by the InterCity ECML Programme client team. The proposal is to transfer this to the NR-contracted Systems Integration function in due course.

The dates given for schemes are based on NR's P80 estimates for entry into service for the infrastructure elements. Benchmarking has been conducted to provide an external view on the likelihood of the infrastructure dates being met. In this case Oxford's Reference Class Forecast method has been used which suggests that similar rail projects slip on average 47% from estimated delivery date at FBC to outturn. Taking the period between FBC (May 2018) and the delivery of the last element of the Programme (PSU2 – Dec 2021) gives a programme duration of 42 months. A further 47% slip in the delivery date would result in a 20 month delay and delivery in August 2023 for the the latest elements of the power supply upgrade. The mitigations for this risk are captured below in section 1.17.

1.11 Cost Management

The ECML Enhancements Programme will be monitored and managed by the InterCity ECML team through periodic management information reports from NR. The Anticipated Final Cost (AFC) for each of the schemes in the Programme is provided to compare against the forecasts agreed for CP5 and the budget for CP6. The approach to managing costs against this budget is set out in the financial case.

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The Network Rail management information report is also used to complete the GMPP reports.

The funding and costs for advisors that are engaged for the ECML Enhancements Programme are managed using the normal Departmental procedures.

1.12 Tolerances

It should be noted that the ECML Enhancements Programme will be required to stay within the funding ranges set out in this FBC. Changes to that funding range will need to be agreed through Departmental governance. The range given includes an element of optimism bias which will be managed as risk by the Network Portfolio Board.

The ECML Enhancements Programme is part of the Rail Group portfolio that is managed by the Network Portfolio Board. In the first instance, any cost overruns must be funded through modification to the scope of the Programme or through other cost reduction measures such as value engineering. However, additional funding may be available as a result of changes to other programmes in the portfolio or, conversely, the ECML Enhancements Programme may be required to reduce its agreed funding in response to changes arising elsewhere in the portfolio.

1.13 Programme Baseline and Change Management

An ECML Enhancements Programme Baseline and Assumptions document was signed in March 2018 having been agreed across the range of stakeholders in DfT, NR and with train and freight operating companies. This sets out the drivers and assumptions for the Programme as well as the set of assumptions that underpin this FBC.

Should this FBC be approved, the scope of the Programme will be defined with NR through the Programme Delivery Statement. This will set out the expected timescales, costs and ways of working for the enhancements to be delivered.

Individual remits will be developed for the schemes in the Programme which set out in further detail the assumptions and exclusions of each scheme for the relevant stage i.e. develop, design or deliver.

The change control process will be managed in accordance with the DfT and NR MoU signed in March 2016. This will capture any material changes to the scope set out in the Programme Delivery Statement or scheme remits.

Individual schemes will be subject to gateways to move between development, design and delivery as set out by the DfT in the Rail Network Enhancements Pipeline guidance in March 2018².

1.14 Programme Plan

A programme plan has been developed to cover key activities for the life of the Programme. NR hold and manage more detailed plans for each of the schemes which are reported in the monthly management information pack.

² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/691719/rail-network-enhancements-pipeline.pdf

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Table 3 – Key Programme Milestones

Milestones/Deliverable	Dates
Revised ECML Enhancement Delivery Plans – ACHIEVED	Sept 2016
Outline Business Case for ECML Enhancements Programme - ACHIEVED	May 2017
Full Business Case for ECML Enhancement Programme	May 2018
Thameslink enabling works completed and enhanced Thameslink services introduced	May 2018
Introduction of IEP Electric Rolling Stock Starts	Dec 2018
Enhanced ICEC timetable introduced	May 2019
AT300 new rolling stock introduced on Trans Pennine route	Sept 2019
ECML Timetable Increment – 8 Long Distance High Speed Paths from King’s Cross	May 2021

1.15 Communication and Stakeholder Management

A stakeholder map and plan has been developed which describes the approach the Programme will be following to manage and communicate with all stakeholders.

The plan identifies the key stakeholders and describes the frequency and methods of communication and how relationships are managed in order to assist the Project Director deliver a successful Programme.

An assessment of stakeholders by influence and interest has been made to ensure suitable targeting and prioritisation of communications. This has been used to identify and target audiences and inform the communication strategy.

An ECML communications strategy is also held by NR which is reported through the joint management boards. The detail of these activities is managed through a communications working group between DfT and NR.

1.16 Programme Reporting

The table below summarises key programme reporting arrangements. Individual workstream and functions may have additional reporting requirements.

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1.16.1 Programme Reporting schedule

Table 4 – Programme Reporting Schedule

Frequency	Report	For purpose
Rail Period	Risks and Issues Reports	Programme Director and SRO – Progress Updates and Risk Reviews
Rail Period	Management Information Reports from Network Rail including Projects on a Page	Programme Dashboard Programme Director and SRO Programme Delivery Group Programme Board meetings
Quarterly	Tier 1 Programme Reports (may move to GMPP Reports if accepted onto the portfolio)	BICC on behalf of SRO and Programme Director

1.17 Key Risks for Implementation

There are a number of key risks that affect the ECML Enhancements Programme that are outlined below:

Funding Risk

There is a risk that the agreed infrastructure projects cannot be delivered within the funding available. **Mitigation:** Proposed infrastructure scope is affordable within CP6 SoFA assumptions including an allowance for optimism bias. Value engineering opportunities are being developed with NR. The implications of further scope removal for passenger services are understood.

Timescale Risk

There is a risk that the ECML infrastructure schemes and operational readiness will not be delivered in the timescales required to introduce new services. Reference Class Forecasting has been completed which shows that similar programmes have seen an average slip of timescales up to 47% which equates to 20 months for this Programme. **Mitigation:** Systems integration function has now been procured. Programme Delivery Group reviews operational readiness as a standing item. Technical assurance work has been undertaken and actions implemented. Fallback position with franchises is understood.

Power Risk

There may not be enough power to allow for the introduction of the full IEP fleet onto the East Coast, in late 2019 and early 2020, or allow for the uplift of services planned for May

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2021. **Mitigation:** NR is planning to deliver a new connection to the ECML at Potteric Carr (near Doncaster) in June 2019. Should this be delayed, mitigations have been explored with VTEC such as running bi-mode trains in diesel mode. The full scope of power upgrades is due to be delivered by late 2021 with NR working to bring that timeframe forward. Should that not be possible, then planned timetable enhancements in May 2021 may need to be delayed till December 2021 or mitigations such as diesel running employed.

NR maintains a related programme risk register as well as scheme specific risk registers. The programme level risks are considered at the ECML Programme Board as well as through normal Departmental processes.

1.18 Risk Management Strategy

Risks are managed in accordance with the Department's risk management policy. A process is in place to ensure that all risks are understood in terms of probability and impact, and that suitable mitigating actions are established and implemented to manage risks. Each risk is assigned an identified manager within the InterCity ECML Programme team.

All programme risks are owned by the Programme Director, who assigns risk managers within the team to manage mitigation actions for individual risks. The risk register is reviewed regularly by the DfT client team and updated with any progress.

The risk management procedures for Rail Group are maintained by the Portfolio Office which provide standard tools and templates to ensure risks are managed consistently across Rail Group.

Programme risks are captured and reported via the central risk register for Rail Group that is maintained on the Management Information System (MIS). Risks that have a deemed exposure (exposure = likelihood x impact) of 16 or higher are escalated to the Programme Office and Board, to Director General Rail and Exco where appropriate.

The risks identified by each directorate are coordinated and reported by their respective PMO functions.

Network Rail maintains a register of industry level risks that are coordinated with the Rail Group risks via the Programme Board. Industry risks that are outside of the control of Network Rail are escalated to Rail Group for management and mitigation.

1.19 Benefits Management Strategy

The Programme benefits will be enabled by infrastructure improvements, rolling stock changes and changes to the existing franchises that use the ECML. The realisation of benefits is managed in accordance with the benefits management framework that is produced and maintained by the Corporate Rail Group.

Benefits will be delivered through the franchises and by freight operators on the East Coast. The full list of benefits for the ECML Enhancements Programme can be found in the ECML Benefits Management Strategy and Benefits Register. The inter-dependencies between the benefits and benefit enablers have been captured in the ECML Benefits Map.

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The ECML Enhancements Programme team have liaised with franchise commercial management and InterCity Express Programme colleagues to prepare for tracking the realisation of the benefits over the life of the franchise. The intent is to manage a common list of benefits and measurement methodologies.

1.19.1 Benefits planning

The Programme benefits will be realised when the new capabilities that are delivered by the Programme are brought into use. The new capabilities are typically brought into use through a business change programme that is enacted through the franchise and that will allow the new capabilities to be used to deliver improved services to passengers and improved efficiencies within the franchise.

Based on the delivery programme for the new capabilities, realisation of the benefits will be planned in terms of the activities required to bring the capabilities into service, the forecast in-service date (which will usually coincide with a timetable change) and the measurements required to demonstrate realisation of the benefit.

The contribution of the operational changes and enhancements to infrastructure and rolling stock to the benefits is captured in the Benefits Map for the ECML Enhancements Programme.

The measures and timescales required to demonstrate benefits realisation will be included in the Benefits Register.

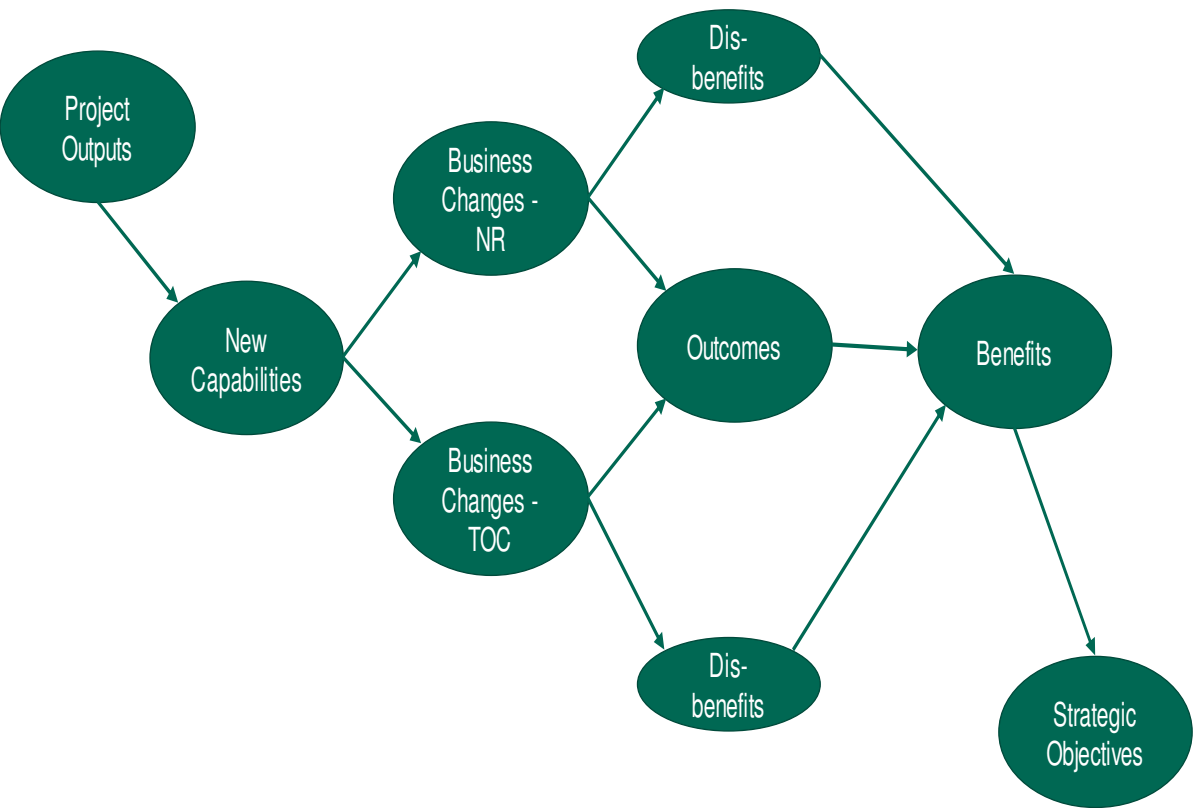


Figure 4 Relationship of project outputs and new capabilities to benefits

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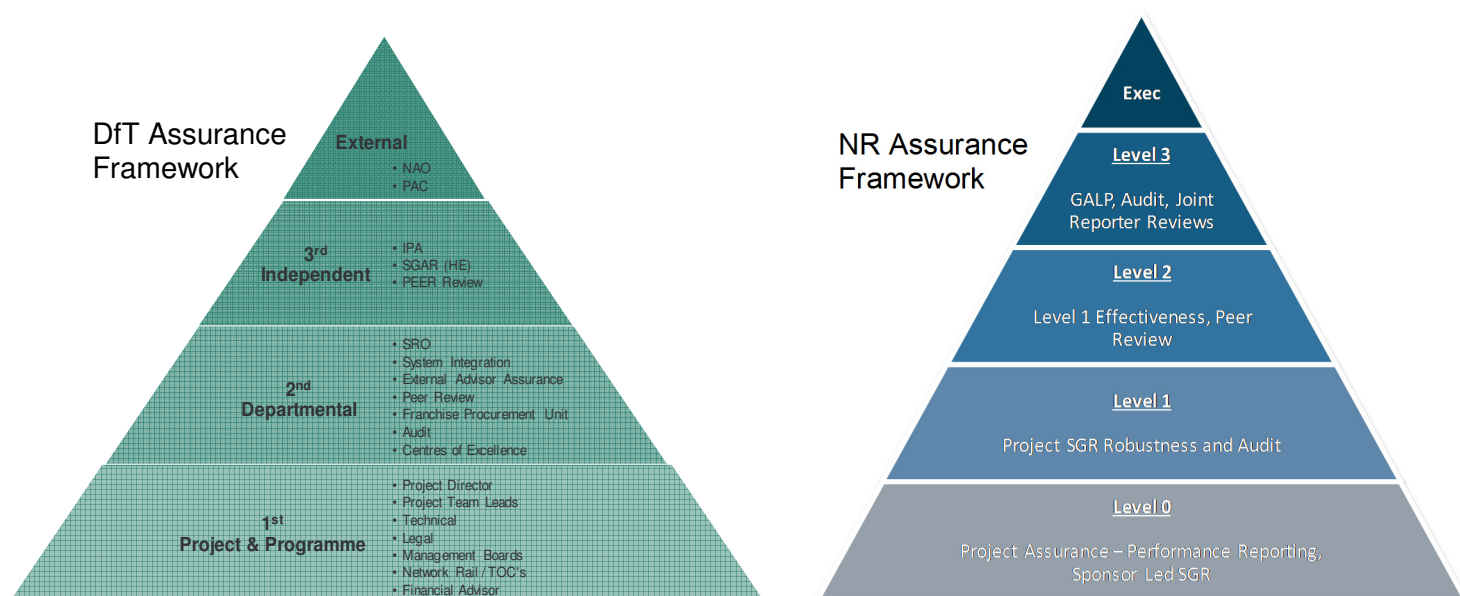
1.19.2 Benefits Map

In consultation with key stakeholders, a Benefit Map of the ECML Enhancements Programme has been developed. The Benefits Map identifies the relationship between the infrastructure outputs, the benefits and the strategic objectives. A copy of the Benefits Map is at **Annex B**.

1.20 Programme Assurance, Review and Evaluation

1.20.1 Integrated Assurance and Approvals Plan (IAAP)

The IAAP for the ECML Enhancements Programme identifies the key assurance and approvals activities including recommendations made as part of those activities. Assurance is identified in terms of four levels of defence with level one being provided by the InterCity ECML Programme team and the associated governing bodies and level four being provided by external entities as set out below. This is done in conjunction with NR as part of an integrated assurance process.



The IAAP is a living document which will be revised after each major assurance or approval event. The recommendations from each major assurance event will be captured in the IAAP along with a list of the actions that are proposed by the InterCity ECML programme team in response to the review comments that have been captured.

The review comments and actions are captured against each of the reviews that are identified in the IAAP in a separate workbook of the overall IAAP spreadsheet. This workbook will also provide the content for the Integrated Assurance Statement (IAS) that is required to accompany each business case submitted to BICC for approval.

An IPA led Project Assessment Review (PAR) of the Programme was conducted in February 2018. The Review Team Delivery Confidence assessment for the ECML Programme was AMBER. The following actions were recommended:

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1. The FBC must clearly set out delivery options and plans, covering any risks arising from the integrated programme review, and confirm the impact of down-select decisions,
2. Identify, establish, communicate and maintain 'integration' of the ECML scheme at DfT Portfolio level,
3. Monitor and reconfirm the May 2021 end-date or, if this is to be slipped, consider the delivery options in the light of this new end-date.

This FBC has developed a proposed scope that meets the Programme outcomes with the CP6 budget assumptions. Ongoing risks to cost and timescales are being managed as described above.

The range of activities carried out to ensure strategic integration with other DfT programmes and across the industry is set out in section 1.4 above. In addition to this, NR has now procured a Systems Integration function for the Programme which will support the boards and teams in ensuring that interdependencies and critical work to deliver the benefits are managed effectively.

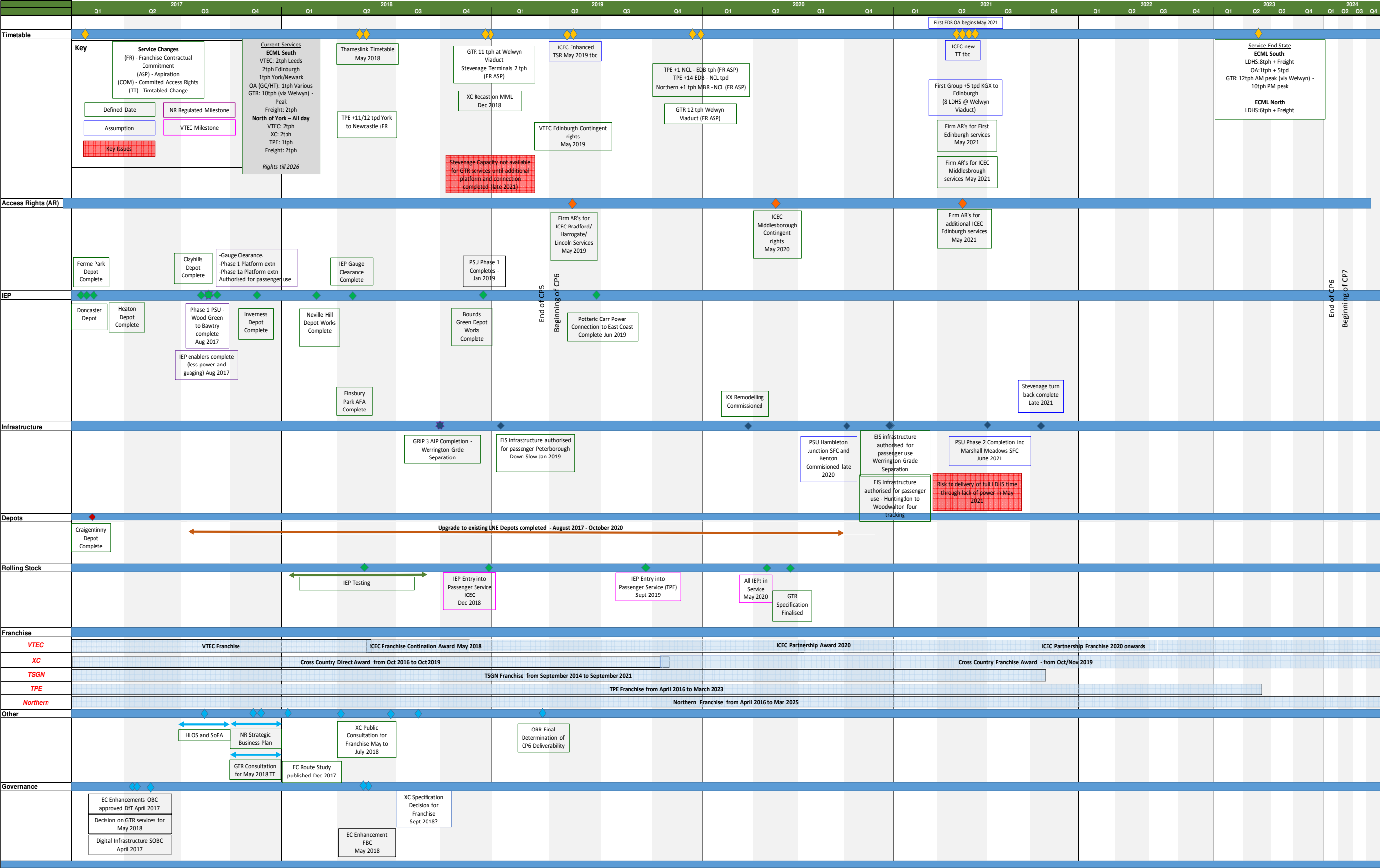
The Programme is still targeting a May 2021 timetable change to deliver passenger benefits. There are risks to this date, especially around the power supply, as noted above, and these are being managed with NR. Fallback plans have been identified should it become clear that May 2021 is not achievable.

1.21 Contingencies

Potential delay to infrastructure construction, train delivery and contract close are regularly monitored within the monthly risk management process, where, in addition to mitigating such risks, actions may include the development of appropriate contingency plans.

ANNEX A – ECML – INTEGRATED SCHEDULE

Indicative East Coast Main Line Integrated Top Level Programme



ANNEX B – ECML – BENEFITS MAP

