# Office of Rail and Road

Review of Network Rail's renewals and efficiency planning for years 1 and 2 of CP6





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# 1. Introduction

An Independent Reporter review by Nichols was jointly commissioned by the ORR and Network Rail in April 2019. The mandate for the review set out the purpose: "to provide an independent assessment of Network Rail's preparations to deliver its efficiency planning in the early part of CP6. The review should specifically consider the reasonableness of route's renewals workbank planning and efficiency plans."

The review was structured in two phases. Review phase 1 assessed the Scotland and Wessex routes, and a phase 1 report was issued in July 2019. A Stage Gate meeting was held after completing phase 1 to review the findings and lessons learnt. It was agreed to alter the emphasis for review phase 2, within the purpose of the original mandate, as follows.

#### For renewals:

- Additional emphasis on workbank maturity, notably detailed design and construction stages for year 1.
- Examine progress data captured by routes from delivery teams, agents and frameworks, for example, seeking assurance on remits for delivery, procurement, start of works, progress per GRIP stages.
- Review progress in developing the Leading Indicator process.
- Check risk resilience via over-programming, the approach to possession booking and any key enhancements interfaces.

#### For efficiencies:

- Reviewing fewer initiatives in more detail.
- Greater emphasis on capital expenditure (capex) efficiencies to explore ownership of delivery of postefficient costs, robustness of plans and programmes to deliver these, implementation by Delivery
  Agents and governance and monitoring of implementation.
- Explicit reference to good practice in efficiency (benefits) realisation programmes.



Review phase 2 assessed six routes between July and September 2019; namely Anglia, London North East & East Midlands (LNE&EM), London North West (LNW), South East, Wales and Western.

This is a review phase 2 report that sets out the Reporter's assessment specifically for the South East route. There are five similar reports for the other routes being assessed in review phase 2. There is also a separate overall review phase 2 report that contains common themes from across the route reports.

The structure of this report is as follows:

#### Renewals workbank delivery assessment

- · Renewals assessment methodology
- Route review context
- Assessment scope
- Assessment findings
- Conclusions and recommendations

### Efficiencies plans delivery assessment

- Efficiencies assessment methodology
- Route review context
- Assessment scope
- Assessment findings
- Conclusions and recommendations

We would like to thank the South East route for its cooperation and support during the review, providing a significant body of documents as evidence, professionally managing meetings for the review teams throughout the three day fieldwork phase, and responding to a series of additional clarifications on its renewals and efficiency plans; all of which was undertaken during the transition to Network Rail's new regional structure.



# 2. Renewals delivery assessment

### 2.1 Renewals assessment methodology

The Reporter mandate set out a high-level scope:

"The reporter should assess the preparedness of the route to deliver its renewals plan in CP6. This should be based on the latest data in Network Rail's leading indicators report together with discussion with the route of the implications of the data. Based on its assessment, the reporter should identify opportunities for improving the route's approach to reporting its preparedness for delivery of renewals workbanks in CP6."

#### **Renewals Delivery Reference Model**

The Reporter's methodology for assessing preparedness uses a Renewals Delivery Reference Model to provide a structure based on a simplified lifecycle with the following stages:

Stage 1 – Workbank planning

Stage 2A - Authorisation and project development

Stage 2B - Delivery planning

Stage 3 – Design and construction



The Model is shown in Figure 1. The lifecycle based structure provides a timescale perspective to assessing delivery preparedness, for example:

For the current financial year (CP6 year 1) – The workbank plan is being actively measured through Stage 3 Design and construction.

For the next financial year (CP6 year 2) – The workbank plan is being actively measured through Stage 2A Authorisation and project development and also Stage 2B Delivery planning.

For later financial years (CP6 year 3 onwards) – Expectation is the workbank plan is being actively measured through Stage 1 Workbank planning and Stage 2A Authorisation and project development.

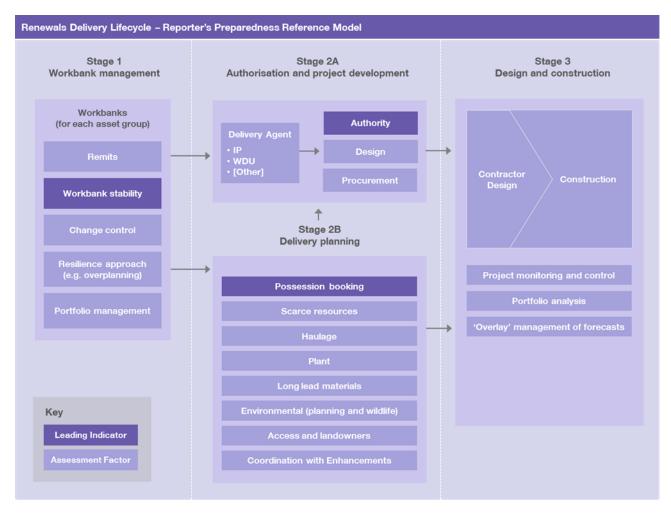


Figure 1: Renewals Delivery Reference Model



#### Assessment of Leading Indicators in phase 1

During review phase 1 we reviewed the available Leading Indicators; disruptive access, project authorisation and workbank stability. These are provided by each route into Network Rail centre and to ORR as a high-level summary of renewals delivery progress. We mapped the three Leading Indicators against the model to understand their scope of coverage and this is shown in Figure 1.

Our conclusion from phase 1 was that the Leading Indicators provided only a partial view of preparedness and we made a number of recommendations for improvements to indicators and metrics that could be used to provide a more complete picture.

#### Assessment methodology for phase 2

There was a change in emphasis for review phase 2 and the Reporter focus was on how each route was managing its preparedness for workbank delivery in year 1 (2019/20) and year 2 (2020/21). We examined the metrics and management controls being used by route management teams to assure themselves of workbank delivery. We sought to find evidence of route management and metrics using the model to provide a structure for our assessment:

- 1. Workbank planning. Workbank stability measures, active use of change control and planning resilience processes like over-planning.
- **2A.** Authorisation and project development. Remit, investment authorisation and procurement progress monitoring and controls.
- **2B.** Delivery Planning. Possessions booking, scarce resource management, haulage, plant, long lead materials, environmental progress monitoring and controls.
- Design and Construction. Actual delivery and forecasting against plan, appropriate use of progress monitoring and controls, use of overlay processes to improve the quality of forecast plans, active management of risks.

To undertake a route assessment, we investigated and examined at two levels:

Portfolio – Monitoring and management of the renewals portfolio as a whole, across asset types.

Project – Monitoring and management of a sample of renewals projects from the largest asset workbanks.



The actual scope of the investigation (i.e. the balance between a focus at portfolio and at project level) at each route was determined by the assessment team leader to fit the time available and was designed to ensure both levels were addressed across the route assessments.

#### 2.2 Route review context

Our review of the South East route was undertaken in August and September 2019, and led for the route by its Acting Route Financial Director (RFD), Director of Route Access Management (DRAM), Head of Portfolio Management Office and its Route Financial Controller (Capital). We assessed a substantial body of evidence provided on the planning, management and delivery of its renewals workbank, primarily focused on years 1 and 2 of CP6, with good evidence of detailed knowledge, ownership of and commitment to delivery across Route Access Manager (RAM), finance, sponsor and delivery teams.

The route's £2bn baseline renewals plan for Control Period 6 (CP6), broken down in terms of each key asset workbanks, is summarised in Table 1 alongside the route's latest forecast for each, confirming that the route's plans for CP6 as unchanged, when assessed at Rolling Forecast 4 (RF4) in July 2019.

Asset group	Budget (£m, RF11)	Latest (£m, RF4)	Variance (£m)
Track	587.6	587.6	0
Signalling	524.3	524.3	0
Structures	306.4	306.4	0
Earthworks	91.9	91.9	0
Buildings	172.5	172.5	0
E&P	286.8	286.8	0
Drainage	60.4	60.4	0
Total	2,029.9	2,029.9	0

Table 1: South East CP6 route planned renewals spending for Control Period 6 (RF4).



The route's planned key volumes for CP6 are summarised in Table 2.

		CP6 total					
Key volume	Unit	Plan (RF11)	Latest (RF4)	Variance			
Plain line	Linear m	662	667	+5			
S&C	Units	877	877	0			
Signalling	SEU	675	675 713				
Embankment	5cl	1,023	1,023	0			
Underbridges	m2	29,412	29,412	0			
Wire runs	No.	n/a	n/a	n/a			
Conductor rail	Km	34	34	0			

Table 2: South East CP6 route planned renewals volumes

# 2.3 Assessment scope

To assess South East's preparedness to deliver their renewals workbank in years 1 and 2 of CP6, we sought evidence of both portfolio and project level management and control. However, our emphasis was primarily on a review of sample projects from the key asset group types, as these made up a large proportion of costs and volumes in these years.

#### Selecting a sample of projects to review

To choose our sample, we considered the top four asset group workbanks that make up over 80% of planned spend in years 1 and 2 of CP6. This is summarised in Table 3 below.

	Ci	P6 Year 1 (FY2	20)	CP6 Year 2 (FY21)			
Asset group	Plan (£m RF11)			Plan Latest (£m RF11) (£m RF4)		Variance (£m)	
Track *	129	129	0	106	106	0	
Signalling *	109	110	+1	72	72	0	
Structures *	36	36	0	80	80	0	
Earthworks	12	12	0	28	28	0	



	CF	P6 Year 1 (FY2	20)	CP6 Year 2 (FY21)			
Asset group	Plan (£m RF11)	Latest (£m RF4)	Variance (£m)	Plan (£m RF11)			
Buildings **	38	38	0	38	38	0	
E&P *	28	28	0	53	53	0	
Drainage	11	11	0	17	17	0	
Total	363	363	0	393	393	0	

Table 3: South East route renewals cost forecast compared to plan, CP6 years 1-2 totals \* Denotes top four asset group sampled in the review. \*\* Denotes buildings also assessed

The planned total volumes for year 1 are set out in Table 4, together with the plan for year 2.

A	11		Year 1		Year 2			
Asset group	Unit	Plan	Forecast	Variance	Plan	Forecast	Variance	
Plain line	Linear m	128.3	134.3	+6.0	140.6	140.6	0	
S&C	Units	152	152	0	170	170	0	
Signalling	SEU	123	126	+3	98	98	0	
Earthworks	5cl	114	115	+1	386	386	0	
Underbridges	m <sup>2</sup>	1,484	1,484	0	8,412	8,412	0	
Wire runs	No.	0	0	0	0	0	0	
Conductor rail	Km	1.4	1.4	0	11.4	11.4	0	

Table 4: South East route volume summary for CP6 year 1-2

We chose a sample of projects based on: high values and or volumes; to give a spread across the two main Delivery Agents: Infrastructure Projects (IP) and Works Delivery; to give a spread across development and delivery in year 1 and 2; and to provide detailed examples and evidence that complement a wider portfolio-level view across the route's renewals plans. The sample comprised:



Track – The route's plain line and switch & crossing (S&C) renewals within the Kent area, which were the route's primary focus in years 1 and 2 as its Sussex area was the subject of major renewals work in the latter part of CP5.

Signalling - Major re-signalling programmes that are in development and delivery in years 1 and 2.

**Structures** – The year 1 delivery programme within the Kent area, comprising a mix of preventative, repair, strengthening and replacement works; plus a major viaduct renewal project in the Sussex area.

**E&P** – The third phase of Negative Short Circuiting Device (NSCD) installation for the Electrical Safety Delivery programme, as well as an emerging (emergency) renewal project not originally included within the CP6 workbank.

Project	Asset	Year 1 (£m)	Year 2 (£m)	Stage
Kent-Plain Line Programme 19/20	Track	15.6	-	Delivery
20/21 Kent S&C	Track	-	19.4	Development
CP6 Kent CAT2 Re-Rail	Track	5.8	4.8	Delivery
Hither Green Signal Renewals	Signalling	43.4	11.0	Delivery
Brighton Mainline FDM	Signalling	7.7	-	Development
Balham & Clapham Area Re-signalling	Signalling	2.0	5.8	Development
Kent Structures (Works Delivery year 1)	Structures	2.9	-	Delivery
Oxted Viaduct	Structures	0.3	8.4	Development
Godinton & Potters Corner Repairs	E&P	4.0	0.6	Delivery
Safer Isolations Phase 3	E&P	2.5	5.8	Delivery

Table 5: Summary of South East sample schemes FDM = Frequency Division Multiplexing

We also reviewed the route's year 1 and 2 buildings renewals plans, comprising a programme of platform, footbridge, canopy and Mechanical & Electrical (M&E) works geographically spread throughout the route.



# 2.4 Assessment findings

We assessed a substantial body of evidence provided on the planning, management and delivery of its renewals workbank, primarily focused on years 1 and 2 of CP6, with good evidence of detailed knowledge, ownership of and commitment to delivery across RAM, finance and delivery teams. Our findings are presented using the Renewals Delivery Reference Model structure described earlier and with supporting examples from our review of sample projects.

#### Model Stage 1 - Workbank planning

The South East route presented an overview of its CP6 workbank that was developed in later years of CP5, and consistent with its Route Strategic Plan, comprising a prioritised workbank primarily focused on asset sustainability, that was phased to ensure deliverability and consideration of contract availability, disruptive access and critical resources.

This workbank includes a number of major projects and programmes, the development work for which was already underway before the start of CP6, providing confidence in their preparedness, for example its Hither Green (and Bromley North) Re-signalling project (which forms part of the works required to support the Thameslink Programme's Key Output 2), and the route's year 1 track and structures renewals programmes.

The costs and volumes for all projects are defined individually and aggregated by asset type in the route's financial reporting system. The profile of work over CP6 does not indicate that there are obvious high-level deliverability risks, with a relatively uniformity of work over the five years. CP6 renewals spend represents an increase of 17% compared to CP5. Year 1 is the lowest level of spend, a decrease of 9% compared to the previous year, which was the peak spend in CP5. Spend then increases steadily to a high-level peak in year 4 of CP6, reflecting re-signalling schemes that move into delivery in the latter part of CP5.

As in CP5 the workbank is budgeted and remitted at post-efficient cash prices. For CP6, however, the route has separated out efficiencies and inflation at an asset group level, to provide improved visibility of these costs and line of sight to savings by projects and delivery teams. Efficiencies are dealt with in the next section of this report.

The route makes explicit use of overplanning provisions per RAM and asset group in its renewals planning. Overplanning enables it to proactively manage risk or change across its portfolios within each workbank, for example if projects change, schedules slip, to respond to unplanned reactive works, to identify opportunities to accelerate interventions or respond to shortfalls across other asset plans by outperforming on others. This includes works remitted to Delivery Agents but not included in the baseline plan, financial



'overlays' to account for overplanning, 'emerging cost overlays' as allowances that enable the route to neutralise the Financial Performance Measure (FPM) impacts for works that emerge through the year.

We saw evidence of the application of this, including via a register of overplan projects; it has recently instructed building works at several stations to counter slippage experienced to specific projects highlighted in the review. This mechanism was also demonstrated via our review of the Godinton & Potters Corner Repair scheme, which is an emerging works (serious emergency) project. Emerging works allocations are normally offset by deferral provisions to remain within the route's funding envelope.

As with all routes, this overplan is accounted for via a series of financial 'overlays'. i.e. a series of credits inyear and debit in future years to reflect that whilst overplan schemes are being readied for delivery, unless other projects reduce their forecast outturn values, then some works will need to be deferred to a future year in order to reconcile back to the route's annual budgets.

Within South East, this overplan was originally defined at the start of CP6 at 20% for each asset group, except for geotechnical and drainage, where it was set at 30%. This was reported as being based on historic trends. As expected, the level of overlay has changed since, as year 1 development work has progressed. The latest position at RF4 is as summarised in Table 6.

Asset group	Budget Forecast (£m, RF11) (£m, RF4)		Overplan (£m)	Overplan (%)
Track	129	129	15	11%
Signalling	109	110	4	4%
Structures	36	36	3	7%
Earthworks	12	12	12	98%
Buildings	38	38	18	46%
E&P	28	28	4	14%
Drainage	11	11	0	0%
Total	363	363	54	15%

Table 6: South East route overplan summary for CP6 year 1



The South East route has established an overlay for inflation. While this introduces a degree of complexity in its financial reporting, it also ensures consistency in the treatment of costs across its renewals portfolio. It has also included an overlay for efficiencies for all asset groups other than track and signalling as an intention to drive the same transparency in its reporting. Note; for track and signalling efficiencies are more complex and rely on pre vs. post efficient analysis by Network Rail, so route-level overlays are not appropriate.

The route operates a Change Control process to its capital renewals portfolio, monitored via a Periodic Change Control Meeting and Weekly Change Control Review attended by RAMs and or Senior Route Asset Managers (SRAMs), the route's Portfolio Management Office (PfMO) and Finance team. The PfMO also tracks change to cost, schedule and volume via its periodic Asset Reviews. The route's Capital Works Delivery Board approves high value changes.

We did not find evidence of marked instability and change, including in the sample projects we reviewed, although there is some low-level change at asset group level, for example as buildings and structures have refined delivery schedules. Tables 1, 2, 3 and 4 above also provide evidence that the route is currently forecasting to deliver as per its baseline for year 1 and 2, and CP6 overall.

Network Rail's national Leading Indicator report has put South East's 'workbank stability' at between 80% and 83% to-date, which demonstrates that there has not been notable change period-on-period in year 1<sup>1</sup>. We consider the national Leading Indicator reporting process in our review summary report, including the explanation and interpretation of this indicator.

#### Model Stage 2A - Authorisation and project development

Authorisation levels are one of the Leading Indicators of the route's preparedness to deliver its renewals plans. We saw a good evidence of governance over authorisations at project and at asset group level to demonstrate good focus on delivery to cost and volumes in discussion with RAMs and sponsors. The route's governance and management system assurance arrangements include:

 Periodic Business Review (PBR) meetings between DRAM and RAMs; a Director review covering progress, works forecasts, access, risks and opportunities, overlays, new works, change and or slippage; supported by route finance data on these.

<sup>1</sup> This indicator includes a central assumption of 20% overplanning in input data, hence is indicative where 100% is not necessarily the maximum or 'target'.



- Routine renewals planning and progress meetings between RAMs and Delivery Agents in each asset group and for major schemes with bespoke governance arrangements.
- Investment Panel submissions. We reviewed a number of these for our sample projects.
- Other route forums, including the Capital Works Delivery Board, Change Panel and Access Planning Prioritisation Panel, 'Gateways' for assurance of buildings cost estimates and finally a number of route efficiencies forums.
- Established processes for financial reporting and tracking delivery to budget per reporting period, including FPM and rolling forecasts and deep-dive review of costs (plus Quarterly Finance Reviews are with the ORR).

We saw good evidence of the operation of the route's PfMO which conducts periodic Asset Renewals Reviews, as well as deep-dive peer review assurance, and works with RAMs and deliver agents to assess and maintain 'Periodic Deliverer Dashboard' covering progress, variances, change, risk and Success, Opportunity, Failure, Threat (SOFT) data. We considered this good practice to acknowledge within our overall report findings.

South East route tracks its year 1 authority levels per asset group, both as a proportion of its agreed budgets and as a proportion of all projects including overplanned works. At Period 6, when our review was completed, the former was at 99% and the latter stood at 86%. This provides confidence that the route is authorised to deliver its year 1 renewals plans. The 99% value captures authority for overplanning, for example the route has authorised 112% of its buildings budget. To balance this, it still has authorities outstanding for two asset groups:

Signalling – This is 91% authorised, with £9m outstanding. We assessed the Brighton Mainline Frequency Division Multiplex (FDM) projects as part of our review, noting that the team have been resolving procurement issues in year 1 and are planning panel authorities in Periods 7 and 8.

**Structures** – This is 85% authorised, with £5m outstanding. We assessed the structures programme, noting projects are authorised for delivery when ready, with the majority in construction and three remaining to reach that point in year 1 in the coming periods.

South East has also already authorised 17% of works planned for year 2, noting that this represents a Period 5 figure and is in line with its early 'glidepath' projections.



The route evidenced that it operates a change control process overseen by a Change Panel and the RFD and Route Financial Controller (Capital) to manage adjustments and inform re-authority processes. This has flagged low levels of change in year 1 to date; nor we did not find significant evidence of changes experienced in our year 1 sample projects, although several examples of smaller changes are flagged below, and in the design and construction section of this report. These include:

**E&P** – Re-profiling costs over years 2-5 of CP6 to provide a more uniform delivery programme.

Buildings – Evidence of small-scale changes affecting individual projects, for example, due to delayed contract award, access cancelled for station platform works, or even works commencing earlier than anticipated.

**Structures** – Forthcoming change control request for the Oxted Viaduct project, to revert from a replacement option to a proposed strengthening and refurbishment option, which has been assessed as delivering better whole life cost and value for money. This represents a positive plan for a controlled change, with final outputs slipping from year 2 to year 3.

We assessed South East's development work and progress for our selected sample projects, highlighting for example:

**Track** – The route provided evidence that it is progressing and tracking the development of remits for work by delivery teams for all five years of CP6. For example, issuing outline remits for all of its year 1-3 long-lead Plain Line and S&C works for IP delivery.

Signalling – We reviewed plans and papers for the Victoria Re-signalling programme, the next phase for which is phase 3 and is budgeted at £140m, for commissioning in year 4 of CP6, but with significant preparation work and high costs in years 1 and 2, including design, surveys and track issues. We saw good evidence of plans, and had visibility of a compressed tight schedule, access and procurement challenges that the project is actively managing, noting that there remains significant risks. We also reviewed the Brighton Main Line FDM project, noting the team is working to resolve cost and delivery risks, with authority planned, but there remains costs and delivery risks.

**Structures** – The route's strategy is to plan, remit and develop for multiple years. All remits for projects to be delivered in years 1 and 2 were issued to the deliverers before the start of CP6. In year 1 the route team are developing 25 projects for year 2 delivery. Of these, 17 are at GRIP stage 3, and five projects have already been tendered and awarded contracts. 95% of projects to be delivered in year 3 have also been remitted, and is developing eight of these projects in year 1.



**E&P** – Our review focused on an unplanned (emergency) renewal that is being developed and priced pending authority later in year 1, with HV equipment orders underway via Supply Chain Operations (SCO) and; Negative Short Circuiting Devices (NSCD) programme where development contracts are in place, GRIP stage 4 designs are underway, equipment orders commenced with SCO and further authority is planned for later in year 1. There was good evidence of development plans, albeit also of risks to delivery.

Buildings – Evidence reviewed showed project remit and development is being robustly tracked by the RAM team. Of the 26 projects in year 1, 16 have awarded contracts, with the remaining 10 planned to be awarded before the end of Period 9.

#### Model Stage 2B - Delivery planning

We looked for evidence and assurance on delivery planning and any instances of unmitigated dependency or risk in relation to (for example) disruptive access, scarce resources, specialist plant, haulage, materials, land access and interdependencies with enhancement schemes.

Access – the route has identified and secured the majority of its disruptive access for year 1 and the first three-quarters of year 2, in line with the industry Engineering Access Statement ('Rules of the Route') processes. This includes oversight by the South East Access Planning Prioritisation Panel. We saw evidence in the form of access plans, for example:

- A detailed plan for IP Signalling possessions in years 1 and 2, including the key Hither Green Resignalling project.
- An early Engineering Access Statement ('Rules of the Route') draft for Victoria Re-signalling Phase 3 detailing possessions and major blockades anticipated in 2021 to 2023.
- The majority of major track related access is booked, noting that 75% of Works Delivery re-rail access is confirmed in year 1, with the remaining 25% working through the deconfliction process.
- Request for abnormal possessions for structures submitted for all year 1, 2 and 3 projects.

Access risks nevertheless remain, for example as flagged for sample E&P projects.

Haulage, plant and long lead materials – This is managed centrally by SCO, notably for the route track programme. We did not identify any risks in the evidence provided by the route, with its plans confirmed and key resources booked in advance, although it confirmed that Christmas 2020 (the start of a major blockade at King's Cross) remains part of the national deconfliction process so remains as a risk.



Resources – We saw evidence of continuity in the supply chain providing stability and confidence in workbank delivery, for example in retaining the CP5 Thameslink team for the route's major re-signalling projects in early CP6. The route also outlined pilot schemes to resource low complexity work via Works Delivery (which also delivers efficiencies compared to delivery by IP's Framework) and use of smaller Tier 2 contractors are being used to undertake non-complex programmes.

Land – We saw evidence that, while not a significant issue, relevant risks are being highlighted and managed, for example in structures for the Oxted Viaduct project.

Enhancements – The route has managed the integration of its renewals programme with the Thameslink Programme in CP5. Looking ahead, the route indicated that it is managing the interface risk between its Victoria Re-signalling programme, that runs throughout CP6, and the adjacent capacity enhancement Croydon Area Remodelling Scheme (CARS). This has the potential to import risk to both, notably if decisions on funding, scope and timing for CARS cannot be aligned with development and delivery timescales for the committed signalling renewals.

#### Model Stage 3 – Design and construction

We reviewed the route's documentation on design development, although did not assess design quality within this review. We saw evidence of work undertaken via GRIP, notably in the major signalling, and structures and building projects sampled, and as scheduled as standard within investment Panel papers.

The route has robust supply chains and frameworks to underpin procurement plans, with only minor changes since CP5. The Victoria Re-signalling Phase 3 scheme, which is currently in development, is driving to a commissioning date of December 2022, so to de-risk the project, procurement is via the existing CP5 signalling framework as there is a misalignment of the project with the anticipated availability of the new CP6 major signalling framework contract.

We looked for evidence of financial performance variances in renewals costs in year 1 as compared to baseline plans, as summarised in Table 7, and specifically in our sample projects in track, signalling, structures, E&P and buildings asset groups.



	Year	1 to date (Per	iod 4)	Year 1 forecast total				
Asset group			Budget (£m, RF11)	Forecast (£m, RF4)	Variance (£m)			
Track *	36	37	+1	129	129	0		
Signalling *	39	31	-8	109	110	+1		
Structures *	6	4	-2	36	36	0		
Earthworks	2	2	-1	12	12	0		
Buildings **	5	4	-1	38	38	0		
E&P *	7	6	-1	28	28	0		
Drainage	2	2	0	11	11	0		
Total	97	86	-11	363	363	0		

Table 7: South East route cost performance CP6 year 1 (some numbers reflect rounding) \* Denotes top four asset group sampled in the review. \*\* Denotes buildings also assessed

There are few, and what appear to be relatively small-scale variances flagged. Reasons for these in year 1 flagged by the route during our review of sample schemes:

Signalling – Re-phasing of the construction and preparation and testing programme for the Hither Green Re-signalling project ahead of commissioning in Easter 2020 (and re-phasing of post-commissioning Insulated Block Joint (IBJ) recovery for another scheme to align with it) plus slippage of Brighton Mainline FDM cabling costs.

**Structures** – Minor changes to construction start dates for some structures.

**Buildings** – Deferral of elements of a platform renewal scheme at Lewisham, due to lack of suitable disruptive access. This has been offset by instructions for overplanned projects.

**E&P** – Minor re-phasing of renewals versus external funding for the NSCD project and West London Line Overhead Line Equipment (OLE) slippage due to availability of access for surveys.

Inflation - Routine release of year-to-date inflation overlay allowances for all assets.

South East route's overall position in terms of volumes in delivering its CP6 workbank in year 1 to-date is summarised in Table 8. This compares progress to its approved RF11 baseline plan with its progress as at Period 5 of year 1.



A	1124	Year 1						
Asset group	Unit	Plan	Actual	Variance				
Plain line	Linear m	31.9	42.7	+11				
S&C	Units	35	40	+5				
Signalling	SEU	88	92	+4				
Embankment	5cl	230	292	+62				
Underbridges	m2	50	31	-19				
Wire runs	No.	0	0	0				
Conductor rail	Km	0	0	0				

Table 8: South East route volumes delivered to date in CP6 year 1, as at Period 5.

This shows that the route is currently on target, with no notable adverse variances flagged. Some specific examples of progress within the sample of projects we reviewed:

Track – There have been, and still are challenges to delivery of post-efficient cost rates via combination of lost? access, materials supplies (British Steel) and non-availability of plant (lost opportunity for fusion welding equipment). Nevertheless delivery progress on volumes has exceeded plans to date. For example, the route's full year budget volumes for High Output is to deliver 14.7km. At Period 6 it is forecasting 15.2km. To date it has delivered 7km against a plan of 6km, with Asset Reviews evidencing progress to date.

Signalling – Volumes completed were for a scheme delivered as planned early in year 1, that was not part of our review sample. We assessed the Hither Green Re-signalling project and saw evidence of progress and detailed equipment installation metrics as evidence of preparedness for the planned Easter 2020 commissioning (the significant Signalling Equivalent Unit (SEU) key volumes fall at the start of year 2).

Buildings – Of the 26 projects programmed for delivery in year 1, 12 have started work on site and four are substantially complete. Access is noted as an ongoing risk to delivery for some of these.



#### **Leading Indicators**

We have assessed the status of the South East route in relation to Network Rail's Leading Indicator Report that provides standard measures of route preparedness for renewals delivery. We note the following:

- Year 1 financial authority stated within the report is 73% at Period 5. This is not consistent with route
  data described previously. A small part of that is expected to be Period 5 versus Period 6 data,
  however, the larger part appears to be because the report is picking up total workbank plans including
  overplanning.
- Disruptive possession access is confirmed for year 1 and the majority of year 2 (in line with the industry process for this); noting that this Leading Indicator captures all disruptive access requirements including maintenance and enhancements, not just renewals. The route flagged access risks as part of our review, which have been addressed in the delivery planning section above.

Refer to our review summary report for further details on the Leading Indicator process.

#### 2.5 Conclusions and recommendations

In this section we set out our key conclusions and related recommendations for renewals preparedness for the South East route. It is important to note, however, that these will also be considered in overall terms across phase 2 of this review, to ensure that these are aligned, as far as is appropriate, across all of the routes and regions.

# South East route conclusions

Preparedness to deliver in years 1 and 2

The South East route has demonstrated good evidence of its plans and preparedness to deliver its renewals in year 1 and 2 of CP6. It provided a comprehensive body of evidence on its workbank development and on the up-to-date status of development and delivery of these plans, and specifically in its major projects in its largest track, signalling, structures, E&P and buildings workbanks.

The route has provided evidence that demonstrates that it is currently on target to deliver its renewals costs and outputs (volumes) for year 1; and it is currently ahead of plan in its two biggest track and signalling workbanks, though with risks to other asset groups that are within the tolerances of the route's overplanning provisions. It is also progressing plans for year 2, with high levels of work already remitted to



Delivery Agents and development work and authorisation to continue throughout year 1. This finding is also supported by Network Rail Leading Indicators for both years.

We found good evidence of the management systems being operated that provide confidence that the route should prepare and deliver its year 1 and 2 renewals targets. This includes evidence of cost and delivery focus across leadership, RAM, finance and delivery teams. The PfMO is good practice providing internal route assurance of workbank delivery, working together with the RAM teams.

#### **Overlay adjustments**

Overplanning is an important and effective part of the route management system, used to ensure resilience and mitigate risk that some projects may be delayed or changed. A series of financial 'overlays' are used to manage and monitor overplanning, emerging work and to manage within the agreed budget. Additional overlays have been created by South East at asset group level for inflation and for efficiencies, to help it track these explicitly and consistently. Given the scale and dynamic nature of the renewals portfolio, this process needs careful active management and a professional assessment of progress, to counter potential optimism by Delivery Agents, risk and change every reporting period. No significant issues were identified in relation to this process within South East route, which closely manages this process.

#### Remits for delivery

The issue of remits by the route and the acceptance of these by its Delivery Agents is an important part of workbank planning and project development. It is positive that this is being tracked by the South East routes at RAM level, as this is a useful metric to indicate progress in securing approvals for renewals development and delivery that is additional to the Leading Indicator process.

#### Workbank change

Change to baseline plans (in terms of cost and volumes) is inevitable on what is a very large renewals investment programmes, valued at £2bn in CP6, and over £0.75bn in years 1 and 2 alone. The route operates a robust change control process. We did not see evidence of a significant level of change in South East's route renewals plans in year 1 to date, although we did find some instances of changes at an individual asset level from our review of sample projects, comprising planned change as well as unplanned slippage. Changes could import risk to delivery of renewals commitments or impact on workbank stability and efficiencies, although this did not appear to be a major risk for the South East route at the time of the review given the low level of change experienced in year 1 to date.



#### **Delivery variances**

Overall renewals delivery progress to date is broadly in line with baseline plans for year 1. There are some variances in terms of costs and outputs that were tracking below forecasts that do not currently give cause for concern as they are offset by positive variances in other asset groups.

#### Risks to delivery

We observed a strong risk management focus within our review of sample projects. However, we note that the route is leading some complex and challenging programmes and projects. There are still risks that may potentially be outside the tolerance that the management system, plans and overlays could cope with; so evidence of progress and planning viewed mid-way through year 1 does not guarantee delivery of costs and volumes for all of years 1 and 2.

A summary of risks flagged by the route during our review included:

- Unforeseen cross-route access impacts. For example, national prioritisation of access in late year 2.
   The route highlighted work in progress to address network impacts of the King's Cross blockade from December 2020, and flagged that its own Victoria Re-signalling programme may create similar challenges later in CP6.
- Unplanned impact from a major enhancement scheme. For example, the Croydon Area Remodelling Scheme (CARS) which is still in its infancy, and has the potential to create risk to the route's signalling workbank.
- Loss or reduction of major blockade access, causing work to be deferred. The route is leading several
  complex projects, where schedule risks remain. For example, the Hither Green signalling renewal
  scheme which is set for commissioning in April 2020, and the Victoria Re-signalling Phases 4 and 5 that
  are being developed currently on assumptions of major possessions available for 2023 and 2024.
   Smaller scale access challenges remains a risk to other workbanks, such as buildings and structures.
- Potential resource availability impacts. For example, scarce resource impacts and a risks from the planned devolution of IP Track into the regions, noting that the route is managing a tapered transition to mitigate this.
- External market factors. For example, the failure of British Steel impacted on all routes' track renewals campaigns; and which has already caused some impact on rail drops and efficiency for the route.
- Major asset failure. High impact low probability events, for example due to exceptional weather events.
   The route's Dover Sea Wall failure in CP5 is an illustration of this.



#### **Leading Indicators**

Good progress has been made by Network Rail on establishing the Leading Indicator process to give confidence of year 1 and 2 workbank plans, including in relation to year 1 and 2 data provided by the South East route. We have concluded that there remain some generic issues to resolve with this process and data, which the Network Rail centre team are aware of and are considering. These aspects are summarised in a separate phase 2 summary report setting out key themes emerging across all routes.

There are potential options for Network Rail to amend these indicators that reflect areas of focus for this review. These may include:

- Quantity of change to workbanks confirmed via route change control, which could supersede the
  workbank stability Leading Indicator, supported by a limited number of categories of change to
  differentiate reasons for these. For example, positive change to deliver efficiencies as distinct from
  unplanned slippage.
- 2. Tracking the level of financial overlays within the financial year. This would provide visibility of this aspect of financial reporting and assurance that they are reducing in line with plans as forecasts are replaced by confirmed plans and costs.
- 3. Measure and or metric for the variance between forecast and actual delivery per asset group, in terms of volume and expenditure; hence a 'lag' indicator to provide assurance of delivery within each year and highlight areas for improvements.

#### **South East route recommendations**

The following recommendations are made for the route, combining:

- Recommendations presented in the Draft Report, based on the route specific conclusions discussed above
- Recommendations arising from a cross-route consistency check, which we believe are also applicable
  to this route.

#### Preparedness to deliver in year 1

At the time of the review (Period 4-5), overall renewals delivery progress to date and full year forecasts for year 1 are reported as being broadly in line with baseline plans. Our findings and conclusions, discussed above, indicate a number of areas of risk to delivery in year 1 and we make the following recommendations:



Recommendation R1 – That the route heightens monitoring and assurance of delivery plans for asset groups that report a variance in terms of financial or volume performance compared to forecasts outputs. Should variances only emerge later in year 1, they may not be resolvable before year end.

Recommendation R2 – That the route monitors the consistency and transparency of overlay adjustments, to mitigate potential optimism and risk of changes emerging that could be hard to mitigate at late in year 1, and in subsequent years.

Recommendation R3 – That the route closely monitors, and informs ORR by exception, on the following strategic threats that are likely to be outside the tolerance of risks they can mitigate and therefore would impact on achievement of year 1 targeted levels of renewals:

- Supply chain issues, given the uncertain economic situation
- Impact of the completion of the IP transition into the routes, specifically IP Track
- Loss or reduction in major blockade access

Preparedness to deliver in year 2

The route already collates and monitors progress against remit delivery and therefore we have not made a specific recommendation for this. To note though that we have recommended Network Rail centre provides guidance to enhance consistency of remit tracking across the routes.

Recommendation R4 – That the route closely monitors, and informs ORR by exception, on the following strategic threats that are likely to be outside the tolerance of risks they can mitigate and therefore would impact on achievement of year 2 targeted levels of renewals:

- Continuation of supply chain issues given the uncertain economic situation.
- Substantial loss of access, for example due to cross-route impact on national priorities.
- Impact of any changes arising from development activity on enhancement projects, for example the CARS programme.

Leading and route progress Indicators

We have recommended to Network Rail centre further enhancements to the Leading Indicators in our overall phase 2 review summary.

Based on the findings and conclusions discussed above, we recommend that the route considers developing more progress indicators for their own use in the following areas:



Quantity of change to workbanks confirmed via route change control, which could supersede the workbank stability Leading Indicator, supported by a limited number of categories of change to differentiate reasons for these. For example, positive change to deliver efficiencies as distinct from unplanned slippage.

Recommendation R5 – That the route implements a measure or metric for reporting the quantity of changes to plans at asset level, supported by an analysis of the causes and categories of change and the risks to and mitigation of impacts on renewals targets. The lessons from these changes should also be embedded in future workbank plans to reduce the volume of future change.

Tracking the level of financial overlays within the financial year. This would provide visibility of this aspect of financial reporting and assurance that they are reducing in line with plans as forecasts are replaced by confirmed plans and costs.

Measure or metric for the variance between forecast and actual delivery per asset group, in terms of volume and expenditure; hence a 'lag' indicator to provide assurance of delivery within each year and highlight areas for improvements.

Recommendation R6 – With the appointment of a Regional Capital Programme Director, the opportunity is taken to review and improve the quality and consistency of management data across all Delivery Agents. Work to do this should be coordinated with the other recommendations in this report.



# 3. Efficiencies delivery assessment

### 3.1 Efficiencies preparedness assessment approach

#### Introduction

In March 2019, ORR confirmed its assessment that Network Rail was better prepared to deliver efficiency improvements in CP6 than it was at the start of CP5. Our Independent Reporter mandate was commissioned to further assess preparations and progress being made to deliver these plans at route level.

The mandate for the Reporter set out a high-level scope:

"The reporter should assess the preparedness of the route to deliver efficiency savings in the first two years of CP6. This should consider whether the routes have credible efficiency plans both in terms of the estimates of savings that will be achieved and plans for delivery."

To assess the preparedness of a route to deliver efficiency savings, the Reporter took a similar approach to the renewals assessment, and examined the reasonableness of the route's management system of planning, monitoring and controls of efficiency delivery. We interpreted reasonableness as meaning proportionate to the challenges and risks associated with efficiency delivery. We found in review phase 1 that efficiencies varied in terms of the scale of challenges and risks, therefore we concluded that a 'one size fits all' approach to an efficiency delivery management system should not be the expectation.

For simplicity, we sought to characterise efficiencies into a small number of categories to reflect different points on a scale of size of challenges and risks to delivery. We did this so that we could define our expectations of what is reasonable for each of the categories, i.e. the further up the scale then our expectations of the efficiencies management system being higher.



#### Efficiency delivery landscape

To explain this further, it is necessary to describe the landscape surrounding delivery of efficiency plans and some of the inherent challenges and risks.

As part of the Strategic Business Planning (SBP) process for CP6, each Network Rail route committed to efficiency savings. Network Rail centre provided a 'fishbone' framework of categories to provide consistency in the articulation of efficiency initiatives. The routes were responsible for forecasting cost savings from each initiative which were either derived as:

- A 'top-down' estimate. Largely based on asset manager expert engineering adjustment to pre-efficient costs, which were the subject of financial analysis of workbanks, in some cases supported by external expertise and modelling. The estimates may also have been subject to discussion and agreement with the relevant Delivery Agent (IP or Works Delivery).
- 2. A 'plan-based' estimate. Derived from an early understanding of a delivery and change approach which may be supported by an outline plan and assumptions'.

'Top Down' estimates in the SBP efficiencies plan were therefore effectively 'initiative targets' to be developed subsequently with implementation plans. The initiative targets were then aggregated and apportioned as post-efficient cost targets:

- For capex, to asset groups, initiatives and then deliverer agents based on the amount of work (and work type) they planned for CP6. Delivery Agents subsequently and continue to assign post-efficient cost targets to projects.
- For operational expenditure (opex), where this estimating approach has been used the targets were allocated across departments and units in the organisation structure – which are then effectively the projects that will deliver the efficiencies.

The consequence of the top-down process is that responsibility for efficiency delivery planning moves to 'project level' and, with a very large number of projects to deliver at route level, it is inevitable that this brings additional challenges:

Each project has to plan for how it will deliver its allocated post efficient savings target. That may
require the project to implement multiple different efficiency initiatives, each requiring its own
implementation plan. i.e. the number of implementation plans required to deliver the original SBP
'initiative target' has multiplied.

In contrast to other efficiency initiatives where responsibility stays at a programme, deliverer or delivery unit level that will require one implementation plan to deliver one initiative.



- Efficiencies forecasts are developed at project level on an emergent basis as projects are developed.
- Ongoing reconciliation of project level emergent efficiency forecasts is required with the original 'top down' targets and fishbone categories, in order to reconcile against the Efficiency Tracker and provide assurance that efficiencies will be realised.

The risks to delivering the efficiencies plan are also greater due to:

- The responsibility for delivery of efficiencies has been delegated and distributed across the route Delivery Agents (IP or Works Delivery) and project managers, i.e. it is now dependent on more people to achieve.
- A Project Manager could now be responsible for embedding several efficiency initiatives to achieve their overall target cost savings, i.e. their understanding and competence required has now also increased.
- The level of complexity of embedding an initiative into a project varies:
  - **'Simple'** The efficiency initiative has already been enabled by others and there is minimal activity or change required to implement it in a project.
  - 'Not simple' The efficiency is still to be enabled by the team or others and requires explicit activity or change by the project to implement it. For example, 'challenge standards', 'change scope' is up to the Project Manager to deliver and enable.
- The efficiency forecasts emergent from developing project efficiency delivery plans may not aggregate up to achieve the overall efficiency targets.

#### **Efficiency categories**

Building on an understanding of the challenges and risks set out above, and for the purpose of setting out our expectations of a proportionate Efficiencies Management System, we have defined the following categories of initiatives:

- (A) Capex, minimal (or completed) enabling activity. For example, Contract Rate Reductions.
- (B) Capex, requires considerable enabling activity to implement in a project. For example, Possession Utilisation efficiencies.
- (C) Opex, minimal enabling and implementation activity. For example, Route Services SCO Rate Card efficiencies Haulage.
- (D) Opex, requires considerable implementation effort. For example, Organisation Restructure.



#### **Efficiency Management System expectations**

We see routes' Efficiency Management Systems as comprising attributes at three levels:

- 'Project level'. A project is the means by which efficiencies are realised. For example, savings achieved by an individual Oracle Project.
- 'Initiative level'. Where changes necessary to realise efficiencies are designed, developed and change
  enabling outputs (enablers) are delivered. Projects use enablers to make their changes to realise
  efficiencies. For example, where an efficiency initiative can be applied to multiple projects, such as
  Optimisation of Access.
- 'Portfolio level'. Where overview, coordination and assurance of multiple projects and initiatives happens.

Our expectation is that the level of planning and management at 'project level' and 'initiative level' is proportionate to the size of the challenge and risk associated with delivering efficiency targets. We defined efficiency Categories A to D above to reflect varying levels of challenge and risk associated with different initiatives. In Table 9 we have defined our expectations of planning and management features at both a 'project level' and 'initiative level' for each of the four Categories A to D. Routes overall efficiency plans will comprise all four categories and therefore we have also defined our expectations of features at 'portfolio level' as common to all four categories. If an initiative is comprised of sub-initiatives, then the category can be applied at the lower level. When we are examining our samples of different efficiencies at a route we will seek evidence of these features and that they are being used appropriately.

Efficiency Management System feature	Сар	ех	Opex				
Category degree of enabling and implementation complexity	(A) Low	(B) High	(C) Low	(D) High			
Project level:							
1. Efficiencies delivery plan (note 1)	Minimal	YES	Minimal	YES			
2. Efficiencies forecast documentation (note 2)	YES	YES	YES	YES			
3. Post implementation review of actual efficiencies achieved (benefits realisation)	YES	YES	YES	YES			
4. Change management plans (note 5)		YES		YES			
Renewals Initiative level:							
5. Initiative delivery plans (note 3)	Minimal	YES					



Efficiency Management System feature	Сар	ех	Opex		
Category degree of enabling and implementation complexity	(A) Low	(B) High	(C) Low	(D) High	
6. Initiative forecast plans (note 4)	YES	YES			
7. Initiative change management plans (note 5)		YES			
Portfolio level: (asset group, Delivery Agent, route)					
8. Validation of emergent efficiencies with forecast targets (traceable to fishbone tracker line items)	YES	YES	YES	YES	
Assurance function to assess project / initiative efficiency level delivery	YES	YES	YES	YES	
10. Portfolio Management / Change Management support (note 6)	YES	YES	YES	YES	

Table 9: Proportionate planning and management of efficiency delivery by initiative category

### Notes on the Table:

- 1. Efficiency delivery plan for each project, for every initiative should include (as a minimum):
  - Description of efficiency initiative (granular level of business change) and rationale
  - Description of how it will generate efficiency
  - Action plan/implementation plan with milestones and dates for enabling efficiencies
  - Identified risks with corresponding mitigations
- 2. Efficiency forecast documentation for each project. We would expect to contain forecast calculation with underpinning detail, record of assumptions, rationale and time phasing.
- 3. Efficiency enabler delivery plan. We would expect to see resources assigned, and should include (as a minimum):
  - Description of efficiency initiative (granular level of business change) and rationale
  - Description of how it will generate efficiency
  - · Action plan/implementation plan with milestones and dates for enabling efficiencies
  - Identified risks with corresponding mitigations
- 4. Initiative forecast plan. We would expect to contain forecast calculation with underpinning detail, assumptions, rationale and time phasing.



- 5. Feature 7 is required to ensure that all the change management enablers are being delivered at the 'initiative level'. These enablers will be used at project level to underpin their change management plans, Feature 4. Where required, change plans should be supported with adequate resources to assist implementation.
- 6. Change management support for the project level to implement common changes across their portfolio, including owning and disseminating good practice, organising training and knowledge sharing.

#### 3.2 Route review context

Our review of the South East route was undertaken at the end of August and beginning of September 2019. It was led for the route by its RFD, DRAM, Route Financial Controllers, Head of Portfolio Management Office, and evidenced through meetings and documentation from RAM (for capex efficiencies) and initiative owners (for opex efficiencies). For key reference forecast data, we reviewed the route's Period 4 2019/20 (RF4) efficiency forecast relative to the RF11 baseline efficiencies agreed as a result of the final determination.

To assess the preparedness of the route to deliver efficiency savings in the first two years of CP6, the Reporter considered the routes' latest opex and renewal (capex) efficiency plans. We reviewed the overall quality of these plans, whether the efficiency forecasts appear reasonable based on those plans, and whether they are consistent with the routes' agreed allocation within the £3.1bn total of efficiencies within the ORR's final determination for CP6.

# 3.3 Assessment scope

Our review focused on 'material efficiencies' as per the review mandate. For consistency of approach across all routes, we adopted sampling principles to select the:

- Top three capex efficiencies by value for years 1 and 2, plus assessing relevant efficiencies identified from our review of renewals describe previously.
- Top three opex efficiencies by value for years 1 and 2.
- Intelligent Infrastructure and SCO, where they existed, to gain a view of how these central initiatives were managed from within the route.



We also assessed a substantial body of information provided by the route for capex efficiencies related to sample renewals projects from the top four workbanks assessed as part of this mandate. These efficiencies cover both Category A and B initiatives.

Table 10 summarises the sample we reviewed for the South East route, together with the route's efficiency forecasts as at RF4 in year 1 of CP6. We have also referenced our efficiency categories, as described in section 3.1 of this report.

						Efficien	cy (£m)			%
Category	Туре	Initiative	Asset	FY20	FY21	FY22	FY23	FY24	CP6	year 1 2
А	Capex	Improved contracting strategies/rates	Signalling	-	1.0	2.4	5.4	7.5	33.2	1%
А	Capex	Improved contracting strategies/rates	Signalling	1.3	-	-	-	-	9.5	2%
А	Capex	Improved contracting strategies/rates	Civils (earthworks / structures)	-	2.8	4.0	2.2	0.8	22.1	4%
А	Capex	Improved contracting strategies/rates	Track	-	3.4	4.3	6.6	7.6	8.6	5%
А	Capex	S&C Scope relative to baseline	Track	3.1	-	-	-	-	5.5	4%
D	Opex	Operations Headcount	Maintenance	4.1	6.1	7.1	7.6	8.3	16.3	24%
D	Opex	Maintenance Access Planning	Maintenance	0.6	2.1	2.2	2.2	2.3	1.3	6%
D	Opex	Maintenance Property strategy	Maintenance	2.1	3.8	4.8	5.6	5.9	9.8	14%
С	Opex	Maintenance Route Services	Maintenance	0.2	1.3	1.8	2.4	2.7	21.9	4%
D	Opex	Maintenance MMT	Maintenance	1.0	1.1	1.1	1.1	1.2	3.1	5%

Table 10: South East route CP6 Period 4 efficiency sample



# 3.4 Assessment findings

We have set out our findings using the structure from the mandate:

- a. Quality of the description of business change and how it will generate efficiency
- b. Calculation of the forecast efficiency
- c. Arrangements for monitoring progress in implementing business changes
- d. Approach to risk identification and management
- e. Identification / documentation of limitations in forecasting and lessons learnt in efficiency plans

#### a. Quality of the description of business change and how it will generate efficiency

In assessing the quality of business change descriptions, we took into consideration the proportionality principle recognising that some initiatives rely on business change to realise efficiencies and others do not. For example, a new contract framework (Category A) has minimal reliance on business change compared with implementing new maintenance technology and associated work practices (Category D). However, our review still sought evidence of documentation for all initiatives as to how each will generate efficiencies and what actions are required to enable and release efficiency benefits.

In our extended sample of efficiencies for this route there were multiple Category B and Category D initiatives which require, or potentially require, business change and therefore need descriptions of that business change and how it will generate efficiency. For other initiatives within our sample that do not rely on business change (Category A or C), we looked at the quality of the project level Efficiencies Delivery Plans ('what activity' and 'how it will generate efficiency').

We have considered evidence in terms of the capex and opex efficiencies that we assessed within the South East route.



#### Capex efficiencies:

We found marked variations in the quality and level of detail of the description of capex efficiencies and business changes, and how they will generate efficiency. Our expectation was that this evidence would comprise a proportionate level of detail, with more information for large value, complex or longer-term changes, versus lesser information for smaller and simpler changes or those with well-defined enabling activity to secure efficiency benefits. While evidence indicated that the rationale for capex efficiency initiatives was well founded, we did not find sufficient granular information for the larger, complex (Category B) efficiencies, detailing for example the 'what' and 'how' of each in granular terms, with proportionate plans to support each initiative.

Within major signalling projects we saw evidence of developing detail for efficiency initiatives, notably for the Victoria Re-signalling programme, that is currently in development, with efficiency plans established in or from year 2 that are expected to be generated as the project is deployed in three programme phases throughout CP6. We assessed the IP Signalling 'Efficiency Plan on a Page' (EPOPs) for the first phase. As above, the level of detail is varied, and where more underpinning detail was expected in order to provide confidence in these plans and the assumed efficiency targets. For example for Victoria Re-signalling Phase 3 we saw some underpinning detail to support the following four high value efficiency Category B initiatives, but these did not include specific details on how the efficiency would be enabled. These initiatives include:

- Category B Re-use of existing equipment, gantries etc (£2.8m).
- Category B S&C ladder works (design etc) subsumed within project costs (£2m).
- Category B Design development, incorporating enhancements early (£2m).

For other examples for Victoria Re-signalling we did not see underpinning detail to support the efficiency initiatives. For example:

- Category B Descope non-signalling specialist / minor works items [and] package works for better suited deliverers (£2m combined across all phases).
- Category B Condensed commissioning possession strategy (£1.3m).
- Category A/B Packaging of smaller work packages to suit SME supply chain opportunities (£3m combined across all phases).

This project is at GRIP stage 3, with a design and build contractor to be appointed, so the route can and intends to develop its plans in more detail.



The route confirmed that these EPOPs are and will continue to be developed as the project progresses, although we note that many of the suggested initiatives relate to early stages of GRIP development, which would therefore be a priority, to mitigate the risk that opportunities are lost.

We also saw a large number of templated 'Plan on a Page' capex efficiency summaries spread across the route's asset groups and projects that are being used to drive planning and delivery. These provided a good, structured approach to documentation, including for efficiencies secured in year 1 to date, although again where the level of detail was not proportionate for more complex items.

Our sample included the Category A efficiency initiative 'Improved contracting strategies/rates including packaging of works'. We assessed plans for delivery within civils (earthworks and structures asset groups) in year 2. The £2.8m value for this is based on the top-down SBP target. The route has developed efficiency plans which total approximately 50% of year 2 targets and are continuing to develop plans for the remainder, as relevant projects are developed. Until these further plans have been substantially developed the route will continue to report the SBP target.

We reviewed evidence of capex efficiency initiatives within buildings and in civils (earthworks and structures) asset groups to support year 1 and 2 efficiencies. For each project in our sample a Project Efficiency Form has been developed, which includes a description of workstream and action proposed to realise the efficiency. While this templated document is a positive feature, there is generally a limited level of detail provided as evidence of plans and the deliverability of these within each descriptor; for efficiency initiatives associated with 'Improved contracting strategies/rates including packaging of works' examples include:

- Category A Contract bundling reduce administration (£0.3m).
- Category A Single framework reduced overheads due to increased volume of workload through a single contractor (£0.3m).

We note that these are relatively small individual sums, so would expect a proportionate amount of detail on respective efficiency plans, although a large number of such items are spread across the route's asset groups that aggregate to a much larger efficiency target in each year.



Detailed documentation and information is not needed or proportionate in all cases. Track capex efficiencies of £23.1m (a mixture of Category A and B), in years 1 and 2 and throughout CP6, are based on reduced cost rates, calculated using national programme models developed by IP Track for all routes. These have been contractualised and applied to the route's delivery plans for a number of track renewals projects and programmes, several of which were sampled in our review, to derive a 'post-efficient' cost rates. The route monitors costs as evidence that it is meeting post-efficient targets. There is therefore less need for detailed explanation on implementation and change activity. We note, however, that it was not possible to verify the overall status of each efficiency initiative embedded within the track programme, as these efficiencies are mapped to a large number of component projects.

# Opex efficiencies:

We found good examples of well-documented Category C and D opex efficiency initiatives that identify and explain the proposed changes, and that are consistent with forecast savings. The route use a templated 'plan on a page' approach to document opex efficiency initiatives that detail the description of the business change(s) proposed in years 1 and 2, and CP6 overall, how these drive cost efficiency, the financial savings (i.e. target), high-level milestones for enabling activity and notable risks and mitigations. The plan on a page is supplemented by a calculation sheet which provide underpinning detail to support the forecast efficiency values. Of the sampled efficiencies, we saw evidence of the plan on a page being applied to Mobile Maintenance Train, Operations Headcount, Property Strategy and Access Planning initiatives. The route has also adopted the SCO Route Services' plan on a page for relevant National Programme Initiatives.

## Overall route:

The route has a strong efficiencies culture to help drive its efficiency plans. The South East efficiency programme is well supported by 'Framework 42' for its delivery plans for CP6. A core theme within this framework is 'proud to be more efficient'. This promotes a culture of efficiencies throughout the route, through collaborative working (including with delivery teams), clear ownership of delivery plans, and consistent and robust reporting. This culture and focus on efficiencies was apparent in our route fieldwork and review of evidence. South East has introduced an efficiencies hopper to encourage and promote new efficiency ideas, which are reviewed by its Route Efficiency Working Group. We saw examples of how this was encouraging people at all levels to share ideas for efficient ways of working and of a continuous improvement culture.



Evidence indicates that the route has the tools and processes needed to further develop the detail on its efficiency plans. We saw evidence that the route is continuing to develop and document underpinning efficiency details, notably for capex efficiencies; for example using the IP Signalling EPOP and the Project Efficiency Form, and to populate the content of these with more granular detail, specifically to support year 2 efficiency targets, and to make this information and the actions required as a result available and clear to route and its Delivery Agent teams.

# b. Calculation of the forecast efficiency

We assessed the calculation of forecast efficiencies for our sample of initiatives, including the definition and justification of inputs to estimates, assumptions, methods and, where appropriate, the consistency of these with the approach agreed by Network Rail's cost benefit working group. Consideration of the uncertainty and risk within these forecasts and their delivery is covered in section (d) on 'approach to risk identification and management'.

As discussed earlier the responsibility for forecasting efficiencies is undertaken at 'project level' on a project by project basis where the SBP efficiency was derived 'top down' and at 'initiative level' if it was 'plan based'.

We have considered forecast calculations for the capex and opex efficiencies we assessed within the route.

## Capex efficiencies:

There is a significant variation in the level of detail provided on capex efficiency calculations to justify the forecasts provided. We expected the calculations underpinning efficiency forecasts to vary depending on the scope, scale, maturity and complexity of each efficiency. In this respect, we did not see evidence to justify forecast savings in many of the larger value items. This particularly applies to capex efficiencies in year 2, notably for projects that are at development stage, that are forecast based on high level targets with no underpinning detail or calculations. For example:

Civils (earthworks and structures) - Improved contracting strategies/rates (£2.8m, year 2).

Buildings – Improved contracting strategies/rates (£1.7m, year 2).

This lack of efficiency calculation evidence was not universal, however. We saw some good examples in Plan on a Page documents. We also saw examples of calculations that were based on application of RAM team knowledge and data. For example on the Victoria Re-signalling Phase 3 project:



- Consider re-use of structures and locations / existing equipment where practicable (£2.8m) This value
  is based on existing unit costs data, to derive a saving of just over £450k per structure and assumed reuse of six structures.
- Insulated Rail Joint (IRJ) recoveries (£1.5m) This value is based on a 50% saving by delivering via Works Delivery.

**IP** Signalling efficiency forecasts are being developed to respond to top-down targets set as part of the baseline plan. Targets are based on outperforming pre-efficient (CP5) costs that are benchmarked in terms of SEUs rates. The route's EPOPs are being developed with bottom-up detail on potential activities and initiatives that contribute to the target.

IP Track efficiencies are derived using nationally developed calculation models and contracted framework rates, which provides a good calculation basis. This underpins the improved contracting strategies and cost rate initiative within our sample, for example justifying the S&C efficiencies that make up £6.5m of the route's year 1 and 2 forecasts. These flow through into post-efficient cost rates for track renewals work delivered by IP Track.

**South East route has created separate efficiency targets within its financial monitoring framework for CP6.** These are a bespoke 'overlay' for the majority of its asset groups, applied to portfolios as distinct to specific projects (hence not applied to the track or signalling workbank). This ensures clear line of sight to efficiency targets RAMs are responsible for delivering over the course of CP6. This is relevant to unremitted or 'stretch' targets for years 3 to 5 of CP6.

#### Opex efficiencies:

The route evidenced a number of good, detailed calculations for the opex initiatives. These were underpinned by cost rates norms for resource and equipment as calculation inputs, and forecast savings annually profiled throughout CP6. The majority of forecasts relate to CP5 experience and data. For example:

- Operations Headcount, delivered by maintenance (£10.2m year 1-2 and £16.3m CP6) The calculation uses a detailed CP5 baseline to determine the efficiencies created by reduced headcount.
- Mobile Maintenance Train (MMT) (£2.1m year 1-2 and £3.1m CP6) The calculation is based on a cost comparison to traditional DU delivery, which removes the need for multiple shifts, weekend abnormal or disruptive possessions. The route has also taken a prudent approach in its forecast calculations, incorporating recent outturn staff and possession costs for the MMT.



The route works with the Benefits Calculation Working Group (BCWG), attending meetings where calculations relevant to the route's national initiatives such as SCO are reviewed, challenged and adopted as appropriate by the routes. The route also uses this meeting as an opportunity to raise any queries and use the team as a sounding board for locally calculated initiatives.

# c. Arrangements for monitoring progress in implementing business changes

We assessed the arrangements for monitoring progress in implementing efficiency plans at 'project level' and also delivery of business change enablers at 'initiative level', to consider if there is clearly documented evidence of appropriate governance and oversight. Our focus was not on monitoring progress in achieving just cost efficiency savings targets at 'project level'.

There is good evidence that the route has established governance arrangements for efficiencies. Regular monitoring is undertaken by the Route Efficiency Working Group, Deep Dive efficiency reviews, Capital Works Delivery Board, Signalling Efficiencies and Headwinds meetings, Portfolio Management Office Asset Reviews and Investment Panels. These meetings provide senior oversight and review of the overall governance, planning and reporting of efficiencies as well as challenge and support to the delivery of efficiency initiatives, focusing on progress to date, plans for the future and any risks which require escalation.

The route also provided evidence of the 'tie-back' used to provide line of sight from the many individual efficiencies reviewed to the overall route Efficiency Tracker.

We have considered monitoring arrangements for capex and opex efficiencies assessed within the route.

## Capex efficiencies:

Monitoring and reporting of capex efficiencies is via a combination of tracking project-level plans and post-efficient project costs. We saw evidence of tracking and reporting of efficiencies via project level plans for less complex projects. As stated previously, however, major renewals projects and annual programmes are driving to their post-efficient budgets assuming that if they deliver to its post-efficient budget, then their efficiencies will also be delivered. In line with this approach, financial monitoring is via tracking the project post-efficient Anticipated Final Costs (AFCs) with efficiencies accrued in line with Cost of Work Done (COWD). However, the reasons whereby a project cost evolves above or below its AFC will be due to a number of factors (for example, scope and schedule change, and risk) so while this provides some monitoring assurance this is not comprehensive. For example, the track workbank monitors its actual



cost rates for plain line and S&C delivery in year 1, to compare these with pre-efficient rates and post-efficient targets. While this provides a clear comparison, these outturn costs are also a function of risks and headwinds experienced. The route is currently transitioning from top-down post-efficient monitoring of efficiency targets to bottom-up tracking of efficiency forecasts from each project.

There is evidence of monitoring of the implementation of capex efficiency initiatives. Quarterly Finance Days and weekly Deep Dive reviews are undertaken, to monitor post-efficient costs, where initiative owners present the status of efficiency delivery. These enable the route to track progress, flag issues and risks arising and actions needed as a result.

Whilst this is good practice, we saw limited efficiency plans, implementation schedules, tasks and milestone data to underpin this; most notably for the larger Category B efficiencies. This makes the monitoring and tracking of delivery progress more difficult. The route has identified this as an area for improvement in year 1.

# **Opex efficiencies:**

There is good evidence of monitoring plans, implementation progress and business changes for opex efficiencies. Initiative 'plans on a page' documents, action plans, supporting milestone dates, risks and issues, forecast savings and success criteria provide a good basis for tracking and monitoring efficiencies. These are reviewed regularly at PBRs, the Business and Strategy Board, the Route Efficiency Working Group and Deep Dive efficiency reviews.

# d. Approach to risk identification and management

We looked for evidence of the route's approach to the management of risks to its efficiencies plans, including its assessment of uncertainty in its forecast savings.

We did not see significant evidence of quantification of risks to both capex and opex efficiency forecasts. For example, in identifying and applying risk-adjusted, range estimated and or probabilised impacts on benefits. Some consideration of cost risk to efficiencies is implicit in forecasts as these are estimated by initiative owners and teams based on experience and engineering judgement as a 'most likely' assessment of benefits, although it is not possible to verify this from evidence or to quantify the degree of certainty or uncertainty embedded within these values.

We have considered risks to efficiencies for capex and opex efficiencies within the South East route.



#### Capex efficiencies:

There is limited documented evidence of the management of risks to capex efficiencies. However, we saw evidence that the route's efficiency governance and assurance forums provides oversight of risks to efficiencies. There is also good evidence that RAM and renewals governance groups and PfMO asset reviews described in the renewals section of this route report, also provide oversight of risks to delivery against post efficient cost budgets, albeit these are focused on other project development and delivery factors. This emphasis on cost and delivery risk provides some level of assurance on risks to efficiencies. However, managing risks to post-efficient budgets does not provide sufficient management of risks to efficiencies, and is not well documented in the evidence provided. For example, it does not track the progress of key enablers into the more complex capex efficiencies, Category B.

We found some evidence of risks to efficiencies in renewals project documentation, although not in detail and which did not provide any indication of the probability of risks, their impact or proximity, or whether they are live, mitigated or retired.

Examples of risks identified at high level as being managed within the route's track programme that are affecting its year 1 and 2 efficiencies and post-efficient costs include:

- Uncertainty of the outcome of the national access deconfliction process for December 2020, potentially
  affecting haulage costs and resources.
- The collapse of British Steel, which has affected rail drops.
- Delayed deployment of fusion welding and Mobile Flash Butt Welder equipment.

An example within the route's signalling programme included:

 Victoria Re-signalling programme – Risk to the proposed re-use of structures if refurbishment and maintenance costs rise and so limit the useful life of these to less than 10 years; and risk that the consolidation of work plans requires additional possessions or misalignment with track S&C timescales.



## **Opex efficiencies:**

There is evidence of risks being identified and managed for opex efficiency initiatives. Key risks have been identified for each initiative, together with mitigating actions, owners and a risk RAG (Red, Amber, Green) status. For example, in years 1 and 2:

- Mobile Maintenance Train Risks defined include machine reliability, for which the mitigating action is
  to work with Route Services to address this, and to ensure there is a stand by machine in place and for
  Route Services to contracts for supply chain critical spares.
- Operations Headcount Risks defined include 'Resource manager capacity' for which the mitigating
  action is 'identified a requirement for additional roster clerk resource to enable Resource Managers to
  fulfil core role: additional roster clerk posts have been created and are being filled.
- Access Planning Risks defined include 'Inability to obtain operator agreement for access that supports CP6 renewals and maintenance plans' for which the mitigating action is defined as 'regular reviews of deliverability of IP and capex workbanks based on access requirements along with maintenance cyclical access plans. Engage in pro-active and forward looking discussions with operators. Escalate issues as required'.

There is also evidence of consideration of risk in considering the scope of opex efficiencies. For example, no Intelligent Infrastructure efficiencies are currently proposed in baseline plans. The route considered forecast efficiencies provided by the National Programme Team, but have not included these as they do not have sufficient confidence in delivery and thus when efficiency benefits could be realised. The route is supportive of the programme, however, and expects to develop efficiencies plans when they have more certainty, although not to be realised within years 1 and 2 of CP6.



e. Identification and documentation of any limitations with the approach for forecasting efficiency, how lessons learn have been incorporated into efficiency plans and whether ORR and Network Rail are considering the right factors in providing assurance that Network Rail is on track to deliver its efficiency plans

## **Forecast limitations**

We have found that the forecasting of many efficiencies, notably in capex, is largely financially focused and is derived from a 'top down' allocation of a post-efficient cost targets to Delivery Agents and then further allocation to projects. Efficiency forecasts are then developed at project level in response to the targets. If the project level forecast is underpinned by a project efficiencies plan then it will be a more robust forecast than the original 'top down' allocation. Asset group and route level forecasts contain a mix of both types of forecast.

## **Lessons learnt**

We saw evidence that the route is aware of and utilising lessons learnt within its CP6 plans, although limited evidence that the route has a defined and documented approach to incorporating lessons learnt specifically within its efficiency plans. We noted the following where lessons learnt have been included:

- There is good evidence that learning is implicit through experience and engineering judgement, and via the route's governance and assurance forums.
- The route incorporated lessons learnt from CP5 in order to develop its CP6 plans and targets, including the use of national calculators, the Infrastructure Cost Model (ICM) model and the Activity Based Planning (ABP) models.
- The route regularly attends the BCWG to learn from and provide feedback on the use of efficiency calculators.
- Lessons learnt are set out in Investment Panel papers, which is good practice.

# Factors for providing assurance that Network Rail is on track to deliver its efficiency plans

We consider that an increased focus on monitoring of change management plans, initiative enabling activities, forecasting, monitoring and risk are appropriate for planning and delivery of what is a very significant efficiency programme. We have also suggested taking a proportional approach to focus this increased focus on the Category B and D initiatives which are the most challenging and higher risk of achieving their forecasts.



# Conclusions and recommendations

This section draws together our conclusions from our review of efficiencies within the South East route and provides recommendations for ORR and Network Rail to consider. We have structured this section under the headings in the Reporter's mandate:

- Quality of efficiency plans
- Reasonableness of savings forecasts, based on efficiency plans
- Consistency of total efficiencies with final determination

## Conclusions - Quality of efficiency plans

We defined our expectations of planning within the context of an overall Efficiencies Management System which is described in our assessment methodology at the start of this section. In answering this question, we have sought to consider proportionately and seek evidence of quality in efficiency planning where we believe it is most needed, for example in our categorisation of efficiencies it is Category B (capex) and D (opex).

Our conclusions and recommendations from our review of a sample of initiatives are:

The route has a well-established efficiency culture

The route's efficiency plans are well supported by its Framework 42 workstream 'Proud to be more efficient', which has the goal to create an efficiency culture throughout the route, and a robust management system with evidence of good focus on efficiencies, including separate inflation and efficiency overlays, to give visibility of targets at asset group level. The route is further developing its plans, recognising that fully embedding its efficiency culture within the organisation will takes time.

Capex efficiency plans need further development

We saw evidence that the route's efficiency initiatives were well-founded during the CP6 business planning process, drawing on CP5 data and learning, high-level plans and estimates developed by RAMS and wider teams, together with validation and assurance at DRAM and RFD level. It has appointed dedicated initiative owners, who are supported and overseen by assurance from delivery through to executive level.



The efficiency target has started to be developed into detailed efficiency plans which are gaining maturity, but are not yet fully detailed, particularly for the large scale efficiencies, noting that the level of detail should be proportionate to the size of the challenge and risk associated with delivering efficiencies, and not defined generically. More work can be done to improve the level of detail of these, notably in capex, in order to provide a means to track efficiencies and give further assurance that the benefits will be realised.

Timing is also relevant. The level of detail in efficiency plans and documentation is lower for year 2 targets, where projects remain to be developed, remitted and authorised. The route has some time in year 1 to finalise its efficiency plans for year 2. Within opex efficiencies in our review sample, we found that these were generally better developed as defined business changes and are planned as projects, with dedicated resources in place to manage them. The documentation included a proportionate level of information for each initiative with detailed descriptions of the business change, how the initiative would generate an efficiency, implementation details and identified risks.

The route operates efficiencies governance and assurance arrangements

The route has a number of well-established meetings, including the Route Efficiency Working Group, Deep Dive efficiency reviews, Capital Works Delivery Board, Signalling Efficiencies and Headwinds meetings and Portfolio Management Office Asset Reviews. These provide assurance and senior management oversight of projects and efficiency initiatives. There is, however, limited detailed information to support monitoring and assurance of these, which is an area the route is aiming to strengthen.

Efficiency reporting does not include mature line of sight assurance

The rolling forecast efficiencies data is aggregated from across all asset groups and projects into the route Efficiency Tracker by the Route Financial Controller (Capital). The route provided a helpful 'tie-back' to provide a line of sight from the Efficiency Tracker to a number of the project AFCs and efficiency initiatives we examined within this review, although does not yet capture granular monitoring data for all efficiencies.



#### Conclusions - Reasonableness of savings forecasts, based on efficiency plans

Capex efficiency forecasts vary in quality

The top down efficiency targets has started to be developed into detailed efficiency plans and calculations at a project level which will help to inform whether individual the top down initiative forecasts are achievable. We found varying degrees of quality in relation to the documentation of forecast calculations at a project level including the sources of inputs, assumptions and treatment of risk, making validation of the reasonableness of forecasts difficult.

Within capex efficiencies in our sample, there are notable examples of efficiencies with relatively little detail on underpinning calculations, particularly within capex year 2 efficiency initiatives which are not yet broken into individual business changes with corresponding bottom-up estimates, and year 2 projects that are not yet fully developed and authorised. Whilst tracking against renewal project AFCs offers some assurance, it does not give sufficient visibility of all of the factors which have contributed to this. For example efficiencies, inefficiencies, headwinds, tailwinds, scope change.

Of the opex efficiencies in our sample, calculations were more comprehensive with underpinning detail including inputs, sources and assumptions to support most calculations. The route are also working closely with Route Services to ensure that the forecast calculations for SCO are robust and achievable. It is noted that the route have taken a prudent and cautious approach to Intelligent Infrastructure, having not forecast any efficiencies in CP6 until further work has been done with the National Programme Team to establish and validate the perceived benefits of the efficiency initiatives proposed.

## Conclusions - Consistency of total efficiencies with final determination

The route has set out plans that are consistent with its agreed share of Network Rail's target for CP6

As summarised in Table 11, South East's baseline commitment for CP6, as defined at RF11 of 2018/19 was for £297m of capex efficiencies and £131m of opex efficiencies, totalling £427m. At the time of our review, as defined at RF4 of 2019/20 the route had re-allocated its forecast between capex and opex efficiencies.



	FY20	FY21	FY22	FY23	FY24	CP6
RF11 £m	46.1	70.0	91.6	113.0	106.7	427.4
Capex	29.8	45.2	63.5	82.8	75.5	296.8
Opex	16.3	24.8	28.1	30.2	31.1	130.6
RF4	46.3	68.4	89.6	110.8	108.6	423.7
Capex	29.9	42.5	59.3	77.2	72.9	281.8
Opex	16.5	25.9	30.3	33.6	35.7	141.9
% change	0%	-2%	-2%	-2%	2%	-1%
Capex	0%	-6%	-7%	-7%	-3%	-5%
Opex	1%	4%	8%	11%	15%	9%
P4 Yearly Profile	11%	16%	21%	26%	26%	100%
Capex	11%	15%	21%	27%	26%	100%
Opex	12%	18%	21%	24%	25%	100%

Table 11: Comparison of RF11 and RF4 route efficiencies\*
\*This data is inclusive of Efficiencies and Activity/Scope Efficiencies

The primary adjustments made between RF11 and RF4 are summarised as follows:

Reduction in capex efficiencies forecast – The route has reviewed and increased its Rail Milling Activity/Scope Efficiency by £23m following the adoption of a new rail milling model; and removed the £37m provision for 'Reduced Activity due to Technology in Signalling' pending further review work with the central team on the calculation of this initiative.

Increase in opex efficiencies forecast – The route's RF11 data was submitted using an incorrect price base. This was subsequently updated to cash prices in RF11, resulting in an increase of £11m.

The net effect of these is a forecast reduction of £4m for CP6 overall, or £2m as forecast within years 1 and 2 combined.



#### Recommendations

# Recommendation E1 - Enhance and develop efficiency plans, including forecast calculations

The route should develop and enhance their existing efficiencies plans to include further detail articulating, in SMART<sup>2</sup> terms, each of:

**Business change** – Defined plans for a programme of activity to deliver efficiencies and details of things the route has done or is preparing to do differently (enablers) to generate efficiencies.

Forecast – Key inputs, sources, calculation method, assumptions, and any risk adjustment and basis for profiling realisation of benefits.

Implementation plan – Key activity, actions required, owners, resources, schedule and key milestones.

Risk – Identification of key risks to achieving the forecast efficiency and mitigations.

When the route implements this recommendation we suggest it:

- Ensures that the level of planning and documented detail should be proportionate to the scale and complexity of the efficiency i.e. more for the Category B and D initiatives and less for Category A and C.
- Provides guidance using templates, and completed examples to help illustrate the appropriate level of documentation required.
- Maintains a clear log of the version and change control, status and maturity of each plan and to define
  and quantify its alignment with the route Efficiency Tracker. This should be proportionate to the scale
  and complexity of the efficiency initiative.

Recommendation E2 – Enhance and utilise existing templates to improve consistency of efficiencies documentation at the project level across the route

The route should enhance their existing EPOP and Plan on a Page templates and utilise these across the route to capture a sufficient level of detail for their efficiency plans.

Recommendation E3 – Strengthen the focus on efficiency enablers implementation plans at the initiative level

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<sup>&</sup>lt;sup>2</sup> SMART: Specific, Measurable, Attainable, Relevant and Time-bound.



The route should strengthen their assurance and monitoring focus on implementation plans for enabling activities and change management products required to deliver efficiencies at the project level. This will provide more visibility on the progress of key efficiency enablers and allow for early intervention and action.

# Recommendation E4 – Provide greater line of sight from project level efficiency plans and forecasts to the Efficiency Tracker

For each efficiency initiative (as identified in the route Efficiency Tracker) the route should log their subinitiatives with their corresponding values, profiles and project, portfolio and programme ID in a master schedule, to provide traceability on how they contribute to the route Efficiency Tracker and a more granular breakdown of efficiencies.

The route should implement its suggestion to monitor efficiency delivery at set points, for example as an input to its Quarterly Finance Days, and at project close-out. These can track and give clarity to all of the factors which make up project AFCs, including efficiencies, inefficiencies, headwinds and tailwinds.

# **Summary**

We have provided below a summary of the routes preparedness to deliver its efficiency plans against headings requested at the mandate Steering Group.

# **Programme**

South East has a clear culture of efficiency that is sponsored by route management. There is more to be done to establish a programme approach to its efficiencies for CP6. The plans to deliver efficiencies for years 1-2 are being developed, with further undefined and 'stretch' targets required to be developed for later years. The route has made some progress in identifying bottom-up, at a project level, for capex efficiencies in CP6. However, capex efficiencies need more development of a proportionate granular level of detail on implementation, specifically where the efficiency is dependent on initiative enabling activities and or change management. This detail could then provide a means for tracking and monitoring delivery of initiatives outputs to provide the route with further assurance that project efficiencies plans are deliverable.

South East's opex efficiencies programme is well-structured as project led initiatives, with dedicated resources managing them.



#### **Forecast**

The majority of South East's capex efficiencies were set based on post-efficient targets arising from a top down allocation process. While bottom-up forecasts have been developed for some projects, there is varied and, in general, insufficient detailed evidence to substantiate these efficiency forecasts. For project efficiency forecasts, reliant on the more involved capex initiatives (Category B), there is a need to plan how the benefits of the initiative will be realised for the project. This will become increasingly important for year 2 and beyond when the plan depends on a number of larger value Category B initiatives.

Some assurance can be derived from the route's cost and delivery focus on the major renewals projects, that have embedded cost efficiency targets aligned to post-efficient budgets. However, this is not sufficient, as project costs can and will vary for many reasons during development and delivery, and hence robust efficiency calculations that correspond to project-specific plans are also needed.

Opex efficiency calculations are more comprehensive, with underpinning detail including inputs, sources and assumptions, including several key efficiencies are calculated based on robust, nationally developed calculation models which have been reviewed and verified by the route.

# **Documentation**

Project efficiency plan templates are in place and in use as a good basis for documentation, although the quality of documentation for capex efficiencies is not yet comprehensive and robust; notably in terms of details on initiative activity, implementation plans and calculations. The route is continuing to develop these plans in year 1. Opex efficiency documentation is more robust, operating as change projects, and supported by implementation plans and processes to assist in the management and monitoring of efficiencies.

