



Office of Rail & Road and Network Rail

Independent Review of Digital Signalling Portfolio
Deliverables and Financial Reporting, Year 2

21 July 2026



The Value of Certainty.

List of figures

Figure 1: DSP waterfall chart 7

Figure 2: DSP maturity assessment chart 8

Figure 3: Portfolio Capability and Enablers waterfall chart 9

Figure 4: Portfolio Capability and Enablers maturity assessment chart..... 10

Figure 5: ETCS signalling renewals waterfall chart 11

Figure 6: East Coast Digital Programme maturity assessment chart..... 12

Figure 7: Fleet Fitment waterfall chart 13

Figure 8: Fleet Fitment maturity assessment chart..... 14

Figure 9: Technical Authority waterfall chart 15

Figure 10: Target 190+ maturity assessment chart 16

List of tables

Table 1: The Independent Reporter’s Recommendations..... 21

Glossary

Abbreviation	Definition
AFC	Anticipated Final Cost
CP7	Financial Control Period (2024-29)
DSP	Digital Signalling Portfolio
ECDP	East Coast Digital Programme
ETCS	European Train Control System
FP1	Financial Period 1 (2029-34)
Funding Boundary	The allocation of costs, scope and accountability between different funding routes or programme budgets, including renewals, enhancements, IPDR, System Authority and other relevant funding sources. This may also include organisational boundaries where these affect which part of Network Rail funds or owns the activity.
MAR	Market Application Readiness
Reporting Boundary	The basis on which costs, scope, outputs, risks and forecasts are included in, or excluded from, a particular programme or portfolio report. This includes boundaries between Network Rail programmes and reporting systems.
TCSF	Train Control System Framework
QCRA	Qualitative Cost Risk Assessment
QSRA	Qualitative Schedule Risk Assessment
WCNM	West Coast North Modernisation (formerly Trilink)

1) Executive Summary

1.1. Introduction and headline judgement

- a) Network Rail's Digital Signalling Portfolio ("DSP" or "the Portfolio") seeks to improve the future affordability of signalling renewals by transitioning the Great British Rail network from conventional lineside signalling to digital, radio-based train control. The Portfolio supports deployment of the European Train Control System (ETCS), alongside the fitting of trains with onboard equipment, development of market and supplier capability, technical authority activity, portfolio-level enablers and business readiness across the rail industry.
- b) Digital signalling is intended to support safer and more reliable operation, improve network performance and capacity, reduce reliance on ageing conventional signalling assets and provide a more financially sustainable long-term approach to signalling renewals. The scale of the challenge is considerable. ETCS deployment is a whole-industry transformation involving infrastructure, onboard train systems, train operators, rolling stock owners, suppliers, approvals bodies, funders and Network Rail's internal delivery and portfolio functions.
- c) This Year 2 review builds on the Year 1 Independent Reporter review undertaken by Arup. It considers how the Portfolio has developed since the Year 1 position and assesses the current view of deliverables, financial reporting, delivery confidence and portfolio maturity in Control Period 7 ("CP7"), the five-year rail funding period running from 2024 to 2029. Where relevant, the review also considers the implications for Funding Period 1 ("FP1"), the next five-year funding period from 2029 to 2034.
- d) The Portfolio includes several major programme areas and initiatives. The East Coast Digital Programme ("ECDP") is the principal live ETCS deployment programme in CP7. Fleet Fitment covers the work needed to fit passenger, freight and specialist rolling stock with onboard equipment. Portfolio Capability and Enablers support central portfolio management, market readiness, supplier capability, technical systems and other cross-portfolio activities. Target 190+ is a technical and research-led initiative intended to support more repeatable and lower-cost ETCS delivery in future.
- e) The headline judgement is that the strategic logic of DSP remains sound, and the Portfolio has made genuine progress in Year 2. Programme structures are clearer, Fleet Fitment planning is becoming more mature, ECDP remains the principal live deployment proof point, and the Portfolio Capability and Enablers layer is more active and better defined. These are important developments for a portfolio that is still building the delivery model, industry capability and technical foundations needed for wider digital signalling rollout.
- f) However, the Portfolio remains operationally transitional rather than mature. The current CP7 proposition is significantly narrower than the original baseline. The digital signalling elements of the West Coast North Modernisation programme has largely moved into a future funding period as a substantive ETCS deployment scheme; Fleet Fitment has been reduced and reprofiled in several areas; and Portfolio Capability activity is now supporting a smaller, more deferred CP7 delivery programme than originally expected.
- g) Current deliverability is stronger for the narrowed CP7 scope, but confidence remains qualified. The review has not identified a single fundamental flaw that would prevent delivery of that scope; however, the issues identified are material to delivery confidence and require active management. The current forecast better reflects known constraints, but cost, schedule, risk, outputs, benefits and delivery assumptions are not yet consistently integrated across the Portfolio. Confidence is strongest where there is live delivery or maturing evidence, particularly in ECDP, parts of Passenger Fleet Fitment planning, supplier readiness activity and Target 190+ mobilisation. Confidence is lower where delivery has moved into future funding periods, where supplier and operator commitments are not yet fully tested, or where current forecasts remain subject to rebaselining and further assurance.
- h) The main implication is that CP7 is increasingly a proof-of-model period. It is being used to develop portfolio capability, mature Fleet Fitment and supply chain strategies, test the practical delivery model through ECDP, and prepare the ground for future funding periods. That may be a more realistic CP7 proposition than the original baseline, but it also means that a substantial part of the strategic delivery challenge has been deferred.

1.2. Context and Review Approach

- a) The Year 1 Independent Reporter review established an initial baseline for monitoring the Digital Signalling Portfolio during CP7. This Year 2 review has considered how the Portfolio has developed since that baseline, with particular focus on whether Network Rail's current forecasts provide a clear and credible view of what will now be delivered in CP7.
- b) The review has been undertaken at a point when the Portfolio is still evolving. Several material baselines and strategies were in development during the review period, including ECDP rebaselining, Fleet Fitment reforecasting, Freight commercial strategy, On Track Machine rebaseline activity, and the portfolio-level treatment of risk exposure, contingency and overlay. Where a forecast or strategy was not yet approved, the review has treated the available evidence as transitional and has commented on confidence accordingly.
- c) The review considered the Digital Signalling Portfolio as a whole and then assessed the principal programme areas and initiatives. These were: Portfolio Capability and Enablers, including the Market Application Readiness programme; ETCS Deployment Programmes; Fleet Fitment; Technical Authority activity, including Target 190+ and the Speed Management Programme; and relevant legacy activity where this affected the current financial or delivery position.
- d) The scope focused on deliverability, financial reporting, maturity and assurance implications. It did not seek to undertake a technical design review of ETCS, a detailed cost audit of every forecast line, or a full re-estimate of the Portfolio. It also did not independently verify all underlying schedule logic, supplier quotations, programme risk models or commercial assumptions. Instead, the review assessed the evidence made available by Network Rail and tested that evidence through documentation review, financial analysis, interviews and review team judgement.
- e) The review was structured around five core questions: what was expected to be delivered in CP7 at the DP24 baseline; what is now expected to be delivered in CP7 at the latest Year 2 forecast; why the position has changed; what confidence can be placed in the current forecast and delivery position; and what this means for affordability, risk, delivery confidence and future funding periods.
- f) Financial movement was considered alongside scope, schedule, risk, contingency, funding and reporting treatment. This is important because a reduction in forecast CP7 cost may improve near-term affordability, but it does not necessarily indicate improved delivery performance or reduced whole-life cost. Where cost movement was explained by deferral, reprofiling, narrowed scope, reclassification, funding-boundary treatment, reporting-source differences or overlay, the review has sought to distinguish those factors from any demonstrated improvement in cost performance.
- g) At portfolio and programme level, the report uses Anticipated Final Cost (AFC) waterfall charts to show how the forecast position has moved from the original funding/baseline position to the latest Year 2 view. These charts are intended to help the reader understand the scale and direction of financial movement, and to distinguish between movement driven by deferral, reprofiling, reclassification, scope change, reporting treatment or forecast adjustment. They are not included for every initiative and should be read alongside the accompanying narrative, particularly where reporting boundaries or data-source differences affect interpretation.
- h) The review also used a maturity assessment model to support a consistent assessment of selected portfolio, programme and initiative components. The model considered twelve areas, including governance, planning, resource management, risk management, requirements, technical maturity, estimating, financial management, supply chain, stakeholder management, operational readiness and benefits management.
- i) Maturity scores are professional judgements based on the evidence reviewed. They are not mathematical scores and should not be read as implying precision beyond the available evidence. They are intended to show where maturity is improving, where material gaps remain, and what evidence would be needed to support a higher maturity judgement in future reviews. Maturity scores are awarded according to the following five levels:

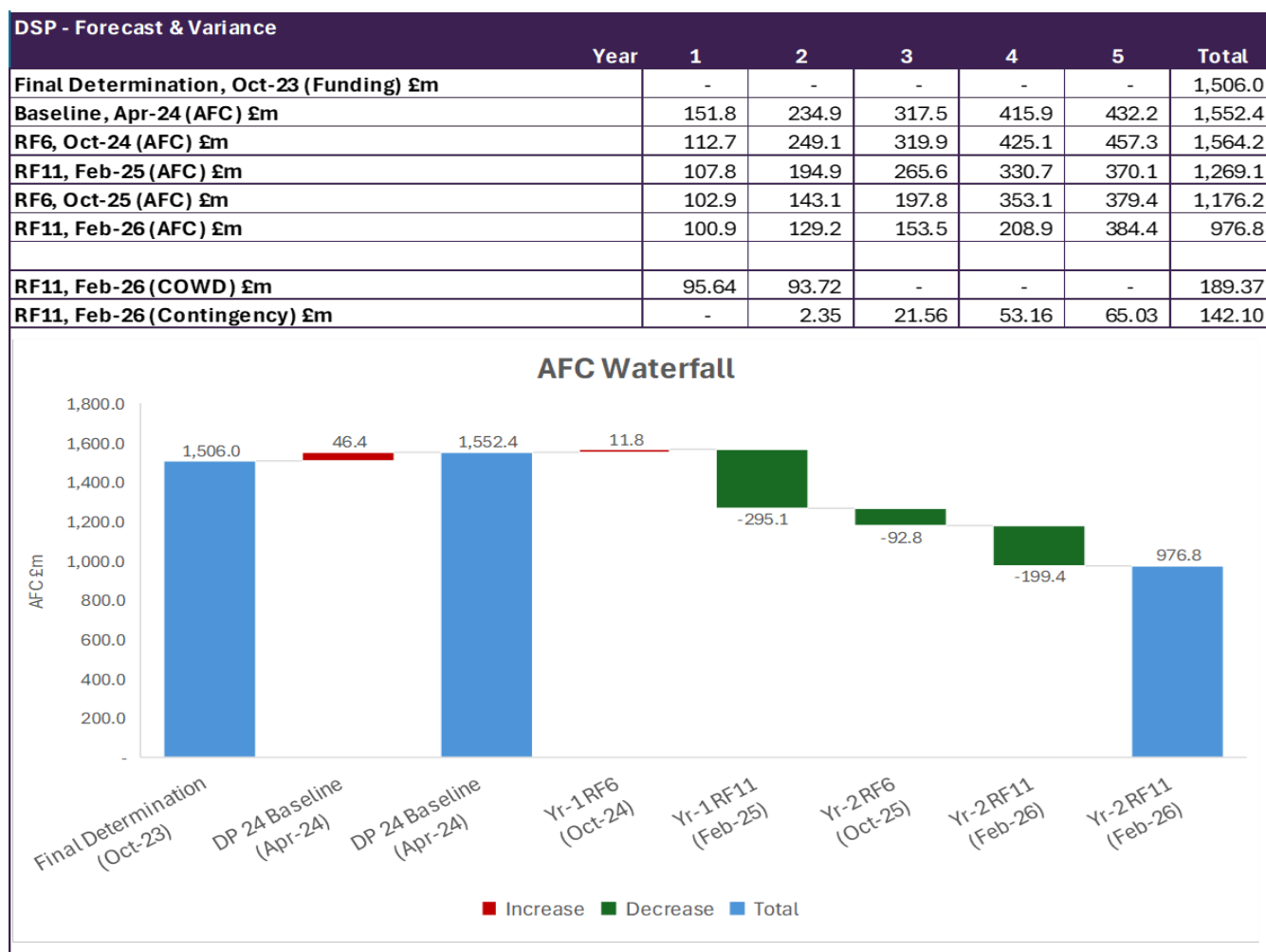
1. Not Established: Ad hoc and reactive; inconsistent execution with little or no documentation.

2. Initial: Basic practices are documented but remain incomplete and inconsistently applied.
 3. Developing: Processes are actively managed, with defined governance and regular review.
 4. Established: Practices are standardised and integrated across functions and organisational levels.
 5. Optimised: Performance is data-driven and predictive, supported by embedded continuous improvement cycles.
- j) The maturity assessment spider diagrams in this report show the expected maturity and assessed maturity for each area reviewed. They provide a visual summary of relative maturity but should be read alongside the accompanying narrative. A lower Year 2 maturity score than Year 1 does not necessarily mean that performance has deteriorated. In some cases, it reflects a more detailed evidence base, a refined assessment model, a different grouping of portfolio components, or clearer visibility of issues that were less developed at Year 1.

1.3. Overall Portfolio Assessment

- The overall assessment is of a strategically coherent but still transitional portfolio. The direction remains sound: digital signalling continues to address a long-term need to improve the affordability and deliverability of future signalling renewals. However, the current CP7 proposition is now materially narrower and more concentrated than the DP24 baseline intended.
- The Year 2 AFC waterfall shows a substantial reduction from the original CP7 baseline. This improves the apparent affordability of CP7, but the review does not interpret the reduction as demonstrated delivery efficiency. The evidence indicates that the movement is driven mainly by deferral into future funding periods, reprofiling within CP7, reduced near-term scope, reclassification of activity, revised procurement and commercial strategies, and the use of a financial overlay to improve the realism of aggregate forecasts. The exact portfolio-level movement should also be read alongside the reporting-source caveats noted in the full report.
- Current deliverability is therefore stronger for the narrowed CP7 scope than for the original baseline, because known constraints are now more clearly reflected. However, the position remains qualified. ECDP is the main live deployment proof point; Fleet Fitment remains a critical dependency; supplier and market-readiness benefits remain largely prospective; and several baselines, forecasts and delivery strategies remain in transition.

Figure 1: DSP waterfall chart



- The maturity assessment supports this picture. The Portfolio is generally at a Developing level in areas such as governance, planning, risk management, supply chain and stakeholder management. This reflects clearer structures, more active portfolio management and improved visibility of major delivery movements compared with Year 1.

- e) However, the spider diagram also shows important gaps. Resource management, business requirements, technical requirements, operational readiness and benefits management remain below the expected level. These weaker areas are important because they are the disciplines that turn strategic intent into deliverable plans, tested readiness and measurable outcomes. Estimate maturity and financial management are also assessed below the Year 2 expectation: both have improved visibility, but are not yet consistently integrated with scope, schedule, risk, outputs and delivery assumptions.

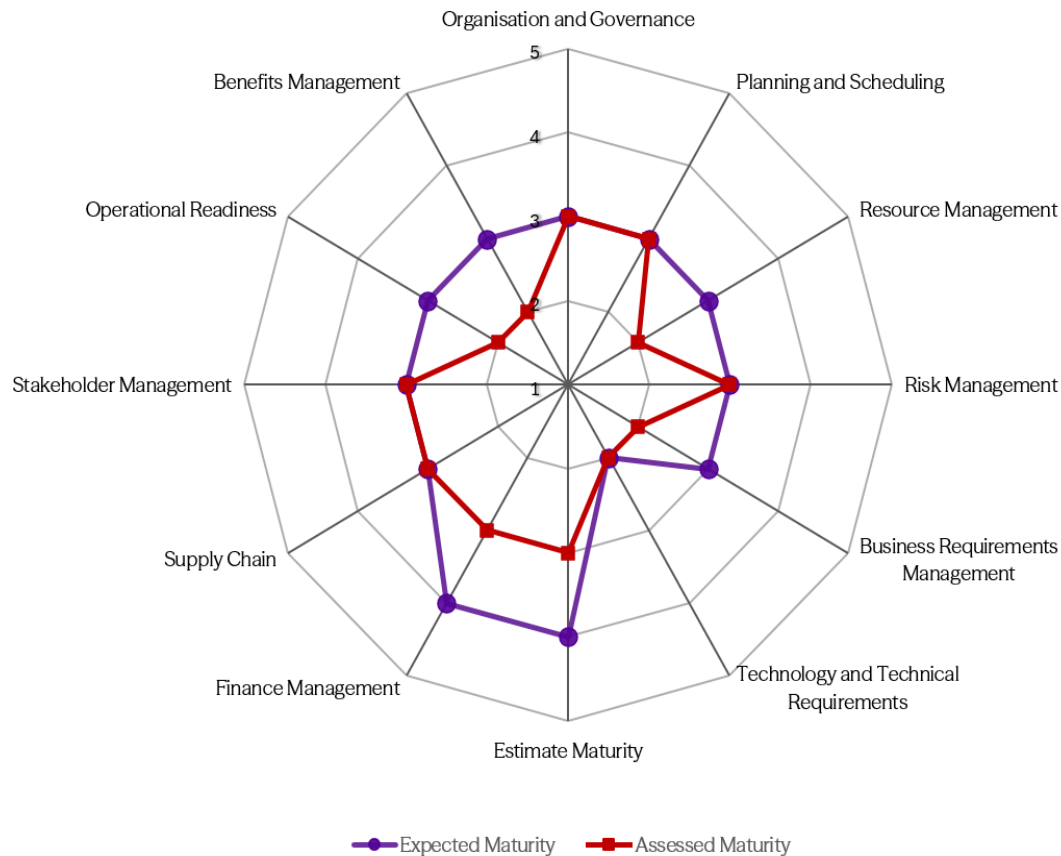


Figure 2: DSP maturity assessment chart

- f) Overall confidence is therefore moderate for delivery of the reduced CP7 proposition, but lower for the deferred future-period work bank, whole-life affordability and benefits realisation. Year 3 maturity depends on completing rebaselining, reconciling overlay and contingency, clarifying reporting boundaries, and embedding an integrated portfolio control baseline showing what CP7 will deliver and what has moved into future periods.

1.4. Portfolio Capability and Enablers

- a) Portfolio Capability provides the central enabling functions needed to stand up and operate the Digital Signalling Portfolio. This includes the core portfolio team, programme management and specialist support, selected legal and procurement support, System Authority (parallel proving) activity and “solve once” work intended to support repeatable delivery across the Portfolio.
- b) The headline financial position is relatively stable, but this should not be read as a static or settled position. The evidence indicates that the line has been actively rebalanced as the Portfolio has moved from initial mobilisation toward a more enduring central capability model. This includes movement between internal and external resource, with the aim of reducing reliance on external support as internal capability is built.

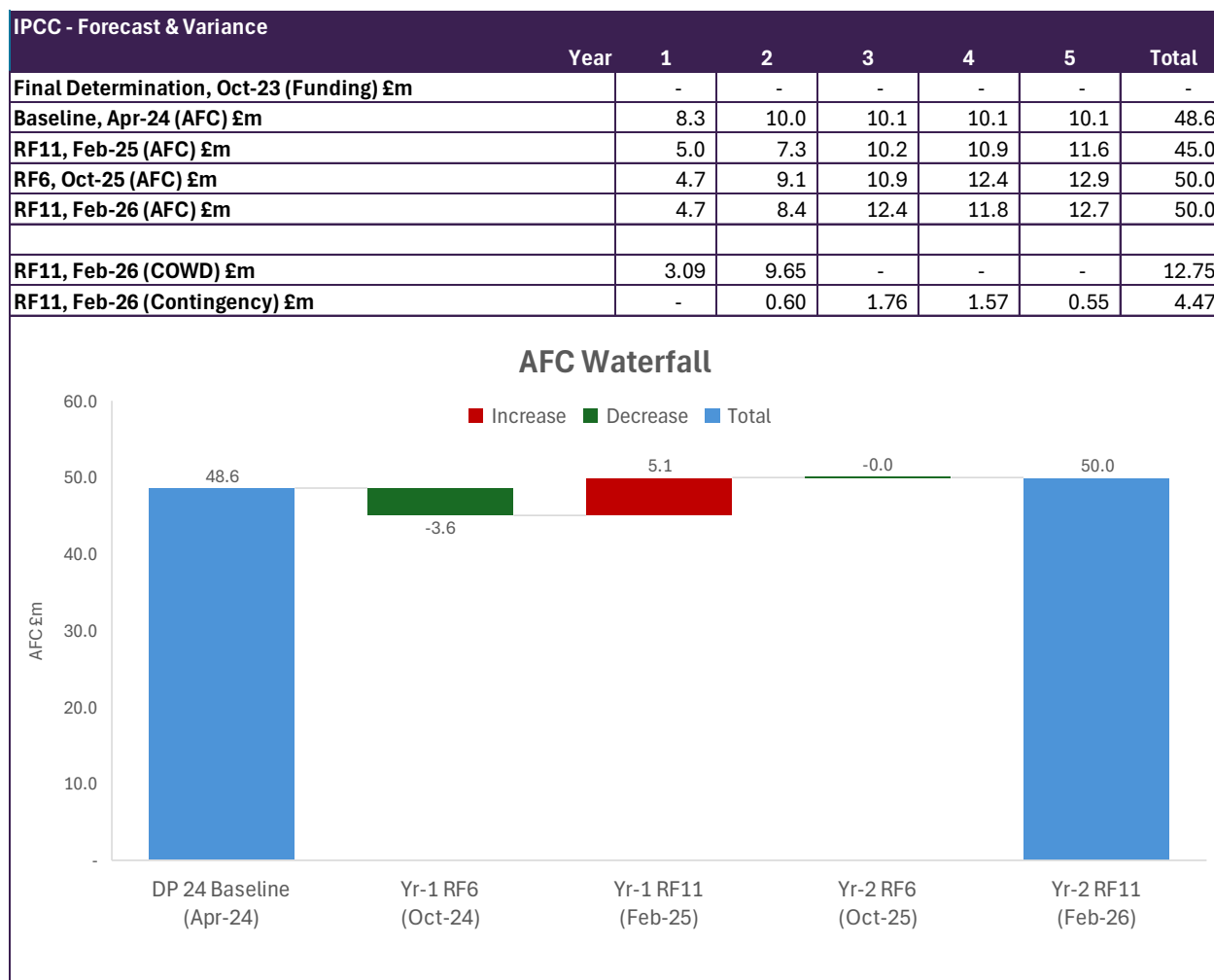


Figure 3: Portfolio Capability and Enablers waterfall chart

- c) The review finds that it is a necessary enabler of the wider DSP strategy, particularly given the scale of rebaselining, procurement, technical readiness, supplier development and preparation for future funding periods. However, the role of Portfolio Capability needs to be assessed against the Portfolio as it now stands. The Year 2 delivery programme at RF11 is smaller and more deferred than was planned at the outset of CP7, so the value-for-money question has changed. Capability spend may still be justified, but it needs to be linked clearly to revised CP7 outputs, delivery constraints, rebaselining activity, procurement development, technical readiness and preparation for future delivery.
- d) The maturity assessment shows a developing central capability function. Governance, planning, risk management, estimate maturity, financial management and operational readiness are assessed as Developing. This reflects stronger structures, more active control and clearer portfolio support than at Year 1.

- e) However, maturity remains uneven. Resource forecasting, business requirements, stakeholder evidence and benefits management remain less mature. The function is still building the operating model it needs while the Portfolio is already live. This creates pressure on prioritisation and makes it harder to demonstrate that the cost base is optimally sized against future delivery demand.
- f) The Year 3 focus should be on embedding the operating model, improving resource and skills planning, clarifying the value delivered by central capability, and linking capability spend to the revised portfolio baseline, delivery risks and future-period outcomes.

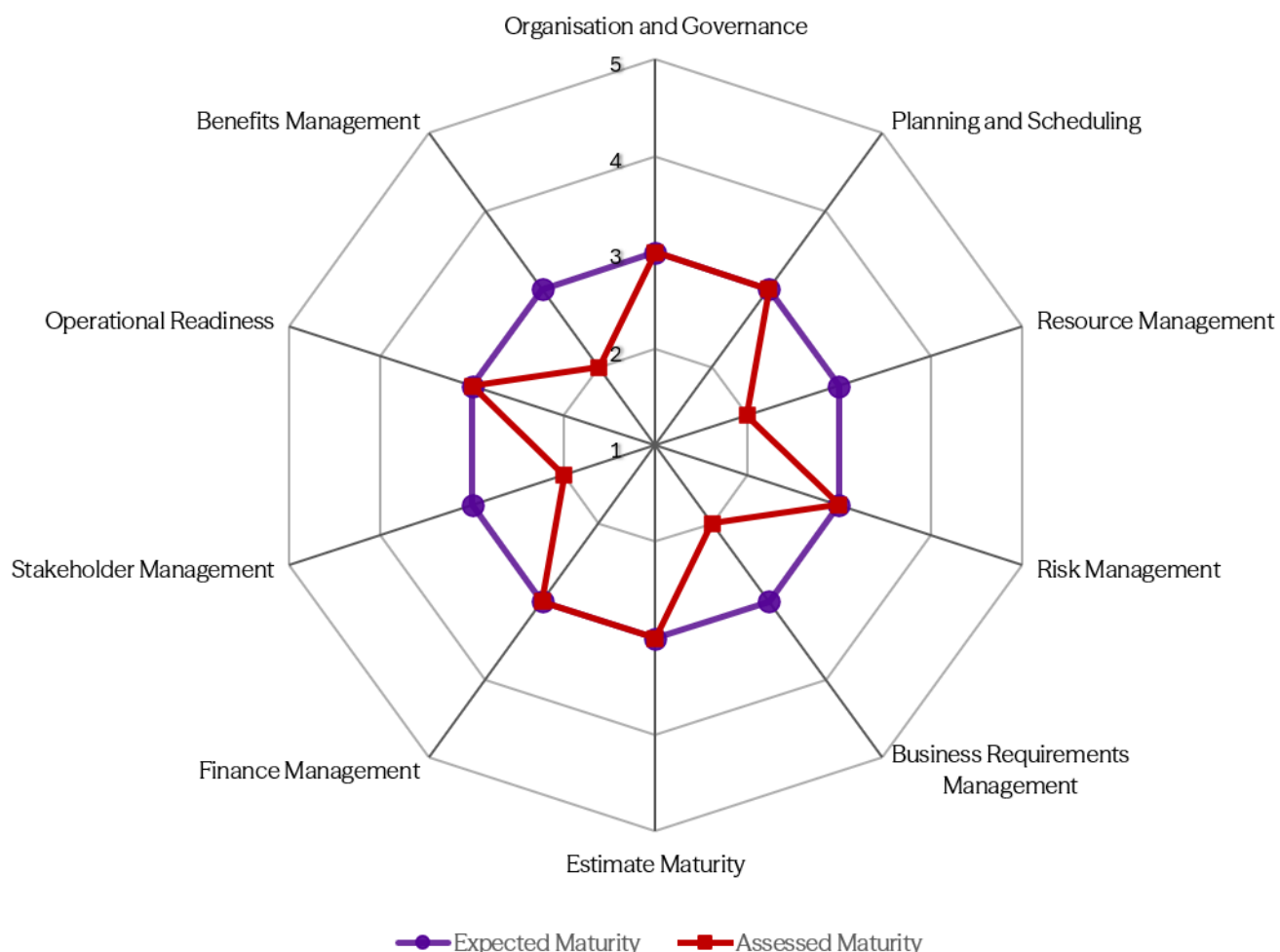


Figure 4: Portfolio Capability and Enablers maturity assessment chart

1.5. ETCS Signalling Renewals Programme

- a) The ETCS Signalling Renewals Programme is where the Portfolio's digital signalling strategy is expected to become operational railway deployment. It includes the East Coast Digital Programme (ECDP) as the principal deployment programme live in CP7, West Coast North Modernisation (WCNM) as the major digital signalling deployment now largely deferred into future funding periods, and smaller regional schemes including Brighton Main Line, Midland Main Line South and Great Western Main Line activity which are due to commence later in CP7.
- b) The programme is the point at which portfolio capability, fleet fitment, technical approval, supply chain readiness and business change need to come together to deliver operational ETCS outcomes. In CP7, however, the programme is now highly concentrated. ECDP is the only substantial live deployment programme, the digital signalling scope for WCNM has largely moved into a future funding period, and the smaller schemes are mainly preserving future options rather than delivering material parallel deployment.

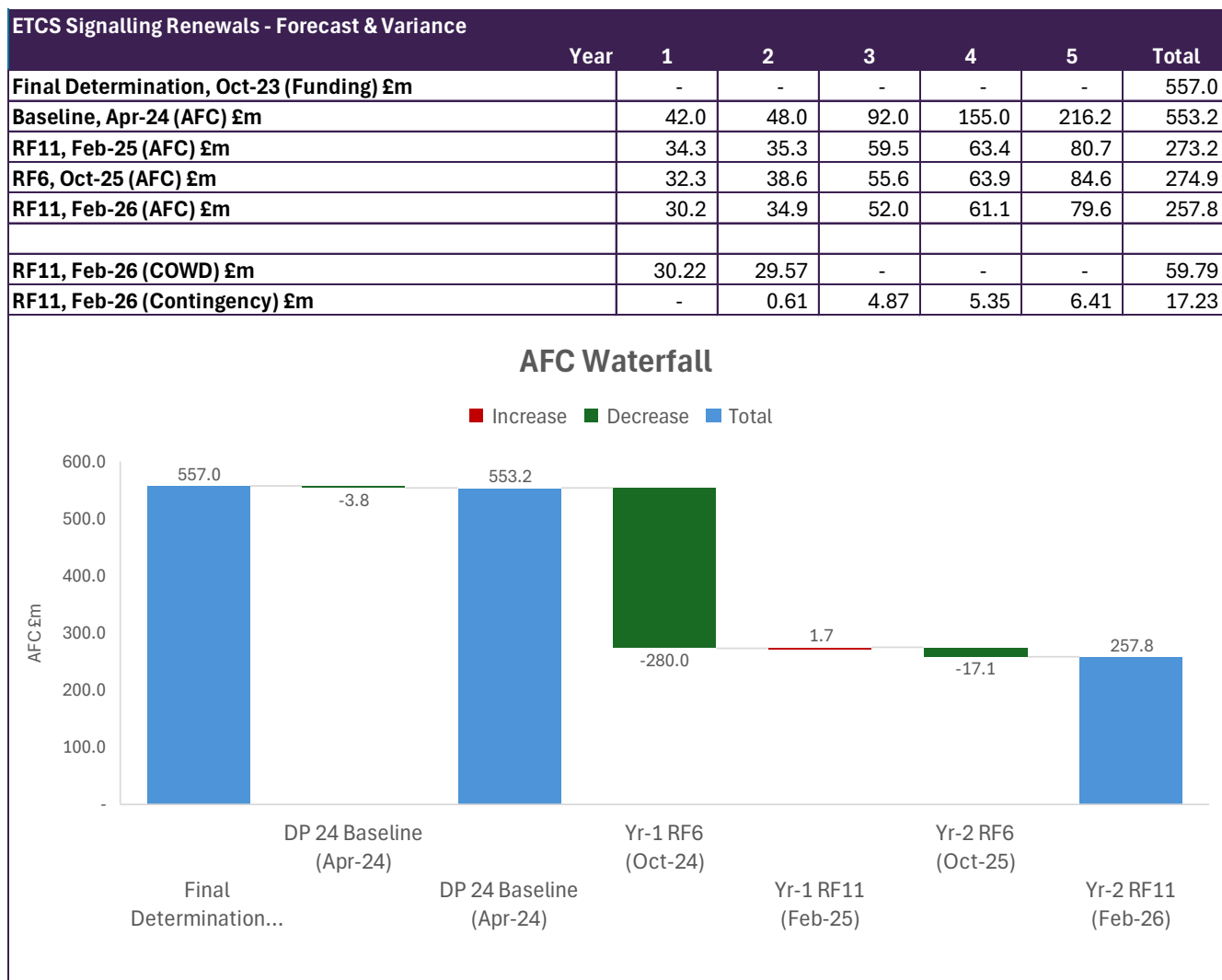


Figure 5: ETCS signalling renewals waterfall chart

- c) The programme AFC waterfall shows a material reduction from the original baseline to the latest Year 2 position. This reduction is driven principally by WCNM moving out of CP7 as a major ETCS deployment programme, with only limited residual enabling activity retained. The reduction, therefore, improves near-term affordability, but should not be interpreted as a broad efficiency or a reduction in the underlying deployment challenge.
- d) ECDP is delivering real operational and technical progress and provides the Portfolio's main live proof point. It is generating practical learning on digital deployment, including fleet interfaces, testing, system proving, approvals, business readiness and preparation for later no-signals operation. However, ECDP is not yet a stable repeatable

template. It remains subject to rebaselining, Full Business Case refresh, mixed reporting boundaries and evolving assumptions for fleet fitment, driver training and migration to later operational stages.

- e) The maturity assessment is therefore focused on ECDP, as the only live deployment programme in delivery at the time of review. ECDP provides the strongest evidence that digital signalling deployment can progress in practice, but it also exposes the conditions that must be in place for repeatable delivery: integrated readiness, fleet fitment, business change, approvals, technical integration, cost and risk control, and clear funding boundaries.
- f) Overall, the Signalling Renewals position is more realistic than the original CP7 baseline, but also more concentrated and more dependent on future-period delivery. Year 3 should focus on translating ECDP learning into a repeatable deployment model, clarifying WCNM's future transition route, and distinguishing clearly between current deployment, enabling activity, residual close-out and future-period preparation.

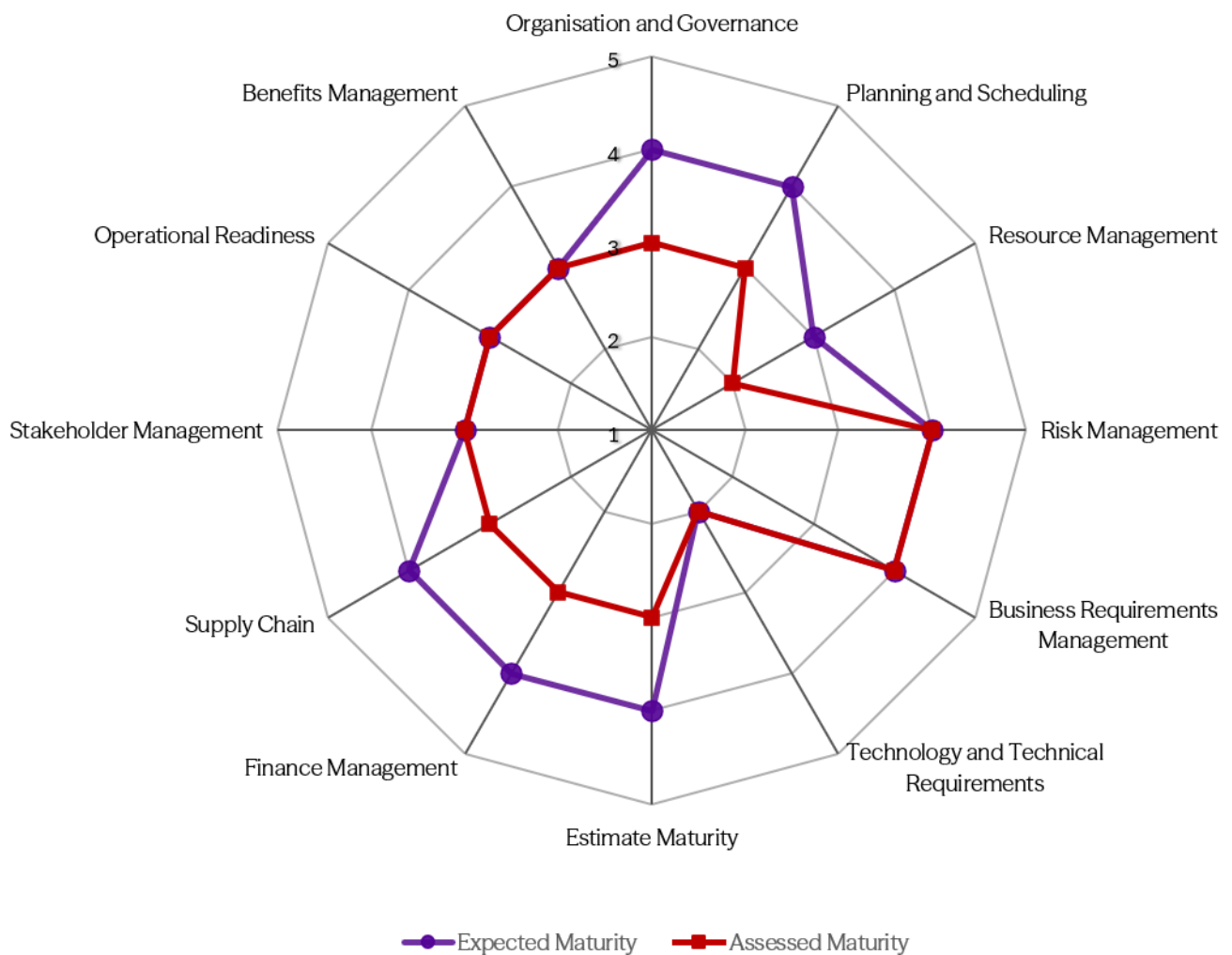


Figure 6: East Coast Digital Programme maturity assessment chart

1.6. Fleet Fitment

- a) Fleet Fitment is the Portfolio workstream responsible for ensuring that trains and specialist vehicles can operate over ETCS-enabled infrastructure. It covers passenger, freight, On Track Machines and Heritage & Charter vehicles, each with different ownership, operating and commercial arrangements. It is a critically important workstream: trackside deployment cannot realise benefits unless the relevant fleets are fitted, authorised and operationally ready.
- b) Fleet Fitment has progressed since Year 1, but maturity remains uneven. Passenger Fleet Fitment is developing the strongest emerging control model, with clearer work packaging, fleet-family planning and schedule logic. Freight is active but remains commercially and operationally fragile. On Track Machines and Heritage & Charter remain more developmental, with continuing dependence on future scope, funding, procurement and value-for-money decisions.

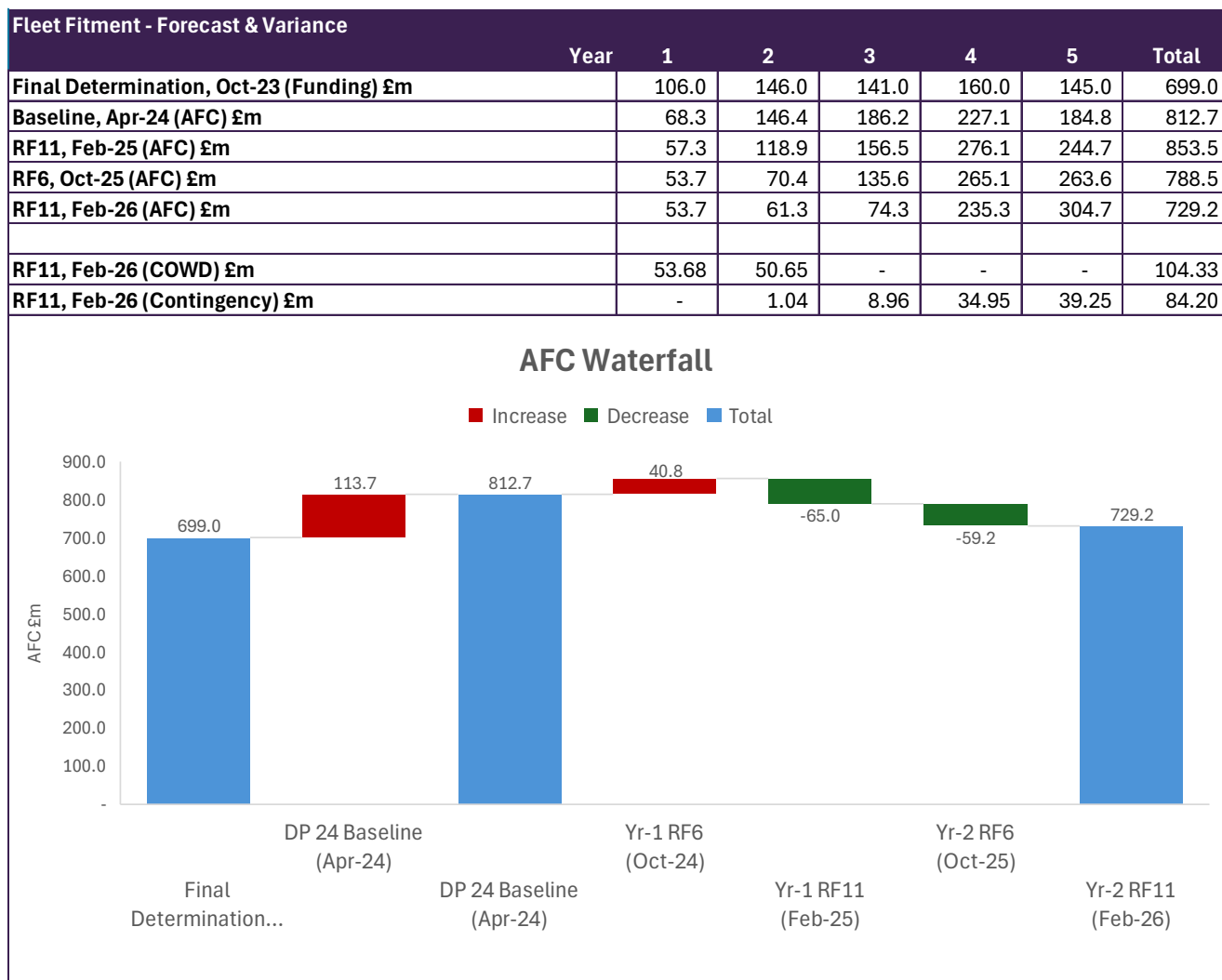


Figure 7: Fleet Fitment waterfall chart

- c) The Fleet Fitment AFC waterfall shows a reduction from the original CP7 baseline to the latest Year 2 position. This improves the apparent CP7 affordability position, but the movement is not a straightforward efficiency. The evidence indicates that the reduction is driven mainly by reprofiling, narrower near-term scope, minimum viable product assumptions, delayed procurement, deferred wider delivery and emerging forecast realism. Spend and risk exposure remain weighted toward the later years of CP7.
- d) The maturity assessment shows a developing but transitional programme. Governance, planning, risk management, financial management, estimate maturity, supply chain, stakeholder management and operational readiness are generally assessed as Developing. However, resource management, business requirements and

benefits management remain weaker. Estimate maturity is improving, but the programme does not yet have a consistent outturn cost feedback model across all sectors.

- e) The central delivery challenge is that Fleet Fitment depends heavily on parties outside Network Rail's direct control, including train operators, freight operators, rolling stock owners, manufacturers, vehicle owners and specialist operators. Delivery confidence depends on aligning responsibility, control, incentives, vehicle access, approvals, procurement routes and operational readiness across those parties.
- f) Overall, Fleet Fitment is becoming more structured and more realistic but does not yet have a settled delivery baseline. Year 3 should focus on approving sector rebaselines, linking vehicle scope to AFC and schedule, confirming commercial and procurement routes, testing supplier and operator commitments, and making clear what CP7 will deliver versus what it is preparing for future funding periods.

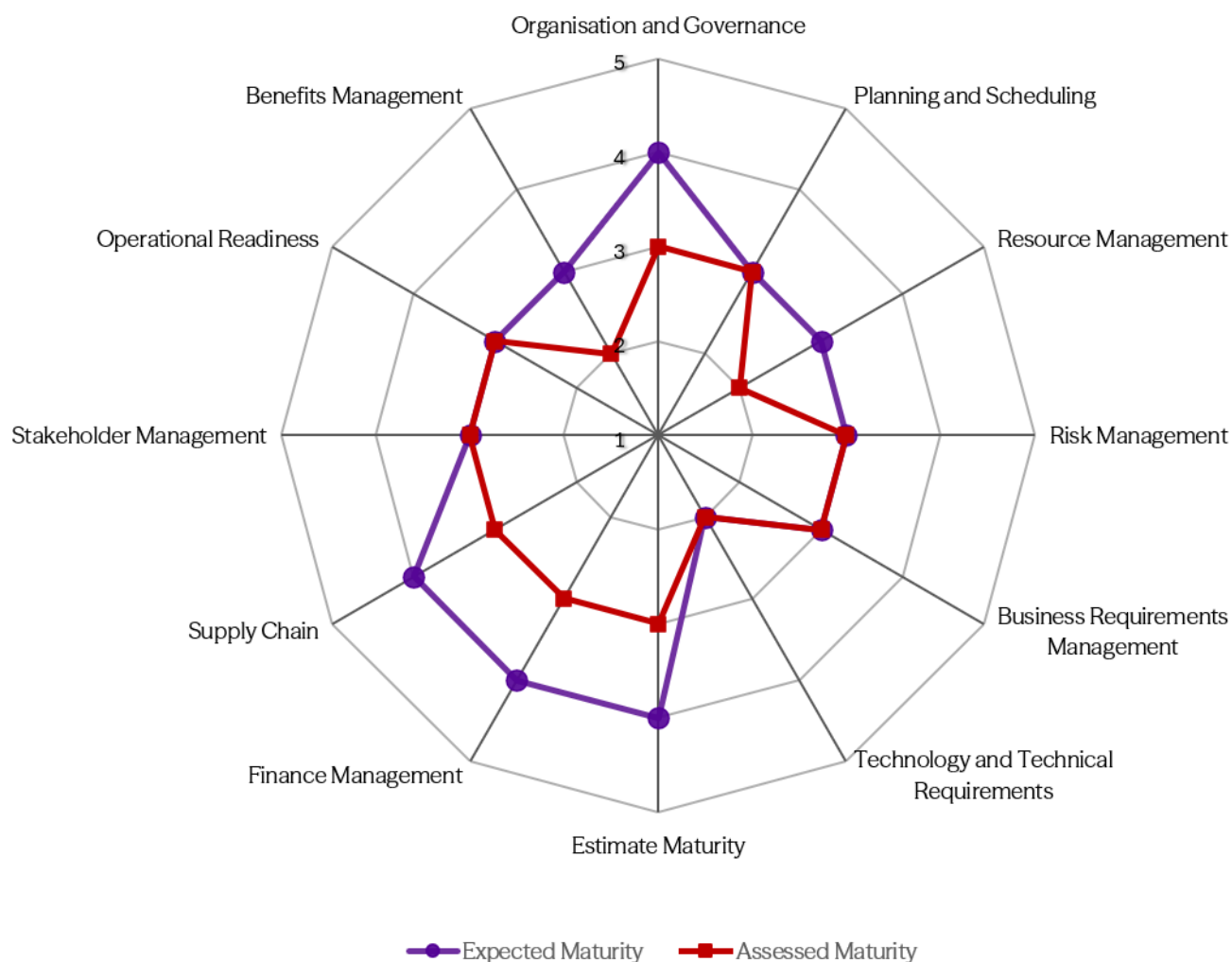


Figure 8: Fleet Fitment maturity assessment chart

1.7. Technical Authority

- a) Technical Authority covers the technical and research-led activity required to support safe, repeatable and affordable digital signalling deployment. In CP7, the main areas are Target 190+ and the Speed Management Programme. Target 190+ is intended to support lower-cost and more scalable ETCS delivery through its Tools and Processes workstream, including the Synthetic Environment and Design and Validation projects. The Speed Management Programme is an interim safety and data-foundation initiative intended to reduce overspeed risk ahead of wider ETCS rollout.

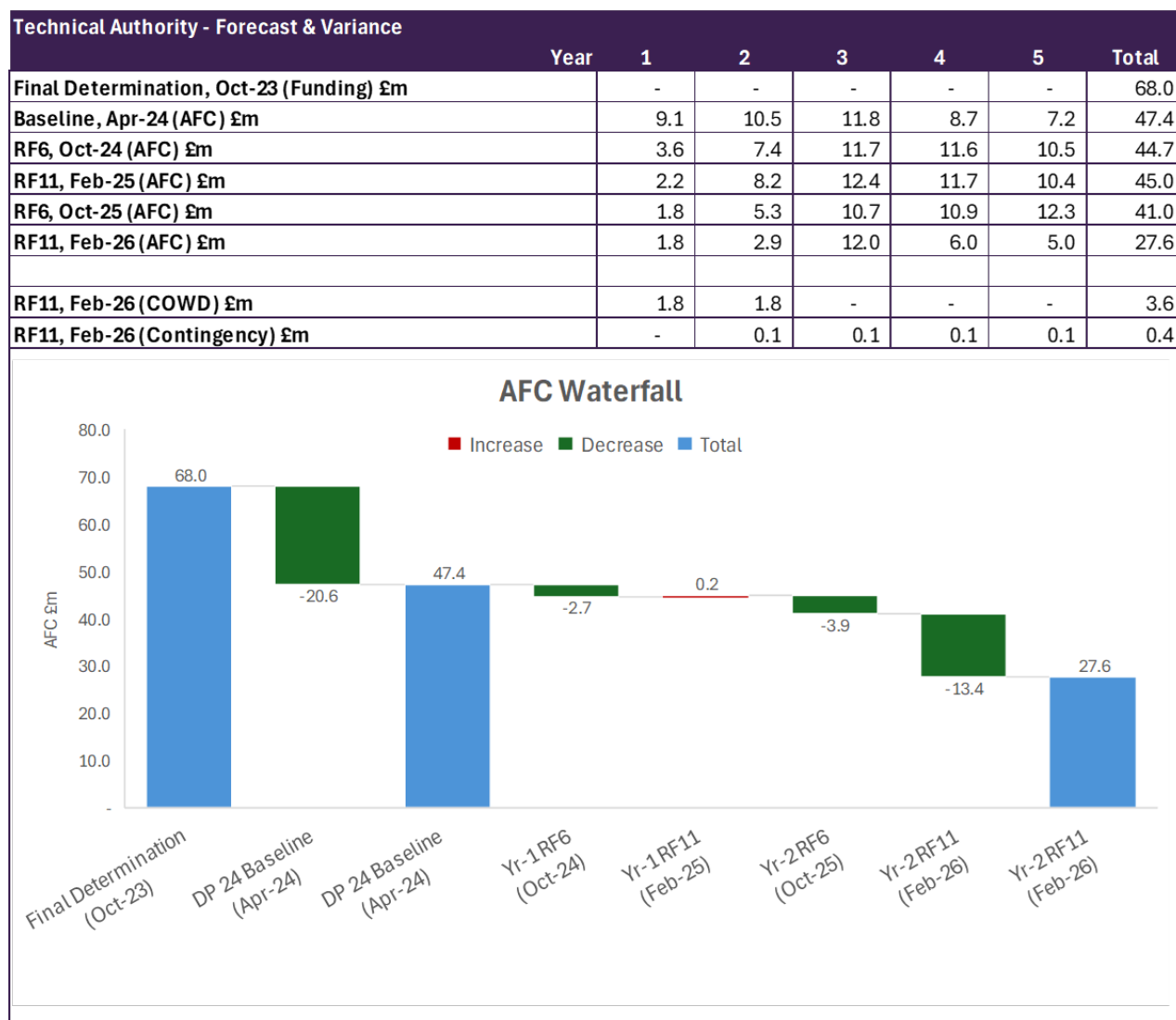


Figure 9: Technical Authority waterfall chart

- b) The Technical Authority waterfall shows a reduction from the original baseline to the latest Year 2 position. This improves the visible CP7 affordability position but should not be interpreted as demonstrated efficiency or as confirmation that the underlying technical need has reduced. The position should be read alongside the wider finding that technical authority activity needs clear reporting boundaries, funding routes and adoption plans.
- c) Target 190+ has remained comparatively stable and has a clear strategic purpose. Its role is to improve design, specification, simulation, validation and assurance processes so that future ETCS deployment can become more standardised and cost-effective. The Synthetic Environment and Design and Validation projects are credible enablers, and recent mobilisation improves confidence that the work is moving from concept toward delivery.
- d) However, the benefits of Target 190+ are not yet embedded in deployment. TCSF provides an important example of Target 190+ thinking being implemented in the Portfolio through market and supplier-readiness activity, but the associated benefits have not yet been proven through delivery. Confidence depends on whether its tools and

processes are adopted by suitable schemes and used to support cost, schedule, risk and assurance assumptions. The key test is therefore not only whether the technical outputs are produced, but whether they are used in a way that supports repeatable deployment.

- e) The Speed Management Programme addresses a recognised interim safety need and supports better speed restriction data and in-cab information ahead of wider ETCS rollout. Its future value depends on data readiness, operator integration, safety assurance and future authority decisions.
- f) Overall, Technical Authority activity remains strategically important, but its benefits are still dependent on adoption by deployment programmes and industry users. Year 3 should focus on linking technical outputs to deployment schemes, safety outcomes, cost-reduction assumptions, funding boundaries and future-period decisions.

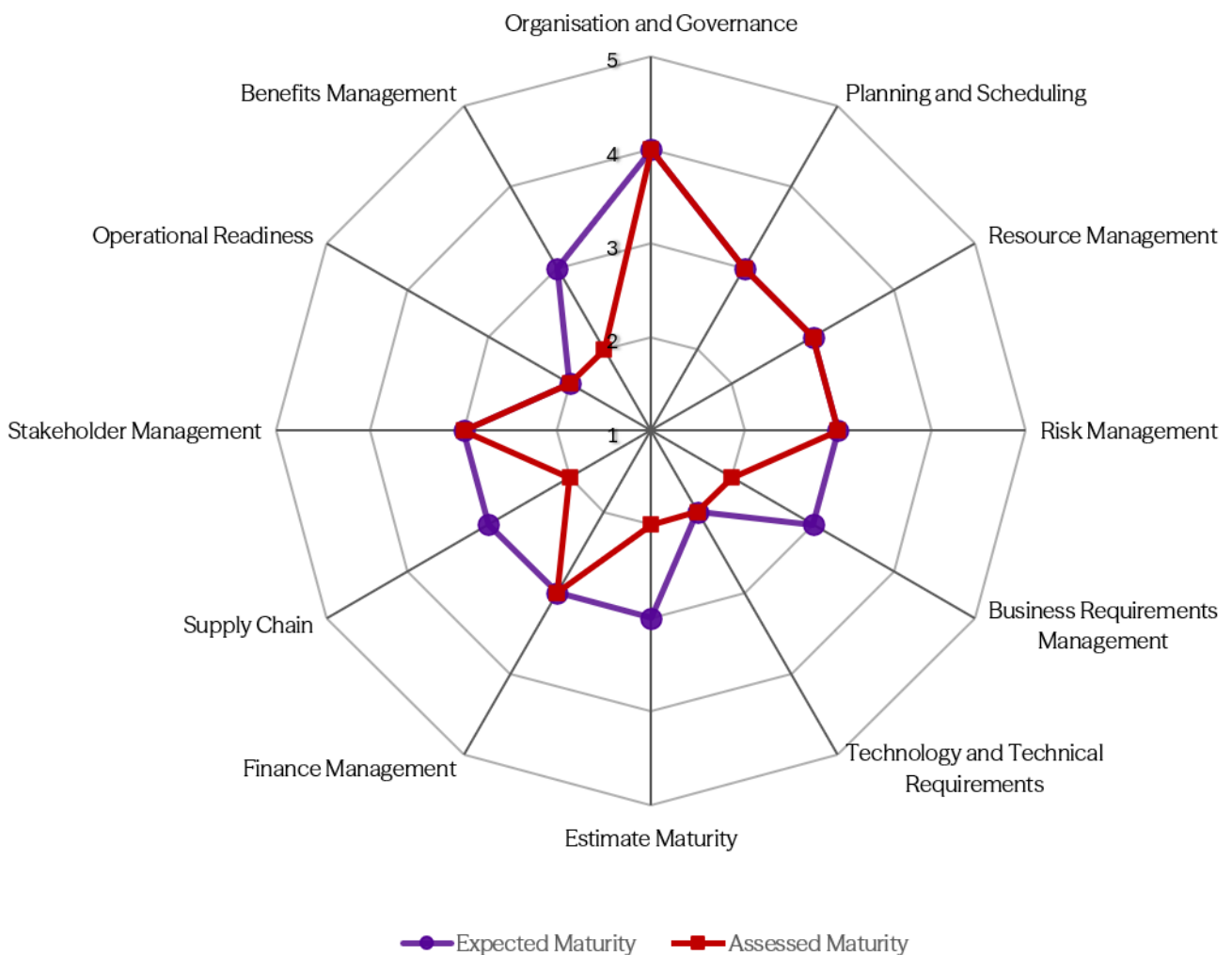


Figure 10: Target 190+ maturity assessment chart

1.8. Key Portfolio Findings

The findings below summarise the detailed findings set out in the full report. They are expressed at a higher level for public reporting and should be read alongside the full report for the detailed evidence base, maturity assessment and recommendations.

a) **Current deliverability is stronger for the narrowed CP7 proposition, but remains qualified**

The current CP7 portfolio is more deliverable than the original DP24 baseline because the forecast now better reflects known delivery constraints. Some activity has moved into later funding periods, and the remaining CP7 programme is more focused on live delivery, development activity, supplier readiness and preparation for future deployment.

Confidence is strongest where there is live delivery or more mature evidence, particularly ECDP, parts of Passenger Fleet Fitment, supplier readiness activity and Target 190+. However, overall delivery confidence remains qualified. Digital signalling scope within West Coast North Modernisation has largely moved into a future funding period, Fleet Fitment still depends heavily on third parties and unproven commercial routes, and the portfolio still relies on central forecast adjustment where project-level forecasts are not yet fully mature.

The review therefore finds moderate confidence in delivery of the narrowed CP7 proposition, but lower confidence that the deferred future work bank, benefits and whole-life cost position are yet fully under control.

b) **The portfolio remains strategically coherent, but CP7 delivery ambition has reduced**

The strategic direction of the Digital Signalling Portfolio remains sound. Digital signalling is still an important long-term route to improving the affordability, reliability and capacity of future signalling renewals. The main elements of the portfolio remain relevant: ECDP is progressing, Fleet Fitment is becoming more structured, market-building activity continues, and central portfolio capability is being developed.

However, the CP7 delivery ambition has reduced. The portfolio forecast for CP7 is now smaller and more concentrated than the original baseline. West Coast North Modernisation is no longer expected to provide a second ETCS deployment within CP7, smaller regional schemes remain early-stage, and Fleet Fitment is increasingly focused on proving models, refining scope and preparing future delivery.

The implication is that CP7 has become more of a transition and proof-of-model period than the broader deployment period originally planned.

c) **A clearer portfolio masterplan is needed to link strategic objectives to delivery activity**

The Portfolio's strategic objectives remain clear: reduce the cost of replacing life-expired signalling assets, increase delivery capacity for signalling renewals, and transition to modern digital signalling technologies that improve performance, reliability and fleet fitment outcomes.

However, the review found that the Portfolio does not yet have a sufficiently integrated masterplan linking these objectives to outcomes, capabilities, business requirements, scheme sequencing, fleet fitment, technology development and supply chain readiness. Without that line of sight, it is harder to make objective-led decisions and assess the impact of changes across the Portfolio.

The current position is also weakened by misalignment across the work bank. Trackside deployment, fleet fitment, technical development and market readiness are not yet consistently sequenced through a single roadmap. This creates risk of schedule instability, inefficient sequencing, delayed benefits and weaker supplier confidence.

g) **The portfolio forecast is becoming more realistic, but through transitional mechanisms**

The reduced CP7 forecast should not be interpreted as a demonstration of efficiency. The movement is mainly explained by deferral, reprofiling, a narrowed scope, reclassification, and a central forecast adjustment. In some areas, these changes represent better realism and stronger discipline than maintaining forecasts that were unlikely to be delivered.

However, they also show that the Portfolio has not yet reached a stable integrated baseline. A mature position would show how cost, schedule, scope, risk, contingency, opportunities and delivery outputs fit together across the Portfolio.

The central forecast adjustment, known as the Overlay, is particularly important. It helps improve aggregate forecast realism, but its scale also indicates that project-level forecasts, risks, opportunities and contingency are not yet fully reconciled at source. This limits confidence in the current forecast as a settled long-term control position.

h) ECDP now carries disproportionate strategic importance

ECDP is the principal live deployment proof point for ETCS in CP7. It is therefore the main source of practical learning for the wider Digital Signalling Portfolio.

ECDP is delivering real progress, and it is also exposing the dependencies that must be solved before digital signalling can be delivered repeatedly and at scale. These include fleet fitment, driver training, business readiness, approvals, systems integration, supply chain performance and funding boundaries.

With West Coast North Modernisation deferred and smaller deployment schemes not yet forming a second wave, ECDP has become both a pathfinder and a concentration risk. The Portfolio now depends heavily on ECDP to generate the evidence needed for future delivery. It will be important that learning from ECDP is captured and translated into the repeatable model needed for future schemes.

i) Fleet Fitment remains one of the main determinants of delivery confidence

Fleet Fitment is improving, but maturity remains uneven across the different sectors. Passenger Fleet Fitment has the strongest emerging control model, particularly around schedule logic, work packaging and planning by fleet family. Freight is active but commercially fragile. On Track Machines and Heritage & Charter remain more developmental.

Across all sectors, delivery depends heavily on parties outside Network Rail's direct control, including train operators, freight operators, rolling stock owners, manufacturers, vehicle owners and specialist operators.

The main challenge is aligning responsibility, control and incentive. Many risks rest with parties that Network Rail does not directly control, while the parties best placed to manage vehicle access, modification approval, operational disruption, supplier interfaces, and fleet availability may not yet have contractual obligations or incentives aligned with the CP7 delivery plan. This makes Fleet Fitment a whole-industry coordination challenge.

j) Supply chain and market confidence remain fragile

The Portfolio's market-building interventions remain directionally sound. The Train Control Systems Framework (TCSF) and Market Application Readiness (MAR) are the right types of mechanism for broadening supplier capability and reducing reliance on a narrow market.

However, the expected work bank has reduced and moved later. This weakens supplier confidence and makes it harder for the market to invest ahead of confirmed work. Several benefits also remain prospective rather than proven through delivery.

This creates a structural tension. The Portfolio needs suppliers to build capability before large-scale demand arrives, but the volume and timing of that future work are less certain than at baseline. Maintaining supplier confidence will therefore require clearer visibility of future work, more consistent framework utilisation and stronger evidence that market-readiness activity is producing usable capability.

k) Portfolio capability is improving, but the operating model is still catching up with delivery need

The Portfolio Capability and Enablers layer is more active and more structured than at Year 1. It funds necessary functions such as central portfolio support, "solve once" activity, System Authority support, legal and procurement support and specialist resource.

Network Rail's position is that the original DP24 capability requirement was underestimated and that Year 2 resourcing is closer to the level needed to support the Portfolio. That may be reasonable. However, the capability layer is still being built while the Portfolio is already live, and it is now supporting a smaller and more deferred CP7 delivery programme than originally expected.

The value-for-money question has therefore changed. Central capability spend remains important, but it needs to be clearly linked to revised CP7 outputs, rebaselining, procurement development, technical readiness, and preparation for future funding periods.

l) Procurement and commercial readiness are now portfolio-level constraints

Procurement and commercial readiness are now central to confidence in delivery. Passenger Fleet Fitment provides the clearest example because it is the most developed Fleet Fitment area and is now testing the practical route to market for fleet-family frameworks and direct manufacturer engagement.

The new Procurement Act has not necessarily removed intended routes to market, but it has increased the need for clearer transparency, procedural discipline and internal readiness. Freight, On Track Machines, the Train Control Systems Framework, Market Application Readiness and future deployment schemes all depend on commercial strategies that are still being developed or tested.

Commercial and procurement capabilities should therefore be treated as core enablers of delivery.

m) Reporting boundaries remain blurred in material areas

Several areas remain difficult to compare year-on-year because financial and scope boundaries are not always reported clearly. For example, ECDP reporting may interact with renewals, enhancement-funded activity and national enablers. West Coast North Modernisation reporting needs to distinguish residual CP7 enabling activity from wider programme values and deferred future deployment. TCSF and Market Application Readiness are closely linked but perform different roles. Fleet Fitment can include scope that is still being refined for future periods.

These boundary issues affect transparency and confidence in delivery. They make it harder to confirm what CP7 will deliver, what has moved to a future funding period, what has changed in cost or scope, and which programme or funding route is accountable.

Improved boundary discipline is essential if future assurance is to reliably track delivery, affordability, and output movement.

1.9. Recommendations

Report Section	Recommendation
1 DSP Portfolio	DSP masterplan and repeatable delivery model Network Rail should build on existing portfolio planning and CP7 delivery learning to complete and approve a DSP portfolio masterplan and repeatable delivery model for FP1. This should use evidence from ECDP, Fleet Fitment, TCSF and MAR, Target 190+ and Portfolio Capability to define sequencing, dependencies, business readiness, funding boundaries and the evidence required before future commitments are baselined.
2 DSP Portfolio	Integrated forecast confidence and overlay framework Network Rail should consolidate and formalise its existing forecasting, schedule, risk, opportunity, contingency and overlay process into an integrated forecast confidence framework. The framework should reconcile schedule maturity, estimating uncertainty, QCRA / QSRA outputs, risk, opportunity, contingency and IPDR Overlay, so that AFC and forecast confidence are supported by a transparent and repeatable methodology.
3 DSP Portfolio, Portfolio Capability	DSP portfolio control baseline and financial source of truth Network Rail should consolidate and reconcile existing programme baselines and financial reporting into a single DSP portfolio control baseline and reconciled financial source of truth. This should consolidate programme baselines, CP7 outputs, deferred FP1 scope, AFC movements, risk exposure and contingency, overlay treatment, procurement status, readiness milestones and funding boundaries.
4 Portfolio Capability	Portfolio Capability, TCSF and Market Application Readiness value/readiness control Network Rail should strengthen and consolidate its existing Portfolio Capability and market-readiness controls to show how IPPC spend, TCSF utilisation, MAR supplier readiness, technical readiness and enabling activities support the revised CP7 delivery task, supplier confidence and FP1 preparation.
5 ECDP	Deployment Programme baselines and readiness routes Network Rail should complete and reconcile its existing Deployment Programme baselines and readiness planning. This should cover the ECDP rebaseline and full business case refresh, WCNM residual CP7 enabling activity, deferred FP1 deployment scope, funding boundaries, readiness dependencies and the use of ECDP learning for future schemes.
6 Fleet Fitment	Fleet Fitment integrated baseline and sector delivery confidence Network Rail should complete and integrate the existing Fleet Fitment baseline and sector-level delivery confidence view, linking Passenger, Freight, OTM and Heritage and Charter vehicle scope, AFC, schedule, risk / contingency, procurement status, readiness, deferred scope and FP1 exposure.

7	Fleet Fitment	Fleet Fitment commercial and procurement readiness Network Rail should complete and coordinate its existing Fleet Fitment commercial and procurement readiness across all sectors. This should include Passenger family frameworks and PA23 readiness, Freight Phase 3.2, OTM sourcing strategy, supplier / OEM capacity, risk allocation and commercial critical paths.
8	Technical Authority	Technical Authority adoption, validation and dependency roadmap Network Rail should build on existing Target 190+ and SMP delivery and assurance arrangements by establishing an integrated Technical Authority adoption, validation and dependency roadmap. This should show how technical outputs, deployment-scheme alignment, benefits evidence, safety validation, funding boundaries and future authority decisions will support CP7 and FP1 delivery.

Table 1: The Independent Reporter's Recommendations

1.10. Conclusion and Year 3 focus

- a) The Digital Signalling Portfolio remains strategically important and continues to address a clear long-term need: making future signalling renewals more affordable, repeatable and deliverable. Year 2 has shown genuine progress in portfolio structure, Fleet Fitment planning, supplier readiness activity, technical development and live learning from ECDP.
- b) However, the Portfolio is still in transition. The current CP7 proposition is narrower and more deferred than the original baseline. The latest forecast is more realistic, but the reduction in CP7 cost is mainly the result of deferral, reprofiling, narrowed scope, reclassification and forecast adjustment rather than demonstrated delivery efficiency. This means that CP7 is increasingly a period for proving the delivery model and preparing future-period delivery, rather than delivering the broader deployment programme originally envisaged.
- c) The priority for Year 3 is to turn this more realistic position into a controlled and evidence-based delivery platform. Network Rail should focus on completing rebaselining, confirming what CP7 will deliver, showing what has moved into future funding periods, and linking cost, schedule, risk exposure, outputs, benefits and readiness through an integrated portfolio control baseline.
- d) Year 3 should also convert practical learning into repeatable delivery. This includes using ECDP as the main deployment proof point, strengthening Fleet Fitment commercial and delivery confidence, demonstrating the value of Portfolio Capability and market-readiness activity, and linking Technical Authority outputs to deployment schemes and measurable benefits.
- e) If these actions are completed, the Portfolio should be better placed to support future digital signalling decisions. If they are not, there remains a risk that CP7 produces useful learning but does not yet provide the evidence needed to support wider, affordable and repeatable deployment in future funding periods.

1.11. Acknowledgements

- a) The Independent Reporter team would like to thank the staff from the ORR and NR who supported the review with their time and expertise.

