

Office of Rail and Road

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



Independent Reporter Lot 4
Western Route Report - November 2019



In summary, the route has a good approach to workbank management and change control. However, we are concerned about the level of change indicated by the Leading Indicator report (81%) and the more detailed analysis presented above. Inconsistencies in the structure and classification of data about changes limits the extent to which this can be analysed, and the drivers of change understood. Our concern is without the drivers of change being understood, the level of change seen at this point in the year could be more than should be reasonably expected for the portfolio of asset renewals. We recommend that the level of change be monitored in the future and that more should be done to understand and reduce the drivers of this change.

Model Stage 2A – Authorisation and project development

The route uses a number of Delivery Agents from within IP and Works Delivery to service its portfolio and these are all involved with the authorisation and project development stage for relevant schemes. Each has slightly different processes and reports progress in different format of status reports. This makes aggregation of the overall position difficult for an ad-hoc review.

In this section, we consider the route's preparedness in this area under five headings:

- Remits, status of issue and acceptance
- Project controls and governance
- Investment authority
- Design
- Procurement

Remit status

Issue of a remit by a route sponsor or asset manager and acceptance by a Delivery Agent marks the start of the project development process. Where a scheme is complex, remits may be updated at several points in the project lifecycle, typically for initial development and then for detailed design and implementation. Using remit status tracking as a Leading Indicator would therefore need to be based on the value of work remitted rather than the existence of a remit on any given project. Western route does not have a central tracker for remits and so consolidated data is unavailable in the Leading Indicator report or to assist local management.



We found evidence that remits were being tracked in detail for the buildings asset group but no other evidence of tracking for other asset groups was provided to us. For buildings, the position is shown in Table 8 and Figures 4 and 5:

Remit status	Year 1 (£m)	Year 2 (£m)
Accepted	3.0	1.9
Issued (not yet accepted)	-	-
Not issued	4.3	6.1
Total	7.3	8.0

Table 8: Remit status for buildings asset group (Western route) (Source: Network Rail (Western route))

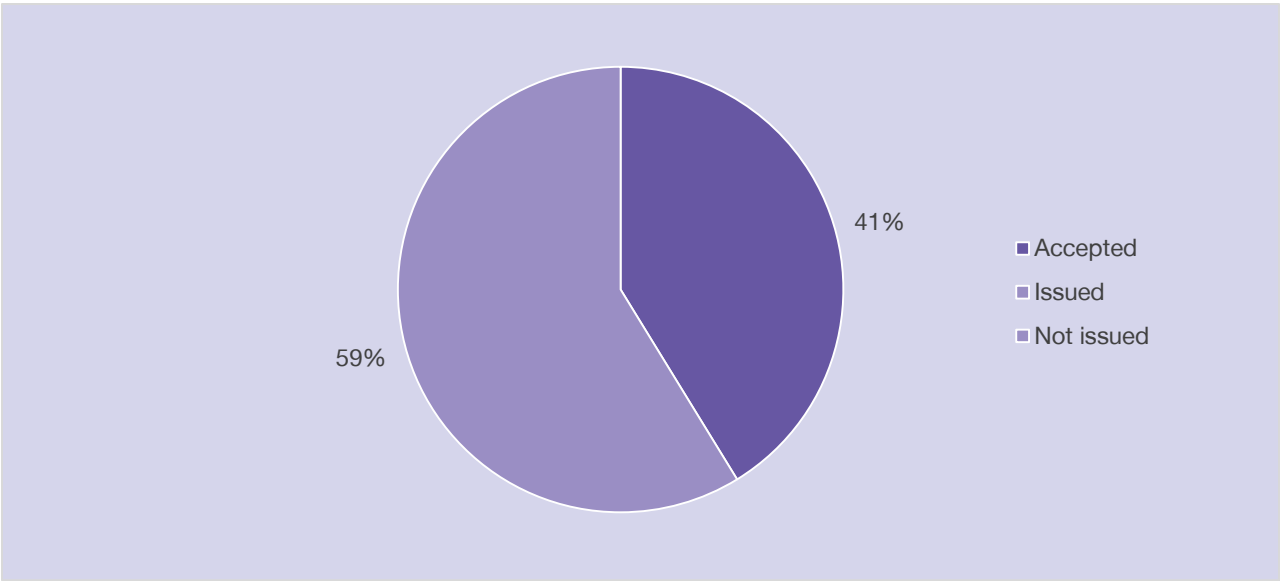


Figure 4: Buildings remit status for year 1 (Western route)

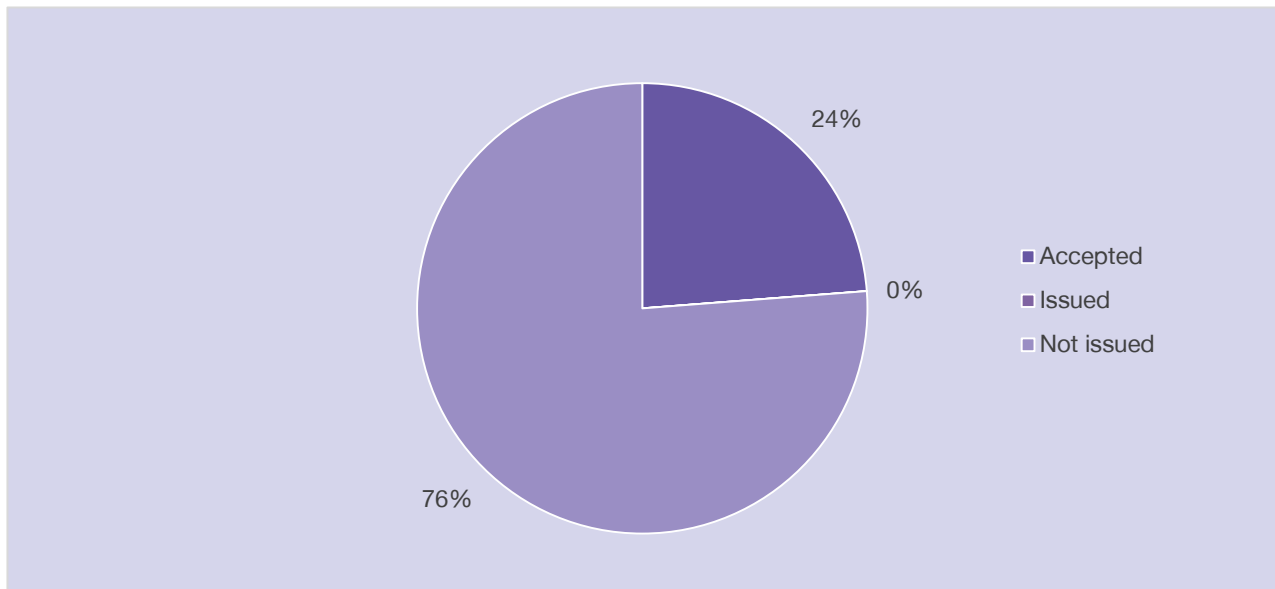


Figure 5: Buildings remit status for year 2 (Western route)

This data suggests there is a shortfall in the remitting of work for each year. Whilst that may be partly explained by remits written in previous years carrying forward, the situation is indicative of potential risk to future delivery. We recommend that data coverage is improved for all asset groups and further analysis then be undertaken.

Project controls and governance

Effective project controls and governance are essential for both the project development and design and construction stages of project delivery (i.e. Stages 2A, 2B and 3 in our project delivery model).

Our focus has been on the project controls and governance implemented by Western route on its renewals portfolio rather than on the management systems employed by the various Delivery Agents (IP and Works Delivery). However, the governance process relies on the accuracy and timeliness of reports from the Delivery Agents. We note that approximately 68% of the portfolio is managed by IP and this organisation has well established management and reporting processes although we note that the reports, provided as evidence, from different IP teams provided as evidence follow different formats and levels of detail. The introduction of regional capital programme directors provides an opportunity to better align and standardise the reporting of renewals across all Delivery Agents, whilst needing to address the loss of central oversight by IP that could, over time, compromise the consistency and quality of project reporting.



Western route follows the current cross-route practice of reviewing the status of its renewals programme through three tiers of meetings which operate on a 4-weekly periodic cycle. There is an additional tier (known as the governance board) for track renewals. This cycle is supplemented by a more comprehensive review of the status of the programme at each (quarterly) RF update. This provides a routine basis for the identification and escalation of risks and issues.

The three tiers of review are:

RAMs' review meetings with their Delivery Agents – Each RAM holds a detailed 4-weekly review meeting. For these meetings each Delivery Agent provides a progress report, with progress, issues and matters requiring escalation. These are primarily detailed working meetings with a focus on maintaining progress. There is a range of formats for inputs and outputs to these meetings which make it difficult to identify common trends and issues as inputs to overall assurance of delivery.

DRAM's PBR meeting with RAMs – This is the key governance meeting where financial performance, volumes, delivery issues and efficiencies are reviewed using a common format report (known as a 'project on a page') which draw together information from the RAM review meetings, Oracle Projects and other sources. This forum also manages the change control process.

Route Director's PBR meeting with the DRAM – Whilst we have not observed the meetings within this process, we consider that the overall approach is what we would expect and is likely to provide a good basis for active management of the renewals programme.

Investment authority

Progress in authorising each year's renewals programme is reported in the Leading Indicators report. Up to Period 3 the report focused on year 1 with the emphasis switching to year 2 at Period 4. The latest reported position is:

Year 1 – 93% authorised at Period 3.

Year 2 – 35% authorised at Period 5 (compares with 16% at this point last year).

Year 1 – We discussed the authority position with the DRAM and were advised the authorities that remained outstanding at period 3 related to relatively minor items with short lead times. On this basis, the position does not appear to have any significant risk to delivery plans.



The latest updated year 1 position provided to us is in Table 9. This shows 99% of the year 1 workload is authorised with individual asset groups ranging from 61% to 107% (figures over 100% indicate that over planned work has been authorised. Excluding over planned work, 98% of the year 1 target has been authorised.).

Asset Group	Target at RF4 (£m)	Current authority (£m)	Current authority %
Track	94.6	96.1	102%
Signalling (inc. LC)	47.4	44.8	94%
Structures	30.1	32.2	107%
Earthworks	24.4	23.9	98%
Buildings	15.1	14.5	96%
Electrification & FP	17.2	17.6	102%
Drainage	5.0	3.1	61%
Telecoms	-		-
Others	-		-
Total	233.8	232.1	Average 99%

Table 9: Updated project authorisation for year 1 (Western route) (Source: Network Rail (Western Route))

Year 2 – The route is ahead of its position in period 5 last year. The status of year 2 authorities is tracked in the periodic review cycle at the DRAM meetings and through project on a page reports. The route recognises the importance of progressively securing authorities and expects to exceed the glide path shown in the Leading Indicators report.

Scheme design

Progress of projects through scheme design (GRIP 4) is reviewed at the RAMs' progress meetings with their Delivery Agents. We received evidence to support this, however we understand that issues are generally raised verbally as exception reports and that, for IP delivered projects, this is based on tracking GRIP stages as standard milestones in their P6 planning system.

Procurement

We assessed whether there are contractual arrangements in place to deliver the renewals programme or that there are plans and processes being followed to support timely award of contracts.



Our review identified the following status:

Track – Framework contracts are in place to deliver plain line and switch and crossing (S&C) renewals in CP6. Major materials, haulage and plant requirements are met through existing contracts held by Supply Chain Operations (SCO). There have been some issues associated with negotiating acceptable target costs for track work, but the year 2 work is expected to be agreed for instruction by RF8.

Signalling – Minor signalling and signalling & telecoms (S&T) frameworks for CP6 commenced in June 2019. The framework for major signalling schemes is being re-tendered by IP and is currently expected to be awarded in January 2020. This creates some uncertainty over the pricing of schemes in later years of CP6. We understand that existing framework arrangements will extend until May 2020 to facilitate a handover of ongoing schemes. The route does not regard these arrangements as creating a risk to its delivery in years 1 or 2. Progress in awarding the new framework and its impact on unit rates and/or efficiencies should be kept under review.

Structures – The structures team provided a copy of their tender event schedule which demonstrates a planned approach to procuring the necessary contracts. This is particularly important for this asset group as, following the failure of Carillion a strategy of procuring each package of works directly rather than via frameworks was implemented (reportedly this provided cost savings and other benefits). Three year 1 packages have been awarded with the remaining three due for award by the end of October 2019. Maintaining this programme is important as there is approximately £10m of work to be executed in Period 13 and slippage of this at year end would prove difficult to mitigate.

Buildings – Apart from the large and complex Bristol Temple Meads roof project which will be tendered, all works are undertaken through existing framework arrangements. Minor works and works delivery can use frameworks with two to three years left to run and so there is limited procurement risk for this element of the portfolio. The major renewals framework has been extended to cover the early years of CP6 and tendering for a replacement contract is underway. As with signalling, this introduces some uncertainty over pricing for future years.

Overall, there appears to be a viable procurement strategy with the use of frameworks minimising procurement timescales as each package completes its design stage. In the current economic environment, there is always a risk of insolvency or other disruption to the supply chain (for example, from Britain's exit from the European Union), however the route did not identify any specific concerns.



Model Stage 2B – Delivery planning

We sought assurance from the route that it has suitable arrangements in place to ensure that long lead activities, scarce resources, critical plant and logistics support and other similar factors will be in place as needed to support the renewals programme. We note that the ORR's Final Determination identified that some aspects of Network Rail's delivery planning did not look across the whole of CP6, this review only considers the first two years of the control period and so does not address these longer-term concerns.

The review covered eight areas with a focus on process, assurance and risk rather than understanding the detailed position for each portfolio or resource.

Disruptive possessions

Booking of disruptive possessions is managed through the national timetable planning process which incorporates long-lead times (up to two years) to facilitate coordination across the network and operational planning by train operators. Network Rail is encouraged to book disruptive access early by an incentive system whereby discounts are available but reduce if bookings are made later in the planning process.

Progress booking disruptive possessions is measured by a Leading Indicator. The latest reported position for Western route is:

Year 1 – 86% booked at Period 3.

Year 2 – 50% booked at Period 5. This is an improvement on 41% booked at Period 5 last year.

It should be noted that the '100%' figure used in the Leading Indicator report is a notional figure based on historical possessions requirements applied to projected work volumes. It is therefore possible that a route can secure all of its required possessions without the indicator reaching 100% (or conversely that more than 100% of projected possessions may be needed).

Disruptive possessions are a fundamental requirement for track and signalling renewals. They are used by other asset groups but work such as preparation for major renewals, lineside earthworks and drainage can often be undertaken either in Engineering Access Statement (EAS) ('rules of the route') access or by taking advantage of disruptive access booked for other works. Therefore, the Leading Indicator is not a complete indicator that all engineering access will be available.



Within the route, possession planning is coordinated by a central team supported by the Possession Planning System (PPS). The process is managed on a process basis (as opposed to project by project) and project specific issues are dealt with by exception at the governance meetings between RAMs and Delivery Agents. The route supplements this process with its 'OnePlan' visualisation tool which assists in coordinating access planning across the route and which plays an important role improving possession utilisation and the management of changes.

It is noteworthy that a major timetable change is planned for December 2019 when Elizabeth Line trains start to run to Reading and significant changes will be made to Great Western services. This additional traffic will increase pressure on access planning for future years of the control period.

Track – All disruptive possessions for years 1 and 2 are reported to be confirmed with the exception of January – March 2021. We understand that the route is currently working on its year 3 possession requirements for track.

Signalling – All disruptive possessions are booked. The programme is highly dependent on delivery of axle counter works in the Paddington area during major possessions at Christmas 2019 and 2020.

Structures – All disruptive possessions are booked for year 1. The route does not anticipate any issues with completing booking of its requirements for year 2.

Buildings – No significant requirement for disruptive possessions.

However, it must be noted that:

1. Disruptive possessions do not represent all access necessary to undertake the renewals programme. Non-disruptive access must also be planned and booked in the shorter windows provided by the EAS.
2. The granting of access does not mean that the works can proceed. Complex logistical and operational planning is also necessary. For example, how engineering trains and on-track plant can transit to and from site. This planning can be disrupted by changes in other routes' arrangements. An example being the decision by LNE&EM to move a major track project at Kings Cross from Christmas 2019 to Christmas 2020 and how this introduced planning risk to work in Western route in year 2.

We conclude that the route has well established processes for managing its disruptive possession requirements and appear appropriate to manage risks to delivery in years 1 and 2 provided that the workbank remains stable.



Scarce resources

The major area of concern for scarce resources is signalling testers with peak requirements falling at Christmas and Easter when extended possessions allow major renewals to be undertaken. Western route's programme for years 1 and 2 is described as comprises more small and discrete schemes meaning that commissioning can be spread over the year rather than relying on peak periods. Notwithstanding this, resource planning is managed through a cross-route signal test diary which identifies times when demand may exceed availability.

Another risk identified by the route is a loss of signalling contractor capacity across the route and wider areas as the Bristol Area Re-signalling contractor (Alstom) demobilises from this major project. This could be further exacerbated if any signalling contractor chose to exit the UK market.

Haulage, Plant and Long lead materials

The planning of these three factors is managed centrally by SCO through its established processes and the overall status is not presented in the reports provided to us by Western route.

Haulage for year 1 track – There was a planning error which resulted in an excess of over 10,000 hours of haulage being reserved for Western route. Western route has told us that there is no loss of efficiency at route level as a result of this error. We understand that any abortive costs arising from this situation will be carried by SCO and presumably will be reported as an inefficiency in central reports.

Haulage for track at Christmas 2020 – The route reported that the rescheduling of a major scheme at Kings Cross from Christmas 2019 to Christmas 2020 has resulted in a potential shortfall in engineering trains. This creates a risk for two plain line renewals in the Paddington area. As this issue appears to have the potential to affect multiple routes, it is important that work continues to find an early resolution.

Long lead lift and escalator equipment – The buildings team demonstrated that the two-year lead times for these items are identified and managed to avoid delay.

Long lead signalling equipment – Axle counters have been pre-ordered to secure supply for the Paddington train detection project.



Environmental issues

These matters are managed through routine management processes within the project teams. We saw evidence of this in the track portfolio where a risk of fly tipping on access points had been identified.

Access and landowners

This is managed through the project teams and we did not identify any risks or issues which may affect delivery of the programme.

Interfaces with enhancement projects

Changes to assumptions about the volume or timing of enhancement works have the potential to disrupt renewals programmes. Western route has the following enhancement schemes currently being planned or implemented:

Exmouth Junction and Abbey Wood – Track enhancement schemes in years 1 and 5 respectively. No risks to the renewals programme have been identified.

HS2 – The project is planning to construct a new station adjacent to Western route infrastructure at Old Oak Common. This will affect the route's renewals and other activities in this area and to help facilitate this, HS2 is contributing to the Paddington train detection project. The route has told us that it could cover this funding (with or without any de-scoping) in the event that HS2 is delayed or modified.

Bristol East – Track works in year 3. Possession planning for other track work is being based on the timing of this scheme. Any slippage has the potential to require rescheduling of the linked work.

Our review indicated that these schemes do not impose any significant risk to the renewals programme in years 1 and 2.

In overall terms, we consider that Western route is adopting a reasonable approach to delivery planning and we have not identified any significant risks to its plans for years 1 and 2.

Model Stage 3 – Design and construction

This section considers financial and volume reporting across the whole renewals portfolio as well as any specific works related issues identified during our review of the sample asset groups.

Overall financial position

The route provided its Period 5 DRAM PBR report. The reported financial position is summarised in Tables 10 and 11.

Asset group	Actual (£m)	Budget (£m)	Variance (£m)	Variance %
Track	40.2	19.0	21.2	111%
Signalling (inc. LC)	14.4	2.4	12.0	512%
Structures	6.5	5.9	0.6	10%
Earthworks	3.4	4.8	(1.4)	(29%)
Buildings	4.0	1.0	3.0	298%
Electrification & FP	5.1	5.0	0.2	4%
Drainage	1.1	0.4	0.6	146%
Telecoms	-	-	*	*
Others	-	-	-	-
Total	74.8	38.5	36.3	94%

Table 10: Performance year-to-date at period 5 (Western) (Source: Network Rail - DRAM PBR report)

Asset Group	Annual forecast (£m)	Year 1 budget (£m)	Variance (£m)	Variance %
Track	94.1	87.9	6.3	7%
Signalling (inc. LC)	47.6	59.4	(11.8)	(20%)
Structures	29.2	28.6	0.6	2%
Earthworks	23.2	24.7	(1.5)	(6%)
Buildings	15.6	15.2	0.4	3%
Electrification & FP	18.8	14.1	4.7	34%
Drainage	5.0	4.0	1.0	24%
Telecoms	-	-	-	-



Asset Group	Annual forecast (£m)	Year 1 budget (£m)	Variance (£m)	Variance %
Others	-	-	-	-
Total	233.4	233.8	0.4	0%

Table 11: Full year forecast (Western) (Source: Network Rail - DRAM PBR report)

We make the following observations:

1. The year to date performance shows overall over expenditure of £36.3m (94%) with considerable variance across asset groups (range 29% under to 512% over). Approximately 90% of the variance lies in the track and signalling asset groups and the route describes this as arising from 'incorrect phasing of alignment overlay' whereby the annual budgets for these asset groups were incorrectly profiled across the financial year with expenditure in the early part of the year being understated. We understand that overlays have a role in managing reported performance, but we consider that a discrepancy of this magnitude illustrates the risks associated with subjective adjustment of forecasts which would normally be expected to be generated from detailed, cost loaded schedules prepared by the Delivery Agents.
2. The full year forecast indicates an underspend of approximately £11.8m in signalling which is compensated for by overspending in track and the other asset groups.(apart from earthworks which also has a small shortfall).
3. The shortfall in signalling arises from the following:
 - Reduction in minor works to offset cost liability held in track (£3.5m)
 - Exeter life extension efficiency moved to year 3 to allow additional works to be planned (£2.5m)
 - Deliverability overlay (£5.7m)

We have not reviewed these items in any further detail, but they are, perhaps, indicative of the type of changes associated with managing a complex portfolio. In particular, they illustrate the importance of operating a good change control system.



Overlays

Western route uses three overlays to manage its outturn reporting. These are:

Emerging costs overlay (ECO) and Financial Performance Metric (FPM) overlay – ECO is the standard adjustment mechanism used to ensure that FPM is not adversely affected by additional works which emerge during the year. The FPM is a counterpart to this which is used to hold the budget for the emerging works. Note that this is more transparent than the practice seen in some other routes of holding the FPM overlay within the deliverability overlay.

Deliverability overlay – This represents a judgement by the DRAM and route financial controller over the difference between work planned in Oracle Projects and what will actually be delivered. As such, the difference is indicative of the level of overplanning by the route.

The level of these overlays at the start of year 1 and at RF4 are shown in Tables 12 and 13.

Alignment overlay – The route has also indicated that it uses an alignment overlay to manage the profiling of work across the financial year, however, details have not been provided. We have commented on the alignment overlay in connection with the year to date performance above and we have not examined how it is assessed in any further detail.

Asset group	Overlays at start of Year 1		
	Deliverability (£m)	ECO (£m)	FPM Overlay (£m)
Track	(9.8)	8.0	(8.0)
Signalling (inc. LC)	(0.9)	6.8	(6.8)
Structures	(5.2)	3.7	(3.7)
Earthworks	(0.4)	2.5	(2.5)
Buildings	(0.6)	1.5	(1.5)
Electrification & FP	(7.5)	1.0	(1.0)
Drainage	-	0.4	(0.4)
Telecoms	-	-	-
Others	-	-	-
Total	(24.4)	23.8	(23.8)

Table 12: Overlays at commencement of year 1 (Western) (Source: Network Rail (Western route))



Asset group	Overlays for year 1 (2019/20) @ RF4			Movement by RF4	
	Deliverability (£m)	ECO (£m)	FPM (£m)	Deliverability (£m)	ECO (£m)
Signalling (inc. LC)	(6.6)	6.8	(6.8)	(5.7)	-
Structures	(3.2)	3.7	(3.7)	1.9	-
Earthworks	(0.8)	2.5	(2.5)	(0.5)	-
Buildings	(1.5)	1.5	(1.5)	(0.9)	-
Electrification & FP	(1.7)	1.0	(1.0)	5.8	-
Drainage	(0.6)	0.4	(0.4)	(0.6)	-
Telecoms	-	-	-	-	-
Others	-	-	-	-	-
Total	(25.2)	23.8	(23.8)	(0.8)	-

Table 13: Overlays for year 1 at Period 4 (Western) (Source: Network Rail (Western route))

We make the following comments:

1. The net deliverability overlay represented approximately 10% of budget at the start of the year. At RF4 it had increased by £0.8m to £25.2m, approximately 11% of the full year budget and 16% of spend to go. The route has advised us that this adjustment has been made to counter an increase in over planning for year 1 so as to maintain the forecast outturn in line with the budget for the year and to reflect concerns over resourcing risks. Western route has also told us that this approach was in line with corporate business planning guidance and discussed at the RF4 review.
2. If the overlay proves too conservative, the route will need to cancel or defer schemes unless it is able to bring forward expenditure from future years (to cover under expenditure in year 1 in other routes) or if contingency is released. The route has advised us that it anticipates being able to fund work in excess of its current forecast and we would expect clarity on this to increase by RF8 when options for further investment are considered.
3. We note that the ECO provision has not been changed at Period 4. We have seen reference to emerging works in several asset groups and a pending change control for £1.5m of emerging building works in the DRAM PBR report.
4. Overlays are reviewed and adjusted each period by finance. The DRAM is involved in this process at the quarterly review. We think it is important that the process takes account of the views of staff in the front line of delivery so that updates are timely and reflect emerging events and we have been told that delivery risk is considered as part of the discussions at the PBR meetings



We have seen three potential issues in Western route which indicate that overlays, whilst useful management tools may warrant further review and monitoring by ORR across all routes:

Lags in updating the ECO overlay position pending change control and agreement with Network Rail centre.

Use of the deliverability overlay to constrain expected outturns within agreed budgets. This contrasts with other routes where we have seen overlays applied to generate a view on the likely full-year outturn. Where this shows that overplanning may lead to over expenditure against budget this is clearly flagged.

Significant variances in year to date performance against budget due to issues with the alignment overlay.

We recommend that ORR and Network Rail undertake further work to satisfy themselves that all routes operate their overlays consistently and transparently within agreed parameters so that their effect on reported figures is clear. Consideration should be given to whether overlay management could be improved by further application of quantified risk analysis techniques.

Volumes

Variations between business plan budgets and forecast volumes (based on the 7-Key volume measures) for years 1 and 2 are shown in Tables 14, 15 and 15.

Asset group	Unit	Actual	Budget	Variance	Variance %
Plain Line	Linear track km	36.5	32.6	3.9	12%
S&C	S&C unit	10.0	16.0	(6.0)	(38)%
Signalling	SEU	80.0	80.0	0.0	-
Underbridges	m ² deck area	1,022.0	483.0	539.0	112%
Conductor Rail	km	-	-	-	-
Earthworks	No	86.0	50.0	36.0	72%
Wire runs	No	-	-	-	-

Table 14: Budget and planned volumes to date for year 1 (Western) (Source: Network Rail (Western route))



Asset group	Unit	Actual	Budget	Variance	Variance %
Plain Line	Linear track km	73.7	67.6	6.1	9
S&C	S&C unit	21.0	21.0	0.0	0
Signalling	SEU	80.0	80.0	0.0	0
Underbridges	m ² deck area	4,210.0	3,155.0	1,055.0	33
Conductor Rail	km	-	-	-	-
Earthworks	No	413.0	364.0	49.0	13
Wire runs	No	-	-	-	-

Table 15: Budget and planned volumes for year 1 (Western) (Source: Network Rail (Western route))

Asset group	Unit	Actual	Budget	Variance	Variance %
Plain Line	Linear track km	n/a*	77.8	n/a	n/a
S&C	S&C unit	n/a*	48.0	n/a	n/a
Signalling	SEU	n/a*	27.0	n/a	n/a
Underbridges	m ² deck area	n/a*	6,709.5	n/a	n/a
Conductor Rail	km	n/a*			
Earthworks	No	n/a*	360.9	n/a	n/a
Wire runs	No	n/a*		n/a	n/a

Table 16: Budget and planned volumes for year 2 (Western) (Source: Network Rail (Western route))

* Year 2 forecast data was not available at the time of our review



Figure 6 compares forecast variances to volumes and costs for the corresponding asset group for year 1.

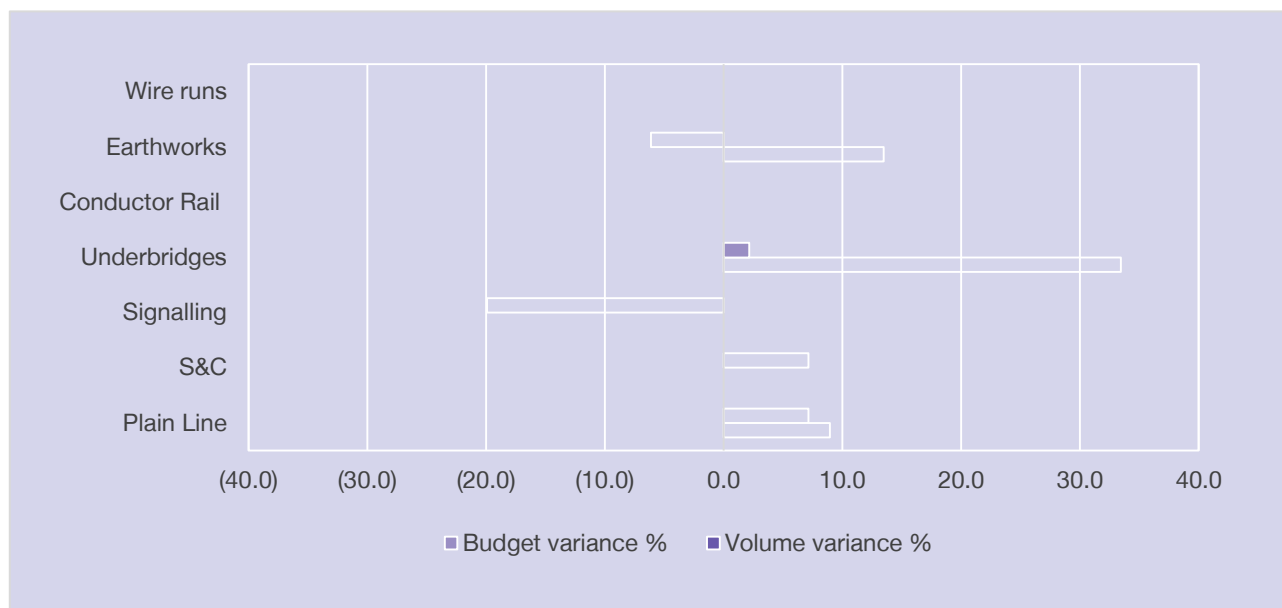


Figure 6: Comparison of variances to year 1 budget volumes and expenditure at RF4 (Western)

We make the following comments:

1. For the asset groups in our sample, there is generally a correlation between budget and volume movements forecast for year 1. The exception to this is signalling where a budget reduction of approximately 20% is not reflected in forecast volumes. This is not an issue for year 1 because signalling volumes lag behind expenditure and are only recorded when a scheme is commissioned. All of the year 1 commissioning took place in May as part of the Bristol Area Signalling Renewal Enhancement (BASRE) scheme.
2. S&C renewals show an underperformance of 6 units (38%) in the year to date but with a forecast recovery by year end. The route has confirmed that this work has slipped to later in year 1 and that access arrangements are in place for its delivery. The route has advised us that a delivery overlay of 4 units has been applied to this item which suggests that there is significant overplanning to back-up the delivery plans.
3. Underbridges (part of the structures asset group) are showing a significant increase in volumes (33%) compared to a small (2%) increase in costs. The route has demonstrated how this has been achieved through good management of the workbank to achieve greater efficiencies.

4. The route has not provided us with forecast volumes for year 2. The RF4 forecast suggested a 1% increase in the overall budget for year 2 and within this there are small (single figure) percentage adjustments across most asset groups. The exception is electrification and fixed plant which shows a 41% increase. It is not clear if these budget changes will affect the 7-Key Volumes and this will need to be confirmed when the year 2 workbank becomes fixed at around RF8.

Updates at RF4

We summarise below the changes to the business plan proposed by the route at RF4.

Asset group	Year 1			
	Control budget (£m)	Change control (£m)	Other (£m)	Current (£m)
Track	87.9	1.3	5.5	94.6
Signalling (inc. LC)	59.4	-2.4	-9.6	47.3
Structures	28.6	5.5	-4.0	30.1
Earthworks	24.7	4.5	-4.8	24.4
Buildings	15.2	3.1	-3.2	15.1
Electrification & FP	14.1	2.5	0.6	17.1
Drainage	4.0	1.5	-0.6	4.9
Telecoms	-	-	-	-
Others	-	-	-	-
Total	233.8	15.8	-16.0	233.6

Table 17: Changes to year 1 forecasts against business plan at RF4 (Western) (Source: Network Rail (Western route))



Asset group	Year 2 (2020/21)			
	Business plan (£m)	Change control (£m)	Other (£m)	Current (£m)
Track	76.1	0.0	(2.0)	74.1
Signalling (inc. LC)	75.6	(3.9)	2.8	74.5
Structures	39.9	0.9	(1.3)	39.5
Earthworks	19.6	0.1	0.3	20.0
Buildings	44.8	2.3	(0.7)	46.4
Electrification & FP	13.2	(1.9)	7.2	18.6
Drainage	4.1	0.0	0.1	4.2
Telecoms	-	-	-	-
Others	-	-	-	-
Total	273.3	(2.5)	6.6	277.3

Table 18: Changes to year 2 forecasts against business plan at RF4 (Western) (Source: Network Rail (Western route))

Tables 17 and 18 show how the numbers baselined in the business plan have been amended by the change control system, reflecting the judgements concerning overlays and other factors applied during the RF process.

In overall terms, the route has established processes for monitoring progress and identifying issues with the delivery of its renewals programme. We saw clear and comprehensive reporting and review through the DRAM PBR reporting pack and heard comprehensive descriptions of the RAM progress review meetings which support the DRAM PBR reporting. Variances to plans are identified and managed by the route and, broadly speaking, there are logical links between changes to forecast outturn expenditure and to the associated key volumes. Our main concern is the overlay process and, in particular, its transparency and the potential for it to delay (rather than just smooth) reporting of significant trends in overall delivery.



2.5 Conclusions and recommendations

In our opinion, Western route is operating a mature project delivery model which can be expected to identify and control risks to delivering planned renewals volumes and expenditure within reasonable forecasting tolerances in years 1 and 2 of CP6.

We found that top level reporting was clear, however, we consider that improvements could be made to the consistency of lower level reporting and management systems to make comparison and analysis of performance clearer.

Overall management of renewals

- The overall process for managing renewals is complex with a combination of formal and informal processes all of which rely on the skills, experience and professionalism of those involved.
- We consider that the process being followed in Western route is comprehensive and can be expected to support the identification, discussion and mitigation of significant risks or issues likely to threaten delivery of the route's renewals programme.
- We saw a number of different spreadsheet-based systems in use across the different asset teams to manage and track their portfolios. Whilst we did not identify any specific issues, we believe that there would be benefits in terms of improved consistency of data, reporting and analysis if the route adopted a standard tool such as the IMS developed in LNW route.

Stage 1 – Workbank management

- In overall terms, the route has a good approach to workbank management with all work for years 1 and 2 identified (albeit that, as is reasonable, some items are provisional allowances for minor emerging works).
- The workbank stability Leading Indicator is a useful broad guide to the level of change in the portfolio but it operates at too high a level to show significant movements in individual asset groups.
- The route operates a detailed, spreadsheet-based change control system. Whilst this has a classification to identify the cause of change, it is used inconsistently across the asset groups making detailed analysis difficult.
- The available analysis indicates significant levels of change within the workbank. Whilst some of this may be attributed to positive factors which may be expected to improve delivery and/or efficiency, it is not the case for all changes. In particular, there are indications that around 22% of change may arise from slippage of projects which is of concern against an aspiration for stable workbanks.

