

## Responses to 'Improving Network Rail's renewals efficiency: a consultation'

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By email: [pr18@orr.gsi.gov.uk](mailto:pr18@orr.gsi.gov.uk)

John Larkinson  
Office of Rail & Road  
One Kemble Street  
London  
WC2B 4AN

13th September 2017

Dear John,

### **Response to ORR's Consultation on Improving Network Rail's Renewals Efficiency**

Thank you for the opportunity to respond to this consultation. This response is made by Arriva plc, its subsidiary Arriva UK Trains Limited and its wholly owned train operating companies (TOCs), Arriva Rail London Limited, Arriva Rail North Limited, Arriva Trains Wales/Trenau Arriva Cymru Limited (ATW), Grand Central Rail Company Limited, The Chiltern Railway Company Limited (CR) and XC Trains Limited (XC). Arriva is a wholly owned subsidiary of Deutsche Bahn AG (DB AG).

Arriva engages actively with the working groups established by the Rail Delivery Group (RDG) in relation to the PR18 process, which has spent time reviewing this consultation and debating feedback. We are therefore fully supportive of RDG's response to this consultation and for the avoidance of doubt RDG's views can be interpreted as representative of the views of Arriva.

In the context of this Consultation, Arriva would like to highlight its support of the five-year funding cycle for Network Rail as this provides an appropriate level of certainty to enable the planning and delivery of the key major maintenance and renewals programme that Network Rail needs to deliver. However, it is also important to ensure continuity of funding across Control Periods to enable the planning of projects programmed for delivery early in a Control Period. If Network Rail is to deliver such schemes efficiently, the Period Review and funding Settlement processes need to be structured to provide appropriate advance funding to support this preparatory activity.

While it is clear that Network Rail has not achieved the renewals unit cost reductions expected in the CP5 settlement, Arriva would highlight that efficiency needs to be assessed on a broader basis by considering the impact on rail passengers and rail revenue as well. In addition, it is unlikely that a "like for like" renewal will be the appropriate solution in the context of a railway which is growing.

It is also clear that the reclassification of Network Rail has reduced the range of mitigating responses available to it to address cost challenges other than by reducing renewals volumes. Arriva would suggest that some form of contingency funding pot be provided in the CP6 settlement to enable Network Rail to sustain renewals while cost challenges are addressed.

Work already undertaken and Network Rail's accelerating devolution programme show that Network Rail can improve the efficiency of its activities through closer working with its suppliers and customers. The activity

currently being undertaken to develop the Route Strategic Business Plans are an effective mechanisms for cementing this in CP6.

Yours sincerely

A handwritten signature in black ink, appearing to read 'R. McClean', with a long horizontal flourish extending to the right.

Richard McClean  
Managing Director  
Grand Central Railway Company Ltd.

## Pro-forma for responding to Improving Network Rail's renewals efficiency: a consultation

This pro-forma is available to those that wish to use it to respond to our consultation. Other forms of response (e.g. letter format) are equally welcome.

Please send your response to [pr18@orr.gsi.gov.uk](mailto:pr18@orr.gsi.gov.uk) by **5pm 13 September 2017**.

<b>Full name</b>	Mary Hewitt
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### Question 1: Have we identified the main casual factors explaining recent trends in efficiency? Do you have any views on their relative importance?

Until recently, Arriva has had little visibility from Network Rail as to the cost effectiveness of Network Rail's delivery of its maintenance and renewals activity. This contrasts with the significant engagement that has been undertaken in areas associated with Operations and train service delivery and to some extent on the delivery of enhancement programmes. However, the introduction of Route Scorecards and the PR18 process is starting to enable greater transparency in this area.

On this basis, it is difficult for Arriva to comment on the full detail of what might be the causal factors underpinning the recent trends in the efficiency of Network Rail's delivery of renewals outlined by ORR.

Arriva is unable to comment on the detail of Network Rail's efficiency improvement plans for CP5 or to how Network Rail responded to the expected results not being delivered as it has had limited visibility or engagement with what these may have been.

#### Impact of availability of Access for renewals delivery

While Arriva does recognise that gaining access to the railway to carry out work is a complex process, it is not aware of any specific instances where problems in this area have impacted on Network Rail's cost effectiveness. It is the case that more trains are using the network, including earlier first trains and later last trains. This is as it should be as the rail industry makes better use of its capacity to meet passenger and freight customer requirements. While this makes engineering access potentially more disruptive, it does not preclude Network Rail from working in partnership with its Operator customers to seek and

secure the engineering access it requires while having due regard to the needs of passengers and freight customers.

Clearly, acting to protect the interests of passengers and freight customers, operators will wish to scrutinise and challenge Network Rail's engineering access requests – indeed, ORR's expectations are that this should increasingly be the case. Operators, who have a consideration of their customers' needs, will want to:

- Understand the impact on their customers and ensure that this disruption is necessary
- Validate that the engineering access will be efficiently used
- Confirm the condition that the route would be handed back in as that it is clear what impacts there may be on the service delivered to passengers immediately after the planned disruption.

However, Operators do not “refuse” Network Rail access as seems to be implied in the ORR Consultation Document. Indeed, Network Rail have access to significant powers to book the engineering access they require. Arriva's experience is that this process is well managed at a local level with strong engagement between the Network Rail and operator teams.

#### Impact of delayed start to CP5 renewals programme and renewals programme replanning

Arriva did see and was concerned about the “log-jam” of renewals activity that occurred in the last year of CP4 – this caused significant disruption to passengers at the time and was followed by a marked reduction in activity at the start of CP5. While this remains conjecture as Arriva has no direct evidence of causal linkages, this could well have been associated with distraction of Network Rail delivery teams away from planning for early CP5 schemes as they worked flat out on the execution of the CP4 projects. It is also worth observing that many of the renewals projects programmed for early in CP5 were very challenging in their nature and would be expected to have required significant planning effort. It may well also be that the workload associated with the PR13 process itself interrupted the planning of the CP5 schemes. We would encourage ORR and Network Rail to ensure that this does not happen again and that appropriate, transitional, measures are put in place.

It is possible to infer that the initial hiatus in delivering the CP5 projects followed by further deferral of projects may well have led to higher unit costs as a result of re-planning and reduced volumes. It could also be sensibly concluded that the increased cost control pressures associated with borrowing limits post reclassification have accelerated and compounded this effect, as volumes of renewals were reduced again.

#### Impact of combining asset improvement with renewals delivery.

With increased devolution of authority to Network Rail Routes, Arriva has seen a greater focus on ensuring that the maximum benefit is delivered through planned renewals including the delivery of asset capability improvements. Achieving such synergies should be considered to be an example of efficient infrastructure management and not “scope and cost creep” as seems to be implied. We would encourage further collaborative work such as this to maximise efficiency.

Arriva does not expect Network Rail to simply renew assets “like for like” but would expect assets to be renewed in “modern equivalent form” reflecting today's technologies and asset capabilities. In addition, as the use of the Network changes, it may well be that improved capability from individual assets is needed to counteract the capacity and performance impacts of increased Network utilisation and the operation of longer and heavier trains. Also the influences of current technical and operating standards and practices may well need to be mitigated through improved asset capability in order for the outputs of the overall system to be maintained.

However, Arriva would observe that the improvements delivered to date in CP5 have good business cases and have been delivered cost effectively. Indeed, Arriva would look to work even more closely with Network Rail to enable a systematic approach to seeking such synergistic opportunities with proper budget provision in Route Strategic Business Plans. It would appear that the issue highlighted by ORR is a question of initial budget provision, governance and cost allocation rather than of renewal unit cost increases.

**Question 2: Are there any factors that we have not identified? If so, could you explain their significance, ideally illustrated with evidence and/or practical examples?**

Given the limited visibility available to Arriva of the issues in play in this area, Arriva has no specific evidence of additional factors that should be considered.

It would appear to Arriva that Network Rail has been faced with the need to make a number of challenging trade-offs as it would appear to have had to:

- prioritise delivering enhancement projects over renewals programmes by allocating the major access opportunities at Christmas and Bank Holidays to these projects as well as allocating key planning and plant resource to enhancement projects
- cancel renewals projects where the hand-back condition of the track would have caused Temporary Speed Restriction allowances to be breached
- defer renewals to deliver total cost budget constraints and debt ceilings.

Making holistic decisions in this context is a complex task which would benefit from the collaborative involvement of all the Stakeholders involved including Network Rail's customers, ORR and DfT and other funders.

**Question 3: Do you have any views on Network Rail's planning capacity?**

Without direct visibility of Network Rail's engineering renewals planning process (as opposed to access planning process where Arriva is closely involved), it is difficult for Arriva to provide a definitive view. However, through the collaborative work done in developing the Route Strategic Business Plans, Arriva has seen Network Rail develop asset management strategies that move away from like for like renewal on a time or utilisation basis to strategies based on asset condition and performance. This has been coupled with active consideration of condition based maintenance regimes. This aligns with Arriva's parallel experience rolling stock operations, maintenance and renewal and we support further progress in this area.

Arriva would also observe that Network Rail's performance focused and incentive driven approach to delivery planning appears to have led to systematic over booking of engineering access and an avoidance of making use of a single engineering access opportunity to undertake more than one project at a time. Associated with this, apparently driven by the incentives provided by the Schedule 4 regime, Network Rail would appear to book engineering access early in the process of engineering delivery

planning leading to situations later in the planning process where it is found that the booked engineering access is not the right “shape” for the work to be undertaken.

Arriva’s experience is that, through working closely with its customers, Network Rail is able to optimise engineering access arrangements. Pilot projects undertaken in this area through the Improved Access Planning project (IAP) have allowed for increased productivity for Network Rail while reducing the impact on passengers and freight customers. Arriva looks forward to working with Network Rail Routes and the Engineering Access Planning teams to roll out the relevant conclusions and to embed them systematically.

#### **Question 4: Do you think we have identified the right priority areas for our scrutiny of Network Rail’s plans during PR18?**

Arriva is not convinced that the Route Scorecards as currently formulated will provide the visibility needed to ensure that Routes deliver against agreed plans with only 1 relevant KPI available. Instead, ORR should focus closely on the arrangements that Routes detail in their Route Strategic Plans to confirm that these will ensure that:

- Resources and processes are in place to ensure that renewals delivery plans will be developed effectively and optimised through joint working with the Route’s customers
- Processes are in place to systematically reduce waste and improve the efficiency of work undertaken in engineering access periods.

#### **Any other points that you would like to make**

Arriva expects the Periodic Review process to provide Network Rail with the funds that it needs to operate, maintain and renew the rail network on a safe and efficient basis ensuring that it continues to be able to deliver the performance and capacity outputs expected while Network utilisation continues to increase. This funding should be set in the context of the long asset lives involved and the often “one in a lifetime” opportunities to renew. This is essential if the rail industry is to meet the needs and expectations of passengers and freight customers.

The structure of the CP6 Settlement needs to take account of the reduced flexibility that Network Rail has to address cost pressures or other shocks through the use of borrowing to allow work programmes to be progressed while action plans are put in place to recover the position over the medium term. This could include:

- provision of funds during CP5 to support the planning of early CP6 schemes so that a smooth start to the delivery of the CP6 renewals workplan can be ensured

- inclusion of a contingency fund to reflect the degree of risk and uncertainty being managed by Network Rail so that the momentum of the CP6 renewals workplan can be maintained while actionplans are developed to address issues that arise.

An appropriate mechanism needs to be found to address in the CP6 Settlement the potential that the implementation of emerging Digital Railway solutions. This mechanism should reflect the current immaturity of the solutions and their benefits.

Arriva feels that it is also essential that Network Rail sets out in its Strategic Business Plans the initiatives it intends to deploy to deliver improvements in its efficiency in delivering renewals if the rail industry is to be able to meet the expectations of funders. However, Network Rail should not be tasked with delivering aspirational unit cost reductions which subsequently prove to be undeliverable as the consequential impact is likely to be worse than an initial transparent underfunding.

In this context, Arriva is very concerned that the draft Route Strategic Business Plans suggest that Network Rail currently expects to have to move towards a policy of deferring renewals and is predicting a consequent overall deterioration of asset condition and asset performance. We strongly recommend that the overall level of quality improves rather than declines, particularly to ensure the ongoing safety record.

While Arriva is unable to comment directly on the engineering details of Network Rail's plans, Arriva does have significant experience in the development and delivery of asset management strategies which have delivered lower costs, higher output and performance from the fleets it operates. It is not clear to Arriva how Network Rail goes about undertaking similar activity for infrastructure asset management strategies in a systematic way with a lack of clarity as to the respective roles of Routes and Network Rail's central technical functions. If Network Rail is to make the progress needed in improving its renewals efficiency, incentives and responsibilities in this area need to be clarified and the processes to be followed laid out in the Route Strategic Business Plans in line with the expectations that the ORR have made clear in their Guidance on Network Rail's Strategic Business Plans issued in February 2017.

Arriva would also expect to see greater clarity as to how Network Rail plans to manage its supply chain in order to reduce unit costs for renewals by establishing effective relationships with its key delivery partners. Again, it is not clear how Network Rail intends to organise itself in this area and what roles will be performed by the Routes and by central functions.

Arriva believes that Network Rail Routes can and should improve the levels of productivity achieved in Possessions. Numerous "pilot" projects have been undertaken in this area with some evident successes. The Route Strategic Business Plans need to provide sufficient detail as to what activity Network Rail plans to undertake in this area in line with the expectations that the ORR have made clear in their Guidance on Network Rail's Strategic Business Plans issued in February 2017.

Similarly, "pilot" schemes have shown how Network Rail can be more cost effective in its renewal activities when it works in closer partnership with Operators and its supply chain to develop and optimise Possession strategies. Arrangements to roll these conclusions out systematically should also be detailed in the Route Strategic Business Plans. Arriva is keen to engage and work with Network Rail Routes and the Engineering Access Teams in this area.

# Improving Network Rail's renewals efficiency

**ACE consultation response**

**11 September 2017**

## Response to consultation questions

### **Q1. Have we identified the main causal factors explaining recent trends in efficiency? Do you have any views on their relative importance?**

Overall, ACE agrees with the causal factors that have been identified by ORR in the consultation paper. However, we believe that Network Rail have been seriously distracted by the Enhancements story in CP5, which has not only drawn in many of their best people but also resulted in regular significant changes to the renewal plan to make the overall budget balance the enhancement overspends.

ACE believes the poor planning at the start of Control Period 5 (CP5) is of high importance and has had a significant impact on ACE member companies. Contract delays from poor preparation has reduced design work for renewals and have forced some ACE member companies to move staff out of rail teams. It is important that this trend does not continue in Control Period 6 (CP6) where there has been little visibility of the pipeline to date, particularly in light of the current skills shortage in the UK rail sector.

Some ACE member companies did note the devolution of Network Rail has not had a visible impact on the renewals efficiency decline in CP5. We therefore view this factor to be of lower relative importance.

### **Q2. Are there any factors that we have not identified? If so, could you explain their significance, ideally illustrated with evidence and/or practical examples.**

ACE has identified eleven additional factors as drivers for the renewals efficiency decline.

1. An underestimation or overestimation of the scope of works involved in renewal activities. ACE notes the cause may be because Network Rail does not have a 'controlling mind', such as a Chief Engineer or Sponsor, able to make a final decision on the scope of work in the best interest for all involved.
2. The strong focus on possession deadlines. Staff are sometimes arriving on site with partially complete designs in order to meet time pressures. The merging of project stages together to chase unachievable end dates will lead to an increase in errors or poor planning.
3. Network Rail do not have a strategic cost control culture at the project level. Years of living under a regulated asset base when additional borrowing was easy has definitely not worked its way out of the project manager or sponsor community.
4. Projects that are driven by commitments at the Department for Transport, including delivery dates, before the scope of work is known.
5. The two delivery organisations within Network Rail for renewals work (Infrastructure Projects and Works Delivery) may be inefficient. Although the capability and competence of these organisations are different, each has their own level of support functions and overheads. It may be worth exploring if their current operating models (including internal processes) are the efficient and cost-effective.
6. ORR's method for measuring renewal costs. Overall, efficiencies are measured in terms of a year on year reduction in unit rate, as has been the case for many years.

For example, the expectation for Network Rail to save 20% on efficiencies in CP5 was unrealistic. Given Network Rail and ORR are much more informed about renewals costs, ACE believes it may be appropriate to consider an alternative method for measurement.

7. The cost stacks within Network Rail are areas to target for efficiencies. For example, around 40% of track renewal costs are associated with the materials, haulage and other services provided by an internal organisation within Network Rail. There may be scope for ORR to apply additional scrutiny in this area, or to open the purchase of materials from other suppliers.
8. Network Rail's risk adverse approach to overruns. Concerns over negative responses (by the public, media or the Minister) are driving Network Rail to plan less yardage in renewal projects, guaranteeing a reduction in efficiencies.
9. An under resourced procurement division at Network Rail. This is resulting in significant delays for releasing tenders and poor preparation at the start of control periods. Network Rail would also benefit from investing in leadership and staff capable of making procurement decisions.
10. Complex internal processes within Network Rail. These complex processes are getting in the way of 'common sense' solutions that can save time and money. Network Rail's GRIP processes are suitable if applied correctly. There may be an argument for a GRIP 'light' for renewals where the 'solution' is obvious. For example, insisting on all the full GRIP stages for the introduction of a single standard turnout on a non-electrified line takes months rather than days. However, the key message is that up-front development/design saves downstream construction costs.
11. A slowdown of renewals works at the start and end of control periods. This significantly impacts the supply chain, particularly at the start of CP5 when there was a heavy focus on enhancements. Five years control periods may not be providing enough certainty for businesses, particularly when compared to the length of the investment pipeline for High Speed 2.

### **Q3. Do you have any views on Network Rail's planning capability?**

ACE believes Network Rail could revisit its rules for contingency planning. Currently, all projects are required to have a set of contingency margins, regardless of their geographic location. Network Rail could consider applying contingency margins based on the impact of an overrun for a project. For example, the impact of an overrun on a category 4 line will not be the same as an overrun on a category 1 line. The current costs associated with the Delivering Work Within Possessions standard (DWWP) and contingency planning may be outweighing the benefits for some projects.

ACE member companies feel Network Rail is over populated by project managers but under-resourced at the engineering and procurement levels. ACE believes that some renewals efficiencies can be achieved, particularly in the planning stage, when the right level and competency of staff are allocated to projects.

Lastly, ACE is concerned about the delivery of plans for CP6. Network Rail needs to be preparing for outlays in CP6 now. There is a significant risk that preparations for CP6 will be worse than in previous control periods if current trends continue. We understand that the CP6

Development Fund which would have ensured this happened was another casualty of the Hendy review.

**Q4. Do you think we have identified the right priority areas for our scrutiny of Network Rail's plans during PR18?**

On the whole, ACE believes ORR have identified the right priority areas for scrutiny of Network Rail's plans during PR18. It is critical that the failings in planning for CP5 do not repeat themselves.

In the past, a number of unforeseen events have occurred which have increased costs and therefore decreased opportunity for efficiency. ACE believes Network Rail and ORR are much better informed in this area than in previous control periods and are well placed to implement a number of lessons learned.

It is important that the messages and lessons learned in Network Rail are travelling to all staff in Network Rail. Some issues identified in this consultation paper will take strong leadership to ensure change is implemented across the organisation with the focus on clear project requirements and outcomes such that accurate costs are identified and fixed in the development stages.

## About ACE

As the leading business association in the sector, ACE represents the interests of professional consultancy and engineering companies large and small in the UK. Many of our member companies have gained international recognition and acclaim and employ over 250,000 staff worldwide.

ACE members are at the heart of delivering, maintaining and upgrading our buildings, structures and infrastructure. They provide specialist services to a diverse range of sectors including water, transportation, housing and energy.

The ACE membership acts as the bridge between consultants, engineers and the wider construction sector who make an estimated contribution of £15bn to the nation's economy with the wider construction market contributing a further £90bn.

ACE's powerful representation and lobbying to government, major clients, the media and other key stakeholders, enables it to promote the critical contribution that engineers and consultants make to the nation's developing infrastructure.

Through our publications, market intelligence, events and networking, business guidance and personal contact, we provide a cohesive approach and direction for our members and the wider industry. In recognising the dynamics of our industry, we support and encourage our members in all aspects of their business, helping them to optimise performance and embrace opportunity.

Our fundamental purposes are to promote the worth of our industry and to give voice to our members. We do so with passion and vision, support and commitment, integrity and professionalism.

## Further information

For further details about this publication please contact:

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**Pro-forma for responding to Improving Network Rail’s renewals efficiency: a consultation**

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Please send your response to [pr18@orr.gsi.gov.uk](mailto:pr18@orr.gsi.gov.uk) by **5pm 13 September 2017**.

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\*This information will not be published on our website.

**Question 1: Have we identified the main casual factors explaining recent trends in efficiency? Do you have any views on their relative importance?**

The significance of 16(d) “Increased pressure on access to the railway to carry out work” should not be overstated.

As a customer focussed organisation; the increasing demand for both passenger and freight services is a reality that Network Rail must accept; and it must plan its processes accordingly. Closure of routes, for whatever reason, imposes significant disruption for operators and their customers.

For freight particularly, the absence in many cases of realistic alternative routes offering the required capability in terms of gauge, train length and axle weight can lead to interruption in supply chain deliveries for customers. The trend within the rail freight industry is for greater volumes of fast moving consumer goods with much tighter lead times and shorter delivery windows. Customers will not commit to rail, with all the benefits of “reduced cost, carbon and congestion” that rail offers, if they are not confident that rail based supply chains can deliver reliably. Many supply chains for bulk commodities are based on regular, reliable deliveries and closure of routes can result in deliveries being lost to road or additional costs incurred in building up buffer stocks to cover periods of disruption.

It is vital that in going forward in to CP6 Network Rail recognises this reality, and develops processes and techniques to deliver more work within the limited access that is available.

**Question 2: Are there any factors that we have not identified? If so, could you explain their significance, ideally illustrated with evidence and/or practical examples?**

**Question 3: Do you have any views on Network Rail's planning capacity?**

**Question 4: Do you think we have identified the right priority areas for our scrutiny of Network Rail's plans during PR18?**

To re-iterate the point made in response to Q1 - Network Rail must develop techniques and processes to enable it to deliver more work within the limited access that is available.

Scorecards for customer performance need to be "balanced" so as to avoid perverse incentives. Improvements in efficiency must not be at the expense of Customer Service or the availability of the Network to deliver trains for passenger and freight customers.

Comparison between routes will be a useful tool for ORR to use to drive improvement. However this approach is of necessity a retrospective activity. ORR should encourage Network Rail to put robust processes in place to share best practice quickly, without waiting for a retrospective review.

**Any other points that you would like to make**

Thank you for taking the time to respond.

**Pro-forma for responding to Improving Network Rail's renewals efficiency: a consultation**

This pro-forma is available to those that wish to use it to respond to our consultation. Other forms of response (e.g. letter format) are equally welcome.

Please send your response to [pr18@orr.gsi.gov.uk](mailto:pr18@orr.gsi.gov.uk) by **5pm 13 September 2017**.

<b>Full name</b>	Brian Bennett
<b>Job title</b>	
<b>Organisation</b>	
<b>Email*</b>	
<b>Telephone number*</b>	

\*This information will not be published on our website.

**Question 1: Have we identified the main casual factors explaining recent trends in efficiency? Do you have any views on their relative importance?**

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**Any other points that you would like to make**

There has been quite a lot of discussion about the so-called " Burscough Curves " and the connection between Ormskirk and Southport and elsewhere .The suggestion I wish to make is about the connection between Ormskirk and Burscough . Over the past few years Burscough has been transformed from a predominately industrial area to a residential area serving Liverpool , Manchester , Southport and Preston and indeed was highlighted for the changes in the town by an article in The Telegraph a short while ago . But this has led to an increase in traffic along the A59 and other roads in the area some of which is now becoming very heavy .

The line from Liverpool to Ormskirk was used in the past for stream trains going to Scotland and so is constructed to a high standard and to extend the current electric train service from Liverpool , which currently stops at Ormskirk , to Burscough should be relatively easy theoretically only requiring a simple electrical connection . It would of course be more expensive than this but the benefits however would be substantial taking some of Burscough's commuter traffic off the road and indeed enabling people living between say Maghull and Ormskirk to get to Manchester and Southport more easily . As well as improving traffic conditions in the area there would also , of course , be a significant reduction in carbon emissions .

Thank you for taking the time to respond.

## Improving Network Rail's renewals efficiency: Consultation July 2017

The following comments do not address all the issues raised in the Consultation Document, but focus on certain elements which are considered to be significant contributors to the shortfall in performance.

1. You indicate that some £3.7Bn of the £14Bn planned renewals for CP5 has been deferred. This represents approx 25% of the total. It would be valuable to carry out an assessment of the consequences to the Network of these deferrals.

If deferring a renewal has had little or no impact then it is reasonable to conclude that NR did, in some cases including items which really could have been planned for a later period.

If deferring a renewal has had a major impact, such as significant disruption of train services, significant line speed restrictions, compensation payments to TOCs, or that later scheduling will result in the works being considerably more costly (beyond general inflation), then there is a case to suggest that NR should have vigorously campaigned to government for additional funding to allow such works to proceed on the basis that the additional money would cost effective. This of course assumes that NR would have the resources to carry out the work if that funding were available.

An assessment as suggested above would be valuable in identifying whether NR made best choices when deferring elements of the programme.

2. Chart 2 of your consultation document shows clearly that NR has used significantly fewer access periods than planned for CP5. Importantly nearly all of the reduction relates to access periods of >72hrs, with little or no reduction in shorter duration access periods. This must surely be very significant as a contributor to the reduced efficiency and higher costs experienced by NR.

There is considerable evidence from other sectors (e.g. process plant) that the use of overtime, shift work, weekend work and work which is carried out in multiple separated periods all result in labour productivity significantly below that which would apply for regular weekday daytime working where completion of work in a single access period is achieved.

In the rail sector, short possessions will typically feature all four of the aspects referenced above therefore it is inevitable that loss of productivity will be very significant. The result is not only the need for more man-hours of labour and supervision, but also the unit hourly cost of labour and supervision will be significantly higher. Additionally such works require more extensive preplanning.

Assuming that NR has sufficiently detailed data, it should be possible by analysis to develop a set of indices indicating the degree of productivity loss and additional hourly costs resulting from works carried out under differing access scenarios. Use of this data should help determine for CP5 (and probably confirm) that this issue was significant to the overall loss of efficiency and higher costs. It will also be useful in future to better assess the optimal scheduling of works and the cost impact of short possessions.

3. It is inevitable that in some renewal projects emerging works will occur which will increase the work content and, given that they were not included in the preplanning, negatively impact on efficiency and cost. Additionally if this emerging works results in NR overrunning its agreed possession may be liable for payments to TOCs. In some cases it will be unavoidable that these emerging works must be carried out concurrently with the

planned works, but in other cases it may be possible to defer such works to a later time when they could be carried out against a plan and budgeted provision.

Presumably NR does have a financial provision for such emerging works, but it would be valuable to investigate whether the provision is adequate.

Plans for CP6 should clearly identify the access periods proposed for each renewal and gain acceptance for the proposals from the relevant TOCs.

4. NR is required to carry out emergency works which result from failures on the network. It is inevitable that these will occur from time to time but individually they cannot be predicted. Presumably NR does have a provision for such events (as per emerging works) which should be able to accommodate the numerically majority of such events, but it is unlikely that such a provision would be adequate (or even appropriate) to address the occasional major events.

During CP5 several such events have occurred (Dawlish sea wall, Settle/Carlisle landslip, Folkestone cliff fall etc.) Inevitably such events need immediate action; the remedial works have not been pre-planned and indeed the works may commence without knowledge of the full extent of work required. Even if such works are excluded from NR efficiency measurements it is probable that they have an indirect impact upon planned works. Such emergency events require the immediate allocation of resources (labour, management & supervision and equipment) to them and these are likely to be resourced by redirection from other works. Consequently the other works are disrupted and deferred making their execution less efficient.

Chris Fox

August 2017



PR 18  
Office of Rail and Road  
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**DB Cargo (UK) Limited**  
Ground Floor McBeath House  
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**Richard Clarke**  
Head of Transport Policy, Access &  
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13 September 2017

### **IMPROVING NETWORK RAIL'S RENEWALS EFFICIENCY: A CONSULTATION**

1. This letter contains the response by DB Cargo (UK) Limited ("DB Cargo") to the consultation document entitled "*Improving Network Rail's renewals efficiency: a consultation*" issued by the Office of Rail and Road ("ORR") in July 2017. DB Cargo confirms that it is content for this response to be published on the ORR website.
2. DB Cargo is the largest rail freight operator in the UK and is a wholly owned subsidiary of Deutsche Bahn, the second largest mobility and logistics group in the world. DB Cargo operates over 5,000 trains per month in the UK conveying everything from cereals to aggregates, consumer products to biomass and petroleum to steel. DB Cargo employs over 2,700 people, providing freight, infrastructure, rail support and charter passenger services within the UK and freight services to and from continental Europe via the Channel Tunnel.
3. DB Cargo in common with other rail freight operators is a wholly private sector activity receiving no material direct government support in the UK. In this respect, rail freight is different to passenger rail as it has a very different, less direct relationship with Governments, funders and other devolved bodies. In a heavily-capital intensive industry, DB Cargo owns and operates its own assets, including depots and rolling stock, and has invested heavily in new locomotives, wagons and facilities over the years since UK privatisation.



### **General Comments**

4. DB Cargo cannot emphasise strongly enough the importance that an affordable and sustainable funding settlement is provided for CP6. It considers that a key factor in achieving this is ensuring that renewals (and other infrastructure works) are delivered by Network Rail as efficiently and effectively as possible.
5. Although not directly an issue addressed by this consultation, for rail freight operators and rail freight customers the priority for CP6 is ensuring that an affordable settlement on access charges is achieved for rail freight operators. Network Rail's efficiency target is of course a key component of the calculation of charges, and the extent to what is reasonable for rail freight operators to bear as a result of any inefficiency must be considered as part of the overall work programme.

### **Efficiency assessment**

6. DB Cargo notes that the efficiency targets forecasted for CP5 have not yet been achieved by Network Rail. DB Cargo also agrees with the ORR that renewals efficiency is an issue not just for Network Rail but also for the ORR, the wider rail industry and governments. However, DB Cargo considers that efficiency in renewal work is hard to measure. It also believes that there are other considerations and benefits which are not fully reflected in the ORR assessment. These include:
  - a) 'Like-for-like' replacement of an asset may not offer the best solution in terms of performance or value for money because the demand on the infrastructure has changed since it was originally installed and/or technology has moved on. Factors like this mean it is more important to consider the long-term overall value for money when assessing efficiency rather than just the unit cost of the renewal.
  - b) Small scale improvements as part of a renewal (e.g. for improved capability such as higher speed S&C replacement rather than 'like-for-like') that has support from operators should not be considered as inefficiency. This is something that the framework should help deliver not discourage. ORR needs to ensure that its measures of

...



efficiency do not lead to the unintended consequence of disincentivising such improvements.

- c) When Network Rail is planning the best way to undertake renewals work it should consider not only the cost of the work but also the overall costs (including Schedule 4 payments to operators). This would enable Network Rail to take a wider view in minimising overall cost when planning work. It appears, however, that the ORR's efficiency assessment is based on the direct cost of the renewal only and does not consider broader end user impacts.

7. The Industry is making positive progress to develop a deeper collaboration at a local level between Network Rail and its customers which is vital for identifying and developing efficiency improvements. However, such a large scale transformation will take time for the benefits to be fully realised. The key concern for network-wide operators such as DB Cargo in ensuring their needs and requirements are taken account of in each geographical route will be driven to a large extent by the effectiveness of Network Rail's Freight and National Passenger Operator Virtual Route and its System Operator function.
8. Given the long lives of most infrastructure assets, the renewal of any part of the network represents a once in a generation opportunity to take a holistic approach to the works to be carried out by ensuring any other relevant works are also considered at the same time in order to make the network as 'future proof' as possible.
9. With a growing demand for network capacity, continued improvements in technology and the introduction of faster passenger services or longer heavier freight trains since the infrastructure to be renewed was originally installed, DB Cargo considers that this 'holistic' approach should be considered as a matter of course in any renewal project. It is often the case that assets need to be replaced in modern equivalent form or to a higher specification just to maintain current performance.
10. The focus of renewal work should be on balancing the best specification of outputs with the money available in order to deliver reliability and capability for today's railway whilst not inhibiting future predicted growth requirements and innovation in the rail sector. Where possible, 'passive provision' for

...



future enhancements should be considered and provided where possible.

11. Critical for the future efficiency of renewals is the development of a balanced workbank from the end of CP5 through CP6 and perhaps beyond. This will help to facilitate supplier confidence, skills retention in the industry and prevent a cliff edge scenario with the curtailing of work towards the end of CP5 to be immediately followed by a 'step up' in workload at the beginning of CP6. The supply chain is not resilient to such severe changes in the level of demand and this would likely lead to delays in delivery and increased unit costs which will consequently impact on Network Rail's ability to deliver much needed efficiency improvements.

### **Access Planning**

12. Optimising the access required is a key driver to achieving future efficiency when carrying out renewals in CP6.
13. However, gaining access to an increasingly congested network to carry out renewal work is complex and requires trade-offs between competing demands. DB Cargo considers that there is a clear trade-off between long 'blockade' style possessions that are more efficient for engineering work versus shorter blockages that are less disruptive for operators. For example, unless agreed significantly in advance, long possessions with no reasonable diversionary route around them directly impact on rail freight operators and their customers with the likely consequence of the traffic being lost to other modes of transport and/or the rail freight operator incurring significant additional costs that are not adequately compensated under Schedule 4.
14. There is a requirement for funders, franchise specifiers and the ORR to be more supportive of the industry in tackling access on the network. Optimisation of access requires compromise on adjustment to services or bespoke negotiations on compensation to enable intelligent decision making which will reduce costs over the delivery of the enhancement or renewal and takes into account the overall impact to the customer.



### **Incentives for network rationalisation**

15. DB Cargo supports the removal of redundant switches and crossings and other equipment that is no longer required for rail use as this results in savings in ongoing maintenance. The removal of infrastructure previously used by coal traffic that has no future requirement due to the recent changes in energy policy is a good example of where such measures can be employed. Therefore, close collaboration between Network Rail and freight operators and relevant industry stakeholders could achieve significant efficiency benefits in such areas.
16. To assist Network Rail achieve its efficiency targets, DB Cargo believes the introduction of a freight efficiency benefit scheme may prove beneficial in better incentivising freight operators to work with Network Rail to identify where infrastructure savings could be made. Any savings identified could be shared in agreed proportions between Network Rail & the freight operators. If freight operators can be appropriately incentivised, the overall benefit of reducing Network Rail's costs should become more achievable with both Network Rail and freight operator's working towards the same goal.
17. In CP5, there has been little incentive for freight operators, over and above goodwill, to work with Network Rail to deliver significant efficiency savings as there is little reward for the time and effort that would need to be invested by freight operators in evaluating and developing ideas in this regard. The current CP5 Route Efficiency Benefit Scheme proved deeply unpopular, particularly for freight operators who have tended to 'opt-out' as the risks far outweigh the prospects of any rewards for any time and effort put in.

### **Efficiency Plans**

18. Whilst it is important to analyse and understand past failures to achieve efficiency targets as ORR's consultation document has done, DB Cargo believes that it is also important to look to the future and continue to build on the good initiatives already started by the Industry (e.g. developments in access planning). DB Cargo is certain that such initiatives will enable changes that will drive significant improvements in planning and delivery of efficient and effective renewals.



19. Network Rail's devolution process which is aimed at developing a route based structure should foster increased engagement at a local level leading to the production of more efficient plans. The role of the System Operator will also be crucial in supporting both routes and operators in this respect (particularly national operators such as DB Cargo) by ensuring capacity is optimised across the network.
20. In summary, through better engagement between Network Rail and its customers there is a foundation for producing better plans with greater levels of transparency and understanding across the industry than has hitherto been the case which should lead to greater levels of efficiency.
21. DB Cargo understands that Network Rail will set out its efficiency expectations for CP6 later this year when it publishes its Strategic Business Plans. Therefore, until such plans have been published, DB Cargo considers that the focus for renewal related improvements should include the following:
  - Increased and more productive use of access to the railway through improved collaboration between Network Rail and operators.
  - Locking down access requirements and workbank content in advance to create better certainty through advanced notice of disruptive possessions and the provision of suitable diversionary routes for freight operators.
  - Increased use of remote condition monitoring equipment on critical assets. This could include the use of new technology mounted on trains to monitor the condition of infrastructure assets to enable more information to be gathered at a much lower cost to enable targeted interventions.

Please contact me if you would like clarification or amplification of any of the points in this response.

Yours sincerely,

A handwritten signature in black ink that reads 'R Clarke'.

**Richard Clarke**  
**Head of Transport Policy, Access & Regulation**

By email:

pr18@orr.gsi.gov.uk

John Larkinson

Office of Rail & Road

One Kemble Street

London

WC2B 4AN

13 September 2017

Dear John,

### **Response to ORR's Consultation on Improving Network Rail's Renewals Efficiency**

Thank you for the opportunity to respond to this consultation. This response is made by FirstGroup on behalf of our Rail Division and its train operating companies: Great Western Railway; TransPennine Express; Hull Trains; East Coast Trains Ltd; and South Western Railway (which is a joint venture between FirstGroup and MTR).

FirstGroup is a core member of the working groups established by the Rail Delivery Group (RDG) in relation to the PR18 process, which has spent time reviewing this consultation and debating feedback. We are therefore fully supportive of RDG's response to this consultation and for the avoidance of doubt RDG's views can be interpreted as being reflective of ours. This response does therefore, draw on a number of the themes contained within the RDG document, but also reflects some elements that we feel are important to highlight.

Before turning to the detailed points, we feel it is important to set out some high level comments. Firstly, we support the five-year funding cycle linked to the High Level Output Statement and Statement of Funds Available process, for Network Rail. However, it should be noted that having continuity across funding periods for medium-term commitments such as renewals needs to be recognised. Secondly, we would agree that Network Rail has not achieved the efficiency levels in CP5 that were expected and there are potentially a number of factors that explain this, which are noted in our comments below. Finally, efficiency needs to be considered not just in respect of Network Rail costs but also in terms of train operator revenues and costs, which when all taken together have a bearing on total industry cost, which in itself has to be considered against a backdrop of a growing railway.

We have grouped our response into three main areas, broadly consistent with the questions posed within the document, which are: factors relating to efficiency; planning access to the Network; and other areas.

#### **Factors Relating to Efficiency**

As noted above, the five-year funding cycle, common to regulated businesses, for Network Rail is important and has our support as it provides structure and certainty over a reasonable

timeframe. However, the difficulty with this arrangement is that planning for the first year of a Control Period can be difficult, given that the funding envelope may not be clear. Renewals have been the area that is most affected. By their very nature renewal plans are long-term and without knowledge of the funding that is available for the first years of a Control Period plans cannot be confirmed which in turn leads to uncertainty. This is reflected in the costs of and the amount of work that is actually planned during the first year or so. Uncertainty will also affect support activity for possessions, such as resource planning and material supply. This transpired at the start of CP5 which meant that Network Rail was unable to plan effectively in terms of work to be undertaken and how that work would be contracted, impacting on delivery and the cost of renewals.

RDG notes that signalling renewals have been affected by a lack of certainty and we would add that it is also important not to limit the supply market through overly lengthy contractual arrangements. Whilst we recognise that a long term partnership can improve delivery and cost there is a danger that contracts of this nature restrict competition and expertise which may also drive inefficient solutions.

We therefore advocate a process whereby Network Rail is permitted to plan works seamlessly across the end and start of Control Periods. This will provide more certainty of delivery, planning and indeed price from the supply sector. There also needs to be an ability for contingency planning and risk within the funding that is agreed for Network Rail. This is not about an efficient price, rather it reflects the nature of the work that is undertaken and that there are numerous factors, many of which may be outside the control of Network Rail, that can affect price over the five to six year horizon that we are discussing.

We are also concerned that any efficiency targets that are set are realistic and based on sound assumptions. We know that one assumption for CP5 was that access to the Network would increase by 25%, which has not been (and in fact was unlikely to be) the case. As such one of the ways in which Network Rail has endeavoured to deliver efficiency is merely to reduce the amount of work. So targets that are set without a sound basis can result in unintended consequences or indeed perverse incentives. This has also impacted maintenance and reliability and is therefore counter-productive. Deferring work is by its very nature an inefficient approach.

For CP6, route devolution and regulation with the associated bottom-up development of the Strategic Business Plans should also ensure that Network Rail is able to prioritise renewals on a more granular basis. This means that it can cost work appropriately rather than basing renewals on an overall unit price. This approach has the unintended consequence of Network Rail then being incentivised to in fact select work that is easier to achieve (i.e. choosing branch line renewals over major junctions) as this, on the face of it, is more efficient, as volumes are achieved for lower cost.

As both an owning group and a train operator we find it difficult to comment directly on the actual costs of renewals as we are not privy to this data from Network Rail during normal business. However, we have reviewed the ORR's views on what has driven renewals costs and agree with the rationale. There are some additional factors that should be considered, as follows:

- Clarity on like-for-like renewals versus modern equivalent form or even a minor enhancement that reflects the changed nature of the use of the asset needs to be recognised. Like-for-like is incentivised as a result of efficiency targets, but it may not be the most appropriate solution. For example, a like-for-like replacement of a 40mph crossover that was originally commissioned on a mainline with a low frequency of

intercity and local traffic and potentially lower linespeed but is now a much more intensively used corridor with more intercity services and a higher linespeed wastes the opportunity to provide a more effective and resilient solution (i.e. a 70mph crossover, for example). The like-for-like approach also means that there is no incentive to rationalise the Network when a renewal is planned, which means that otherwise avoidable long term maintenance costs are locked in;

- The ability to deliver incremental improvements as part of a renewal scheme, identified by industry partners, is not inefficient – it has the potential to improve outcomes and resilience;
- The overall industry cost of an intervention. Building on the work undertaken by RDG operators and Network Rail will assess the total cost of works, considering revenue and Schedule 4 impacts as well as the physical asset cost. This can lead to a more efficient overall cost, but may be seen as inefficient in terms of the asset cost; and
- One further development during CP5 has been a more conservative approach to possession delivery to reduce the risk of overruns, given some of the high-profile incidents. To try to eliminate risk it is natural to reduce the amount of work planned, the numbers of worksites and the willingness to combine types of work.

Each of these need to be recognised in the context of a more efficient approach to delivering improvements and reliability to the Network. Moreover, in the case of the first two points, clarity is needed over when a like-for-like renewal would benefit from being a minor enhancement or indeed be considered as modern-equivalent-form, it may be more expensive in terms of the physical asset, but may be far more efficient when considered in a wider operational context. In planning and delivering renewals, Network Rail should be incentivised to deliver appropriate solutions that provide for flexibility and do not overly constrain the ability of the Network. This is an area where greater collaboration between operators and Network Rail in planning can help.

### **Access Planning**

Our overall experience is that Network Rail's approach to planning access for renewals is relatively effective, in terms of being timely. However, it is the case that possessions are booked ahead of the detail planning of what is required to deliver the workbank, which is a function of the planning timescales. Late notice possessions, that are by their nature inefficient, can occur if the work does not match the possessions, although it does tend to be the case that these types of possession are more often related to maintenance requirements or because of problems associated with enhancement delivery or a change in scope. However, that is not to say that there is not room for improvement.

As noted above, the period around the change in Control Period is a critical one and without some certainty of funding inefficiency will creep in. Network Rail needs to inform operators of their possession plans for the first year of a Control Period 18 months before it commences, prior to submission and agreement of the five-year Network Rail plan. As such Network Rail is not incentivised to do anything other than propose a standard approach for the possessions it believes are required, which may not be effective or at the worst required. With greater certainty afforded through a mechanism that allows Network Rail to plan across Control Periods would be a significant benefit.

In terms of planning access to the Network for renewals, the industry has undertaken detailed work in this area and has identified a number of beneficial approaches. This relies on all parties, Network Rail, operators and the supply chain, to work together to find the most effective and industry-efficient method of delivery. Within First we have first-hand experience of this, however, they have tended to be related to enhancements rather than

renewals. In part this is because the Schedule 4 compensation funding for enhancements is part of the overall project cost and is not related to the Access Charge Supplement related funding arrangements that is the case with renewals (and maintenance) possessions requirements. One specific example was the method of delivery for the Reading Project, which we have provided to RDG for use in its response, but for completeness is included here:

*The NR-led Reading Project team had proposed a series of nine weekend all line blocks of Reading through the Autumn of 2010, as this was the normal possession strategy. However, given the scale of the project, coupled with the complication that after each weekend the full railway would not be available for use which would compromise the service offering during one of the busiest times of the year, GW looked at alternatives. Collaborative working by NR and GW within the project team identified that the work could be completed in one 9-day blockade and that this was achievable over Christmas (less trains and less customers). This approach saved £10m. A number of mitigations were put in place including ensuring that some trains could continue to serve London using alternative stations and diversionary routes reducing the amount of bus replacement needed. Working together on the approach and on activities such as customer communication the block was successfully executed. It gave the project and NR the confidence to repeat the approach in Easter 2013, shortening the overall time of the project by a year. This approach has also been taken forward into the wider Great Western Upgrade Programme.*

Access planning efficiency is therefore not tied to just the impact on the cost of a renewal, it is also linked to the overall industry cost. It could be the case that by working together NR and operators can agree an approach that may mean more cost for a specific renewal but overall reduce the Schedule 4 compensation, TOCs costs of deliver or minimise passenger disruption and therefore the impact on a TOC's revenue.

Collaboration across routes and operators, within projects and across disciplines is also required to deliver more a more effective possession strategy, particularly when balanced against a growing railway that has ever greater demands. We also know from Transport Focus and our own research that passengers prefer to remain on trains, even if journey times are extended through diversions but that where there has to be a change of trains this should be kept to one change where possible. Taking these factors into account may also not lead to the most cost effective approach to delivering a renewal but it may lead to an overall improved outcome for industry, end-users and taxpayers.

As the RDG response notes, more data and analysis in this area is welcomed as is support for the work already completed by RDG. We would also like to assist with the work proposed by ORR in this area.

### **Other Areas**

Delivering more efficient solutions in CP6 will require the industry to learn lessons from previous Control Periods. As we have already stated, one crucial area is continuity of planning and delivery across Control Periods, the understandable but unfortunate delay in confirming the Statement of Available Funds for CP6 would, on the face of it, risk creating the same problem at the start of the Control Period that was encountered at the start of CP5. However, we are encouraged that there is a recognition that the initial renewal requirement set out by Network Rail is understood and that this will provide some level of comfort for Network Rail to begin to plan effectively for the first year of CP6.

It is also important to recognise the impact that enhancements can have on renewals. Enhancement projects provide an opportunity for an effective and efficient means of

delivering renewals through piggy-backing on possessions. However, without collaboration and communication between project teams, renewals plans can be materially disadvantaged by the need to deliver a specific enhancement (noting the separate approach to funding) related activity.

We supportive of mechanisms to encourage operators to work closely with Network Rail to identify more effective ways of delivery and to identify areas where the delivery of infrastructure can be more efficient. We note that the Route Efficiency Benefit Share (REBS) mechanism introduced in CP5 for all operators was intended to help with this. However, as we have previously set out to the ORR, we do not believe that REBS is an appropriate mechanism for incentivising operators as it is too difficult to significantly affect Network Rail's spend on OMR activities, particularly on multi-operator routes. The volume of Network Rail's spend is such that in relative terms a small overrun on cost for Network Rail significantly outweighs any potential impact a TOCs could have. It is also the case that Network Rail's actual performance against target varies widely across routes (and most operators cross route boundaries). This also means that any benefit that should accrue from the current REBS mechanism is often capped as the control period progresses removing any incentive.

We believe that the devolution of Network Rail has the potential to help improve efficiency particularly when combined with effective collaboration with operators. The devolution of Network Rail and detailed Strategic Business Plan work at a Route level should help to improve efficiency during CP6, particularly when combined with greater collaboration with operators and the supply chain. There should, however, be an incentive for all parties to work together to improve overall efficiency, not just the cost of renewals themselves. This will also help in ensuring that appropriate funding is available for the work that is required in each route. With the industry working together it is possible to improve the overall financial result, which is a better outcome for end-users and taxpayers.

Once again, thank you for the opportunity to comment on this consultation, we are content for this response to be published on the ORR website. Should the ORR wish to discuss any aspect of this response in more detail please do not hesitate to contact me.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Russell Evans', with a long horizontal flourish extending to the right.

Russell Evans

Policy & Planning Director, First Rail

**Pro-forma for responding to Improving Network Rail’s renewals efficiency: a consultation**

This pro-forma is available to those that wish to use it to respond to our consultation. Other forms of response (e.g. letter format) are equally welcome.

Please send your response to [pr18@orr.gsi.gov.uk](mailto:pr18@orr.gsi.gov.uk) by **5pm 13 September 2017**.

<b>Full name</b>	Chris MacRae
<b>Job title</b>	Head of Policy – Rail Freight
<b>Organisation</b>	Freight Transport Association
<b>Email*</b>	
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\*This information will not be published on our website.

**Question 1: Have we identified the main casual factors explaining recent trends in efficiency? Do you have any views on their relative importance?**

Yes, the summary of the immediate causal factors is accurate in outlining these as

- Network Rail was poorly prepared to deliver renewals at the start of CP5;
- Network Rail’s PR13 efficiency improvement plans were not well founded;
- Network Rail reacted slowly to the problems on efficiency;
- there has been increased pressure on access to the railway to carry out work;
- the reclassification of Network Rail into the public sector, with the introduction of fixed borrowing limits.
- devolution to Network Rail’s routes initially led to unaffordable increases in the scope of work in some areas

However, there are other factors also identified in the document worth highlighting that include management of complex projects. There are specific freight dimensions to this that we will discuss later on.

**Question 2: Are there any factors that we have not identified? If so, could you explain their significance, ideally illustrated with evidence and/or practical examples?**

Complex projects with a cross-route planning requirement have been a particular weakness. The Felixstowe to Nuneaton freight project has suffered because there have been too many inter-dependencies with passenger renewals or upgrade schemes and therefore the end to end freight improvement scheme has suffered. While there is now an enhancement project on the Felixstowe Branch going ahead, to achieve the whole freight corridor benefits that that project is a part of will require enhancement elsewhere along that corridor that are tied to passenger improvements and other infrastructure renewal schemes where freight benefits require to be built in.

**Question 3: Do you have any views on Network Rail’s planning capacity?**

As mentioned in Question 1, the issue of planning of complex projects is important as this has had a negative effect on freight as evidenced above.

It is also important to note in the document that “Network Rail has moved away from a centrally driven five-yearly planning cycle geared to the periodic review, and implemented an ongoing business-as-usual business planning process centred in the routes, informed by local knowledge of assets and their condition, and influenced by local stakeholder needs. The SBP submissions will be a snapshot from this process at the time of the periodic review. Network Rail’s policy of devolution of authority to the routes has been a key enabler of this progress”.

We very much welcome this as it is important to build a pipeline of plans that exist beyond the five year Periodic Review and Control Period processes, albeit having to reflect the monies available in each but with a view as to how individual schemes fit into the longer term overall plan and vision. It is also important that the planning process avoids the ramping down and ramping up of work programmes at the end / beginning of different Control Periods as this brings dislocation and cost escalations. Also, the creation of Programme Boards is welcome with their specific focussing ability.

**Question 4: Do you think we have identified the right priority areas for our scrutiny of Network Rail’s plans during PR18?**

The Consultation also references “a centrally driven strategic business planning process that was to an extent disconnected from the business itself, with the result that the proposed efficiency initiatives were more overlays than real plans”.

**Any other points that you would like to make**

Focus on the role of Devolved Route MDs in delivering efficiency and improvement is correct. While it is correctly stated that Route based enhancement schemes can most cost effectively (or in some cases only be cost effectively) delivered on the back of renewals schemes, the same must be recognised with freight schemes where the benefits are on end to end freight corridor flows that can cross multiple Route boundaries. It is especially important here that the FNPO (Freight and National Passenger Operators') Route schemes are supported especially at Route Board level.

Thank you for taking the time to respond.

Response to ORR consultation

Improving Network Rail's renewals efficiency

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Freightliner Group

September 2017

## Introduction

This is the response of Freightliner Group Limited to the Improving Network Rail's renewals efficiency: a consultation.

Freightliner Group Limited incorporates Freightliner Limited and Freightliner Heavy Haul Limited. We specialise in moving freight by rail and offer rail freight services throughout the UK to a wide range of customers. Freightliner is the second largest rail freight operator in the UK.

Freightliner uses the national rail network to run commercial freight services as a customer but is also a supplier to Network Rail providing train services both within possessions and for the movement of bulk material trains.

## Overview

The railway system is vital to the success of the UK economy; it connects people to jobs and goods to market. It is also a system that moves goods and people efficiently with less carbon, pollution and far more safety than comparable modes.

The railway system contributes up to £9.3 billion in gross value added per year and Rail enhances the productive potential of the economy by up to £10.2 per year. Rail also supports the efficiency of the road network for other users through reduced road congestion, resulting in up to £12 billion per year in travel time savings per year. Rail is also one of the safest ways to travel, preventing up to 950 serious casualties and fatalities per year<sup>1</sup>.

It is important that Network Rail have sufficient funds in CP6 and going forward to continue to support a safe and reliable rail network that in turn underpins the delivery of these important benefits to the UK.

It is important that these benefits are delivered to the country at the best possible value for money and that Network Rail, can demonstrate that it is an efficient organisation that is delivering. The railway is a complex industry that to a certain extent is suffering from its own success. The doubling of passenger numbers over the last 20 years as well as over 70% growth of freight movements by rail, and a rise in customer expectation of service quality, on what is essentially the same rail network, is undoubtedly putting strain on the whole system.

The use of 5 year control periods has provided certainty of funding over a reasonable length of time and we strongly support the continuation of at least a 5 year structure. The industry requires long term certainty to reflect the fact that railway assets typically have a life of over 30 years and frequently longer, and need to be sustainably managed over a long timeframe. A continuation of a framework that encourages continuity in planning and avoid disconnects and gaps as well as supporting investment in skills and innovation from Network Rail and its suppliers would be strongly welcomed.

Freightliner agrees with the ORR's view that the challenges around renewals efficiency are not just Network Rail's, but require a holistic review of how the whole system works together to achieve better value outputs including the ORR, wider rail industry and governments. Some of the reasons that Network Rail has suffered from higher unit costs for renewals are structural, or as a result, albeit indirectly, of more trains running on the network. Blame cannot be angled solely at any one party, but instead we suggest that the focus is forward looking but taking into account lessons learnt from the fact that efficiency targets have not been achieved during Control period 5.

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<sup>1</sup> <http://www.oxera.com/getmedia/802a4979-8371-4063-ad24-8a81ed6c8f82/Contribution-of-rail-to-the-UK-economy-140714.pdf.aspx?ext=.pdf>

Clarity is required to ensure that scope savings and efficiency savings are not confused. Whilst both categories are savings, it is important that all the focus is not on how to reduce the scope of the network by for example taking out crossovers or connections or simplifying signalling. Such scope savings may have wider impacts on future performance robustness or new services (for example the implementation of single line working to avoid a broken down train), and the long term implications should be carefully considered.

There is little information about Network Rail's cost base that is available in the public domain or to operators beyond high-level numbers. It is therefore difficult for an operator to fully understand why costs have increased or the reasons behind this. Our comments in this consultation response should therefore be considered as observational and in some cases based on examples that we are aware of, which may not necessarily be reflective of the whole picture.

### **1. Fluctuation of renewal volumes and need for stable funding**

A combination of events appear to have resulted in a position where renewals volumes have fluctuated throughout the Control Period, including notably the reclassification of Network Rail into the public sector, which resulted in reduced financial flexibility.

Network Rail have considerably reduced the volumes of maintenance and renewal works over the final 2 years of the Control Period but are advising suppliers to prepare for a step change increase in volumes from the beginning of CP6. This stop-start profile of work does not support an efficient supplier base or efficient use of Network Rail's own staff, with many fixed costs remaining unchanged, a reduction in renewals volume will inevitably lead to an increase in unit costs.

Such patterns of work mean that suppliers stop investing and make staff redundant only have to recruit new staff again. Inevitably skills and experience get lost in the interim period.

Consideration is needed across the industry to support Network Rail to deliver a stable and steady pipeline of renewals (and enhancements) that supports long term constructive relationships with suppliers, enables suppliers to make investments (in the private sector), invest in future skills through apprenticeships and recruit and retain the right skill base. These benefits are currently being lost and unit costs are increasing against a fixed cost base, in Network Rail, but also in the supplier base.

It is vital that at least 5 year control periods are retained; ideally control periods should be longer, reflecting the exceptionally long asset life of railway assets and the need to manage the network on a long-term sustainable basis. Over the long term, fluctuations in funding and work undertaken will lead to a more unreliable and less safe railway network. The renewal holidays taken during the latter period of British Rail had impacts for at least the following decade.

The current final settlement is timed at 6 months before the start of the control period and leaves insufficient time to support planning of major renewal works, which require considerable access negotiations with operators. We suggest that consideration is given to changing the profile of the funding settlement so there is more certainty further out. The process to agree major blockades with operators starts around 2 years out, so it is perhaps understandable that there is a slow start to works in each Control period when funding is only finally settled 6 months before.

There should be consideration to a proportion of funding being agreed further out before the start of the control period. One way to do this would be to agree a proportion (ideally the majority) of the renewals funding for the first two years of CP6 well before the start of the control period rather than this being fixed in the ORR's final determination. This would enable better planning for major renewal schemes and reduce the risk of a slow and inefficient start to control periods.

Network Rail's funding should also include an allowance for risk and uncertainty. During CP6, things

will happen that could lead Network Rail to incur additional costs or change their original plans. Some of these events are impossible to predict up to six years ahead and so there will always be a degree of uncertainty in the CP6 plan. Funding for risk and uncertainty provides flexibility so that small variations in costs during CP6 do not result in re-planning activities, which increases unit costs of delivery and contributes negatively to efficiency gains. Such flexibility would also support Network Rail in providing the best value modern renewal scheme.

Efficiency targets built into funding settlements in CP6 should be realistic and achievable and encourage decisions that deliver best value for money and the right choices for the holistic railway. Efficiency should not be just considered as a unit cost of doing work but should also take into account the holistic impact of work undertaken including for example impact on train operations and wider economic impacts. The most efficient solution for Network Rail may mean closing a line for 3 weeks, but the economic impact to the country through commuters not being able to get to work or containers not being able to move from a port would mean that the savings made would not justify the economic damage.

A further consideration is taking into account how initial capital expenditure in renewal schemes may support reduced on-going maintenance costs. If, for example remote condition monitoring is fitted at the time of renewal (which we understand is now the case), this will lead to reduced maintenance costs in future. Such equipment may increase the unit cost of the renewal scheme, but this should not be considered as inefficiency, as over the life of the asset it will lead to cost savings.

## **2. Impact of financial crash**

Network Rail was able to benefit during Control Period 4 (2009-14) from competitive supplier prices as many companies suffered loss of business after the global financial crash in 2008. Suppliers may have taken a different approach at this stage to pricing: pricing very competitively to bring revenue through the door to contribute to fixed costs and support the retention of staff, rather than a focus on profit. This would have been a short-term tactic, and would not be sustainable for a business in the longer term. Subsequently, as the economy bounced back, suppliers would have been able to increase prices to reflect the long-term sustainable level of return required to grow and invest in their company. This may have contributed towards Network Rail meeting the CP4 efficiency targets, but impacted unfavourably in CP5.

It may be helpful for the ORR to undertake some benchmarking across other parts of the construction sector and other railway systems to understand whether this has had an impact.

## **3. Funding structure**

Network Rail does not have a funding structure and framework that supports making the best value for money decisions. For example, it appears to be very difficult structurally for Network Rail Routes to improve or enhance assets at the same time as renewing them. A couple of examples we are aware of are:

- The relining of Bradway Tunnel in Derbyshire - the tunnel was closed for several months to undertake this task but no work was undertaken in parallel to prepare the tunnel for electrification (the task undertaken being considered a renewal and the electrification being considered an enhancement.)
- The renewal of the junction at Haughley Junction (north of Ipswich). This was a single lead junction but despite intensive lobbying from both passenger and freight operators to double the junction at the time of renewal, the Anglia Route would not/could do this as they were not funded to do so. As a result when the junction is doubled, further possessions will be required and the work planned and this will inevitably cost considerably more than if all the work had been undertaken at the same time.

Consideration should be given to a funding mechanism that Network Rail could draw down from to support the best value for money decisions when undertaking renewals to improve the network. This could perhaps be done on a basis where funding can be drawn down if the marginal cost of an enhanced renewal reaches a certain value for money hurdle.

#### **4. Network rationalisation**

Network Rail routes do not have any incentive to rationalise the network to support maintenance savings in the future. If for example, a crossover or loop is identified as no longer required, due to changes in train patterns, the cost of removing it can be quite substantial, and it is difficult to make a stand alone business case to remove the asset. If the cost of the removal cannot be paid back by maintenance savings within the Control Period there is no incentive for the Route to spend money in taking out the redundant asset, even though there may be a clear business case do so over a longer period.

There also needs to be more incentives for operators to work with Network rail to identify where savings can be made on the infrastructure. The Revenue Efficiency Benefit Sharing scheme was designed in CP5 to do just that, but due to the structure of the scheme being too wide, and the risk of downside payments by operators, nearly all operators opted out of the scheme. As a result the potential benefits from the scheme have not been realised. A revitalised and more focussed scheme is needed for CP6.

We suggest that a CP6 scheme is focussed on where positive benefits can be realised, where currently there is no incentive on operators to agree them. This is particularly pertinent for freight operators, who have long term businesses that rely on constantly developing new flows of traffic as business needs evolve over time. There is consequently no incentive for freight operators to agree to the removal of crossovers, loops or freight only lines that may be needed in the future to support new business flows. Sites that have been closed for 20 years can come back into use. Therefore a scheme that encouraged freight operators to consider more carefully whether such assets could be removed, through a financial incentive (a % share of the savings made) would enable the existing layout of the infrastructure to be carefully considered and where appropriate rationalised. Without such a scheme it is unlikely that these opportunities will be identified or realised.

#### **5. Fear of overrunning possessions**

Possessions to undertake renewals can get cancelled. This can sometimes mean that possessions are still booked, trains do not operate and Schedule 4 costs are still paid. We are sure that there are lots of reasons that Network Rail makes the decision to cancel renewals and that they do not do this lightly. A major factor is fear of risk of overrunning and the media/ social media frenzy that follows this - this understandably makes Network Rail risk averse, but may not support the best value overall decisions. We note that this has been particularly the case post the King Cross overrun in Christmas 2014. The overrun itself was not that major but due to various other factors the incident became major news. Since then we are aware that Network Rail have been more risk adverse, this will inevitably however have had an impact on unit costs however.

Consideration of a structure that supports Network Rail in finding the optimum balance of risks and costs, would be helpful.

#### **6. Timings of possessions**

Most renewals are currently undertaken at a weekend, which makes sense in terms of the volume and value of passengers and freight travelling at this time, versus other times of the week. We recognise that undertaking renewals only at the weekend does not make best use of fixed capital

assets, whether those of Network Rail or their suppliers, and this will make the unit cost of using those assets more expensive.

It would be more efficient to undertake renewals work across the week and weekend to allow assets and staff to be used more intensively. This is challenging due to the intense pattern of services that run all day and considerable number of freights services that run on midweek nights on many routes. In some other European countries - notably France parts of the network are closed during the day, in between peak times to enable renewals to be undertaken.

## **7. Need for more holistic planning approach**

We understand that some of Network Rail's efficiency plans for CP5 included assumptions about increased access, and that this has not come to fruition. The access taken must be based on the optimal balance of cost and value across the railway system and careful consideration is needed to achieve this balance. However, if supporting processes are not changed then Network Rail will continue in the future not to secure the increased access it desires. The working relationship between the Routes and the System operator will be vital in managing holistic processes and ensuring that possessions proposed by different Routes do not conflict.

In order to underpin change and make better use of mid-week days or nights or extended blockades a step change in approach is required by Network Rail, in supporting operators to find solutions to amend their train plan, and be more focussed on the whole cross-industry solution to enable increased access.

This has become more important as the network has become more congested. It is much harder now to find paths for services diverted into an alternative station or on an alternative route, because the alternatives are already congested. Since the beginning of CP5 passenger numbers have grown by 9%, making the need for alternatives both more vital, but also more challenging.

Network Rail, in the round knows which parts of the network are due for renewal over the next few years. Each one of these renewals could be considered for its suitability for doing on mid-weekdays or nights, depending on traffic volume, availability of diversionary routes and physical attributes. This could be discussed with operators as an overall plan at an early stage, before any detail planning is undertaken so that some renewals could be identified for their suitability for mid-week timings. This would avoid having to change plans at a later stage because they are not supported by operators. This would also support a plan that ensures that diversionary routes are made available.

To make this a success Network Rail would also need to consider how they support operators in offering alternative solutions. At the moment the Network Code processes do not underpin certainty for operators in terms of train plan at the time they accept possessions, making operators reluctant to agree more radical proposals. A step-change would be needed to develop a real service ethic by Network Rail, so that the collective whole is aimed at supporting the operators in funding solutions, currently the team wanting to plan possessions do not work in tandem or to the same timescales with the teams planning trains around possessions. There is no-one or no-team in network that is responsible for making sure the whole hangs together as a workable plan for both Network Rail and the operators. Subsequently there is frequently tension between operators and Network Rail in agreeing extended access windows at the planning stage. The train plan for the operators is done at a much later stage in the process and requires trust from the operators that Network Rail will sort out the train plan.

An example of this is the additional 11 week Gospel Oak blockade (for electrification of the route) that commences in September 2017. At just 3 weeks before the blockade was due to start Network Rail advised Freightliner that it hadn't identified a path for one of our key services out of London

Gateway port and was not going to offer us a path. After much pressure a path was identified at a time some 2 hours earlier than the usual path, which has had considerable knock on consequences and costs. It is paramount importance that such issues are resolved at an earlier stage in the process, or operators will be very reluctant to agree to disruptive possessions. This supports the need for a more holistic approach by Network Rail to customer service.

During CP5 phase 1 of the Industry Access Programme (IAP) was developed through the Rail Delivery Group with the aim of optimising access on a whole industry cost basis, developing processes and decision support tools to evaluate the trade-offs between construction costs and impact on revenue. These processes have not yet been widely rolled out. It will be vital to involve operators and the supply chain early in the definition and evaluation of possible access options, and for Network Rail to be transparent about the financial impacts of different options. The increased application of the IAP principles will provide increased transparency of access decisions (e.g. where the right option for the industry might be a higher construction cost). It will be important that the DfT and ORR are supportive of the industry in tackling access, particularly where optimising access requires adjustments to services or bespoke negotiations on compensation.

## **8. Impact of Schedule 4 structure**

Another blocker to changing the pattern of access for renewals is Schedule 4. The freight Schedule 4 is a liquidated regime, which pays a nominal sum to contribute towards costs and losses but in no way does it compensate freight operators for actual costs and losses. The result of this is that every time freight operators accept a disruptive possession they agree to losing money. Understandably, the freight operators are reluctant to accept more disruptive possessions on this basis. We suggest that a holistic review of the savings that could be made by changing possession patterns versus increasing Schedule 4 rates to reflect actual costs and losses.

## **7. High output trains**

Freightliner is aware that some of the high output trains have been suspended from use. We understand that this is linked to cost saving but also inefficient use of the high output equipment, within, for example 6 hour mid-week night possessions. Given the high capital cost of this equipment (which is a cost that must still be accounted for) this appears to be a disjointed decision.

Another challenge around the high output trains (and other possession services) we have observed is around regulation of getting the trains on time to site against for example the final passenger trains on the route. We have experienced examples of where the renewals work has been cancelled because the high output trains have been held up behind the final passenger service. We understand that it would be very frustrating to be a passenger on that final train and to be detained into a taxi or a coach, but in terms of holistic value for money it is not clear whether the controllers making the decisions have the complete information or authority to make the best overall value for money decisions.

## **8. Signalling renewals**

We note that signalling renewals has fallen the most behind during CP5. A few observational comments around this are that:

- a. Signalling is an area where the retention of skills is of paramount importance so the stop-start programme may have had a particular impact on signalling. Going forward it will be particularly important to train and retain specialist signalling engineers and designers. Ideally this skill should be in-house within Network Rail, rather than relying on contractors who will also be bidding for contracts in other countries. This requires a long-term underpinning of a plan of

signalling renewals. It will also require careful planning by Network Rail to ensure that the holistic training and retention of skills are planned across the whole network, and not undermined by variation in volumes of work in individual routes.

- b. There has been considerable uncertainty during CP5 around the development and implementation of an ETCS signalling system. Over the Control Period there has been many different approaches as to what the priority routes should be for ETCS signalling and considerable and multiple changes in assumed timescales for implementation. This must have had an impact on the planning of conventional signalling renewals over the control period. It is important that going forward a stable plan is agreed in CP6 and CP7 for ETCS signalling roll-out, to enable Network Rail to plan with certainty where conventional signalling will be rolled out.
- c. Signalling is an area in particular, where there is opportunity to enhance capacity at the same time as re-signalling at a marginal cost. There does not appear to be the right framework in place to enable Network Rail to make improvements at the same time as renewing signalling. An example of this during CP5 was the South Humberside re-signalling scheme, which was on a like for like basis and did not include any improvements.
- d. Network Rail had a policy of rolling out modular signalling, with the aim of reducing costs. Unfortunately, due to the historic and congested nature of the UK rail system, this proved to be an unsuitable product for nearly all routes. It is key that as much capacity as possible is squeezed out of the existing network to satisfy growing demand, and a better way of measuring success of Network Rail signalling renewals should also take into account where capacity has been improved. Network Rail may have factored these cost savings into their plans for CP5, but in practice have been unable to realise those savings.

## 9. Examples of efficiencies

As a supplier to Network Rail in providing trains both within possession sites we are aware of the following initiatives that have improved efficiency in this area:

1. Safe and efficient access trials - this involves taking a possession using the conventional signalling rather than using traditional detonators, flags and stop boards. Freightliner has been supporting Network Rail in implementing a trial with High Output track renewals between Edinburgh and Newcastle. This reduces the time to take a possession and reduces the number of staff working on the track to put down detonators and stop boards (reducing safety risk). Thus the productivity of the possession (yards of track renewed) is increased.
2. Taking a Possession around a train (TPAT) - instead of a possession being taken and then the train approaching the signaller who has to get permission from the PICOP for the train to proceed, which takes time this method allows the train to arrive at the correct point using normal signals and then the possession is taken around it. This saves about 30 minutes per possession that allows the possession to be more productive.
3. Flexible train arrival point (FTAP) - this involves using GPS on the train to identify exactly where track works ceased on the previous night. GPS guides the train to stop in exactly the correct place and then the possession is taken around the train rather than the possession being taken and then the train being allowed into the possession. This saves at least 30 minutes which enables more productive time. It also reduces the number of staff working on the track to put down detonators and stop boards (reducing safety risk).
4. Multi- skilling staff - Freightliner has cross-trained train drivers driver so that they can also undertake the duties traditionally undertaken by separate ground staff and train preparation duty staff. This means that only one train crew is required on the train and has enabled reduced costs for Network Rail.
5. In site drivers - Freightliner has trained drivers to be able to drive within work sites (driving at 5mph) without the previous route knowledge for that area. This has saved on route knowledge training costs and supports a flexible and more cost efficient national work force that can move to large projects when required. Freightliner has provided services using

this methodology at major work sites at London Bridge, Waterloo and on Western Route during Christmas New Year 2016/17.

6. Competition in the supply chain - for the first time in Control Period 5 Network Rail has used all 5 major freight operators as suppliers. This has increased the competition between freight operators and leads to innovative thinking as described above, to be competitive. Network Rail has also introduced national more flexible contracts for freight operators which have supported increased flexibility and efficiency to match resource to jobs.
7. New Mussel wagons - Network Rail have invested in new 100t wagons (known as Mussels). This has increased the capacity of block trains - and the amount of tonnage that can be moved by the same locomotive and train crew. Previous wagons had a gross weight of as low as 30t per wagon and none had a capacity of greater than 90t.
8. Virtual quarries - Network Rail continue to develop the concept of virtual quarries that enables materials to be stored nearer to work sites and supports more efficient use of rolling stock (i.e. wagons are not being used to store materials, as was previously the practice).

**Pro-forma for responding to Improving Network Rail’s renewals efficiency: a consultation**

This pro-forma is available to those that wish to use it to respond to our consultation. Other forms of response (e.g. letter format) are equally welcome.

Please send your response to [pr18@orr.gsi.gov.uk](mailto:pr18@orr.gsi.gov.uk) by **5pm 13 September 2017**.

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\*This information will not be published on our website.

**Question 1: Have we identified the main casual factors explaining recent trends in efficiency? Do you have any views on their relative importance?**

Although this ORR consultation has raised some drivers as to why CP5 renewals efficiencies have declined, nowhere is it explored as to *why* some of the changes and different behaviours have taken place, and that will be the key. Given the relatively good CP4 record of delivery, there seem to be no valid reasons yet given for those possible drivers of declining efficiency.

It is GB Railfreight’s view that, clearly, there are now not sufficient people employed within Network Rail who have enough project planning experience, with a proven track record to deliver, nor is there anywhere near enough successful challenging of its various suppliers across the board. These skills are, both, vital in ensuring that reliable possessions are the norm and that costs are kept as low as possible. It is hard work.

There is a definite requirement for Network Rail to have enough staff already in place, with proven capabilities, before such staff are entrusted with multi-million pound projects. There is no excuse for employing people who do not have the correct skills for these very demanding, responsible and expensive projects.

Rigorous scrutiny and the challenging of maintenance records for machinery and equipment, used on possession sites, needs to take place to ensure that they’re reliable and do not hinder the efficiency of any given possession. Whole possessions can often be cancelled due to an item of machinery breaking down.

Regarding trends in efficiency, GB Railfreight would like to have transparency on the £2.6bn (in 2016-17 prices) of renewals underperformance in the first three years of CP5.

It isn’t clear, at all, *why* there has been such a large jump in Network Rail’s renewals unit costs although there appear to differences between routes on the subject which warrants more investigation. It may be that some routes take a far more pragmatic approach to renewals, and their associated costs, than other routes.

**Question 2: Are there any factors that we have not identified? If so, could you explain their significance, ideally illustrated with evidence and/or practical examples?**

For the greatest efficiencies, Network Rail needs to be clear what access it needs for a renewal, along with the total costs (both operational/material and Schedule 4 costs) before access is requested from all operators. Getting all parts of that correct, first time, for all possessions, will allow Network Rail to choose which possessions to join together.

It would probably be beneficial, to all parties, if Network Rail were to enter into early engagement with operators and have bespoke commercial negotiations with a view to far earlier resolution of possession requirements.

However, the biggest inhibitor to this is contractors' behaviours. For anything other than the very large renewal and enhancements contracts, few contractors will want to sign contracts so early on (1-2 years out) as they'll want to leave their options open for bigger, more lucrative projects. There needs to be a fundamental change to this so as to be able to lock down contracts far sooner than is currently the case.

Put simply, GBRf believes there are probably too few suppliers who want to embrace the UK rail network's renewals works. They may well have little incentive and Network Rail not have strong enough penalties for when things don't go to plan with its suppliers.

There are many occasions where initial engineering access requirements, e.g. published in Version 1 of the Engineering Access Statement, state a period of time required to carry out works, long before a contractor is appointed, who could then require a totally different set of blocks to a route. The initial request is often merely a "best estimate", and carries a large amount of cost in excess operational and Schedule 4 costs.

Another point to note, regarding renewals efficiencies, is that we regularly see progress reports on renewals site (via Network Rail Control updates) and there is always contingency built in to the possession time. This is, obviously, the right thing to do but there may need to be a better, more accurate, balance between including too much contingency and not paying out too much compensation for cancelling trains that may not have needed to be cancelled.

**Question 3: Do you have any views on Network Rail's planning capacity?**

Renewals activity in CP4 quickly ramped up in its last two years and now appears to be doing exactly the same in CP5. It would be useful to know what, exactly, drove the revised CP5 track asset policy, especially as Network Rail lacked the capability to deliver that work.

It would be useful to have data for seeing how well Network Rail piggybacks its renewals activities on its enhancements projects, especially at the very early stages of planning. It has got to be sensible to combine these two activities although there is definitely a tipping point where too much could be planned for robust and predictable delivery.

GB Railfreight believes that Network Rail often plans too many Section 4 "Standard Possession Opportunities" across the Network, denying operators the chance to run trains, then does not use them to their best extent. For example, we know that Friday night Section 4 opportunities are generally very little used so why have them and why deny operators the opportunity to run?

Once again, GBRf believes this stems from Network Rail not knowing exactly what access it requires over a given timetable year and pitching in for a best guess of its required access.

GB Railfreight would like there to be transparency of the planned access usage each week and its productivity, especially the Section 4 and 5 opportunities, with a view to that feeding into likely required access for each following year.

Train operators see little in the way of renewals strategy, either over lines of route or any of the new route areas. Taking the East Coast Main Line, for example, rather than returning several times over the next decade to renew S&C units between Peterborough and Doncaster, there needs to be a far more strategic look at renewals and carry them out in a smaller number of bigger possessions.

**Question 4: Do you think we have identified the right priority areas for our scrutiny of Network Rail's plans during PR18?**

ORR states that good planning is a pre-requisite for improving efficiency. Given that ORR is looking to test route-based plans against each other, from the bottom up, GB Railfreight cannot understand how a Network Rail Route will know how much a particular project will cost in CP6 when it won't yet have been tendered or let?

How is ORR measuring the quality of the inputs for projects and the people, in each route, who create these inputs?

With regard to a more in-depth challenge of Network Rail's CP6 efficiency improvements, GB Railfreight is concerned that Network Rail won't always know the state of its progress early enough for warning bells to ring in enough time for realistic changes to be made. GBRf is keen to know more about mechanisms to be put in place.

**Any other points that you would like to make**

Network Rail must not be rewarded in CP6, in any way, for poor management and missed efficiencies in its CP5 renewals programme. As the starting point for the PR18 Access Charges Review, FOCs should not be picking up any of the extra costs associated with these inefficiencies.

Thank you for taking the time to respond.

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Please send your response to [pr18@orr.gsi.gov.uk](mailto:pr18@orr.gsi.gov.uk) by **5pm 13 September 2017**.

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\*This information will not be published on our website.

**Govia is one of the leading rail operators in the UK and is a joint venture between the Go-Ahead Group (65%) and Keolis (35%). Govia has experience running complex and challenging rail operations; currently running three major rail franchises: GTR, Southeastern and London Midland. Govia is the UK’s busiest rail operator, currently providing around 35% of all passenger journeys. As a key provider of rail services, we welcome the opportunity to respond to the ORR’s consultation regarding the 2018 periodic review.**

**This response represents the views of the three Govia-owned Train Operating Companies as well as Go-Ahead Group plc. Go-Ahead has contributed to the industry response prepared by RDG and this is intended to supplement that response.**

**Question 1: Have we identified the main causal factors explaining recent trends in efficiency? Do you have any views on their relative importance?**

We agree with most of the main causal factors listed in the consultation document, in particular that Network Rail was poorly prepared to deliver renewals at the start of CP5 and the impact of the reclassification of Network Rail into the public sector.

Much of the renewals activity in CP4 was deliberately backloaded and Network Rail failed to complete the work within the Control Period, meaning it had to be rolled over and as a result Network Rail was poorly prepared to deliver CP5 from day one. We must be careful not to carry on this domino effect by making the same mistake for the beginning of CP6.

The reclassification of Network Rail into the public sector has led to significant red tape. The increased regulation, as well as a lack of clear accountability and authority has impaired Network Rail’s ability to make decisions. In some cases, colleagues at Network Rail have been unaware who has the authority to sign off on key investments, therefore creating long delays. Also, as Network Rail is now presumably exposed to Government efficiency programmes in the same way as schools and the NHS, its ability to deliver on its commitments is impacted when funding is cut.

In our opinion, the view that access for renewals played a significant role in limiting Network Rail's ability to meet the required CP5 efficiency targets needs to be evidenced. Whilst there may have been a small erosion of Network Rail's overnight engineering access due to Government and stakeholders specifying earlier and later trains, experience from Go-Ahead Group TOCs suggests that this is relatively limited. Also, on occasions Network Rail has previously been offered additional access (for example on the WCML, over the summer holidays, when trains are quieter) and the additional access has been viewed by Network Rail as unnecessary. It is also sometimes the case that Network Rail assumes a TOC will reject an access request, without specifically asking or following due process.

Network Rail also makes assumptions regarding TOCs preferences on access; often assuming that TOCs will not support long blockades and would always favour consecutive weekend works, however this is not always the case as recent major blockades at Watford (for the renewals scheme in 2014) and on the Redditch branch (to deliver the enhancement project in 2014) have shown. Repeated weekend closures carry a risk of overrun and a detrimental reputational impact leading to a possible long-term reduction in travel. Access planning should be conducted with close engagement with the TOCs and the type of approach should be considered on a case by case basis. Extended blockades, when planned and delivered appropriately, can not only be more financially efficient for Network Rail but also more manageable (as a 'single-hit') for operators.

It is important not to confuse improvements with inefficiency. Network Rail needs to move on from the like-for-like replacement arrangements. The current approach of changing a 20mph crossing with another 20mph crossing, when a modern-day equivalent may carry a higher speed capability should be part of the maintenance programme, not be classified as an enhancement. The marginal cost uplift is a much better value for money approach. As described in the RDG response to this consultation, renewals often present a once in a generation opportunity to do significant work in an area and, with a growing demand on the network, we as an industry believe this opportunity must be taken.

**Question 2: Are there any factors that we have not identified? If so, could you explain their significance, ideally illustrated with evidence and/or practical examples?**

An area which is perhaps not given enough focus in the consultation is the actual physical deliverability of any planned renewals volumes in CP5, which follows the experience of Network Rail's failure to deliver its planned volumes of track renewals in both CP3 and CP4.

Network Rail made a deliberate decision to heavily profile most of its planned track renewals activity in CP4 towards the last two years of the Control Period, banking on the use of new High Output equipment to deliver the required volumes more efficiently (in a relatively much shorter period of time compared to historic methods). This represented a bit of a logistical gamble as Network Rail relied on a relatively small fleet of High Output vehicles to undertake the required amount of renewal work nationally, and unfortunately Network Rail failed to complete the planned volume of renewal work within the Control Period (partly due to insufficient resources), leading to a significant volume of track renewals then being deferred from CP4 to CP5 (and note that a proportion of the CP4 renewal volumes had also been deferred from CP3).

As Network Rail's efficient renewals expenditure represents a Regulatory determination (as part of its overall OM&R requirement), but the actual renewal volumes aren't, then this can lead to

the risk of Network Rail continuing to defer a proportion of planned renewals not only because of an inability to reduce overall unit costs, but also due to a physical inability to actually deliver the volumes required to maintain a consistent asset condition.

**Question 3: Do you have any views on Network Rail's planning capacity?**

We agree that good planning is a critical aspect of improving efficiency and we agree with the approach the ORR has set out for assessing Network Rail's plans.

Network Rail's planning for enhancement and major renewal projects needs greater focus, requiring clear accountability and a more transparent process with better engagement with TOCs, and a wider level of co-operation between Network Rail programmes. TOCs are often consulted late or receive late notification of slippage in the commissioning dates for Network Rail's projects, which creates significant issues for the TOCs to manage. Slippage in Network Rail's projects can lead to the commissioning dates for different schemes coinciding, which can create issues for TOCs in terms of driver training. For example, in terms of signalling renewals, TOCs may not have sufficient drivers to release for training on two schemes from the same depot at the same time, particularly if short notice is given, which can lead to increased project costs to Network Rail as alternative traincrew training options are pursued. These downstream processes are critical to support Network Rail's projects, so it is vital that TOCs are consulted throughout and given sufficient notice of changes to enable the required training of traincrew to be delivered in the most efficient manner.

**Question 4: Do you think we have identified the right priority areas for our scrutiny of Network Rail's plans during PR18?**

We support the priority areas the ORR has identified for scrutinising Network Rail's plans. Scrutiny of plans should also include analysis of the deliverability of the volumes of renewals proposed. We must avoid a repeat of the situation where Network Rail is overcommitted to a programme of schemes it does not have the capability to deliver. For this reason, the ORR should also scrutinise Network Rail's contract award strategy for delivering the high volumes of work in CP6.

Alongside this, the ORR should scrutinise the engineering access proposals for the delivery of renewals and the impact this will have on the travelling customer against the value and benefit of undertaking the work.

**Any other points that you would like to make**

Whether through poor planning, or delivery slippage, there appear to be peaks and troughs of work for Network Rail which is hugely inefficient. A consistent pipeline of work should help improve Network Rail's efficiency and create a situation where more contractors are available to bid for the work, leading to increased competition and therefore lower costs.

Going forwards, it is essential that any efficiency targets built into funding settlements in CP6 are realistic and achievable. They should encourage decisions that deliver best value for money and the right choices for the railway.

The consultation document states that the ORR is considering alternatives to the REBS mechanism. We strongly believe that REBS should be abolished as train operators have little influence over some of the categories which are included in the REBS payments. We also believe there are already sufficient incentives on the parties to work collaboratively. We have expressed these views to the ORR both at PR18 meetings and in responses to previous ORR consultations. Train Operators and Network Rail should be left to agree their own commercial arrangements for risk/reward on specific efficiency schemes. A complex mechanism which is not widely understood in the industry has little bearing on behaviours.

Thank you for taking the time to respond.

**Pro-forma for responding to Improving Network Rail’s renewals efficiency: a consultation**

This pro-forma is available to those that wish to use it to respond to our consultation. Other forms of response (e.g. letter format) are equally welcome.

Please send your response to [pr18@orr.gsi.gov.uk](mailto:pr18@orr.gsi.gov.uk) by **5pm 13 September 2017**.

<b>Full name</b>	Ralph C Tiffin
<b>Job title</b>	Senior Statutory Auditor - Consultant
<b>Organisation</b>	McLachlan+Tiffin
<b>Email*</b>	
<b>Telephone number*</b>	

\*This information will not be published on our website.

**Question 1: Have we identified the main casual factors explaining recent trends in efficiency? Do you have any views on their relative importance?**

(Material factors para 16)

- a) Network Rail was poorly prepared to deliver renewals at the start of CP5;
- b) Rail’s PR13 efficiency improvement plans were not well founded;
- c) Network Rail reacted slowly to the problems on efficiency;

There is no doubt evidence for the first three causal factors and thus the closer NR route folk get to the problems the better. ORR actions are attempting to address these.

**d) There has been increased pressure on access to the railway to carry out work**

From experience main line services are generally good and they are generally punctual.

From regular experience and observation of journeys on ECML, WCML and Anglia trains rollick up and down the tracks, apart from when there is some incident. All rather reminiscent of the Railtrack years. Although the ride is not getting better as a passenger you have to assume the measurement trains and renewals regime is working.

Higher utilisation of track, the costly fixed asset base, should bring efficiency to UK rail. But not if revenue from utilisation is not passed on to NR and the taxpayer.

One fundamental flaw in the UK railway model today is that the short term monopoly franchises paying basically set costs for access have little incentive to consider track utilisation or sustainability, but rather cash flow maximisation over the life of their franchise.

The franchisee's drivers are thus to demand improved infrastructure speeds and availability as long as the costs do not fall to them. This weakness leads to demand for the 24/7/365 railway.

What is wrong with Saturday to Sunday mid day being a period with diversions and line speed restrictions etc? On many longer distance routes these are quieter times – evidence is lower fares. When required to slow or divert trains interestingly the TOCs tend to charge higher or full fares – so they do not lose - but NR does not get more money.

**e) The reclassification of Network Rail into the public sector, with the introduction of fixed borrowing limits.**

This could be seen as a positive constraint – a bit of commercial reality. But the only option is cost reduction. There is no real scope under the present franchise regime to seek more revenue

**f) Devolution initially led to unaffordable increases in the scope of work in some areas (which, nonetheless, did deliver benefits, such as improvements in train performance).**

This may be an indicator of the route managers being driven to please their customers or rather under pressure from their principal or monopoly franchise holder. Will freight, minor and open access users not be disadvantaged?

from 16 f

*One of the aims of route devolution is to make Network Rail more responsive to stakeholder needs, and a renewal can provide the best opportunity to achieve such improvements (indeed they may be uneconomic at any other time). The question is whether Network Rail has had sufficiently robust governance arrangements in place to understand and manage the impact of individual decisions on the affordability and efficiency of the renewals portfolio as a whole*

**Do you have any views on their relative importance?**

**d) is very important.** There seems to be little mention of how UK maintenance and renewals regimes compare to other 'world class' infrastructure owners.

What is wrong with speed restrictions and diversions?

**Question 2: Are there any factors that we have not identified? If so, could you explain their significance, ideally illustrated with evidence and/or practical examples?**

You have identified the factors, the drivers need to be understood  
Better planning etc can be done with investment in staff and training.

**Question 3: Do you have any views on Network Rail's planning capacity?**

No comment

**Question 4: Do you think we have identified the right priority areas for our scrutiny of Network Rail's plans during PR18?**

(from para 32)

**a making greater use of comparison between individual route plans.**

Comparisons with best practice would be better – a serious weakness of the present focus on comparing routes is that routes and their use are quite diverse in nature.

How about international comparisons – much of the data is factual and technical – when is a track likely to fail? When to other reliable infrastructure companies replace track? – how do they do it?

The fact that we have a defective and disconnected model for rail in the UK does not prevent the ORR from identifying best practice – from other 'world class' safe, economical and sustainable infrastructure companies

**Encouraging Network Rail's increased engagement with route customers and other stakeholders.**

Dialog is always a good thing but how much can NR or the franchise customers do within the constraints of the present franchising system?

**Engaging with the governments and the wider industry on how their actions can affect the scope for efficiency improvements.**

This is fundamental. The present prescribed services, selection of who operates them and how Network Rail's funding settlement is structured are just some issues that need reviewed.

**Any other points that you would like to make**

Thank you for taking the time to respond.

## Pro-forma for responding to Improving Network Rail's renewals efficiency: a consultation

This pro-forma is available to those that wish to use it to respond to our consultation. Other forms of response (e.g. letter format) are equally welcome.

Please send your response to [pr18@orr.gsi.gov.uk](mailto:pr18@orr.gsi.gov.uk) by **5pm 13 September 2017**.

<b>Full name</b>	David Jones
<b>Job title</b>	Rail Development Manager
<b>Organisation</b>	Merseytravel (on behalf of the Liverpool City Region)
<b>Email*</b>	
<b>Telephone number*</b>	

\*This information will not be published on our website.

### Question 1: Have we identified the main casual factors explaining recent trends in efficiency? Do you have any views on their relative importance?

The key reasons put forward for explaining Network Rail's poor performance seem reasonable and at the same time disappointing. It is difficult to understand how efficiency could have declined while plans were being put in place which were aimed at improving efficiency. The inference is that if Network Rail had not instigated any changes they would have delivered more renewals at a lower cost. The concern is that this is replicated in introducing more change.

Merseytravel's concern regarding this decline in efficiency lies more with the issue of enhancements rather than just renewals and maintenance of structures. The cost of delivering rail projects has risen at levels significantly above the level of inflation over the past 20 years and this issue of real cost increases does not seem to be addressed. A new station in 2000 cost £3m while an equivalent station would now cost £12m rather than less than £5m if inflation was applied. This issue has to be addressed if rail is to be a competitive mode of transport and if investment is to be attracted into the rail network, particularly when government funding is restricted

The move towards single-source contractors for projects of a given cost appears to take competition out of the bidding process. Subsequently we have had situations where the contractor has then suggested that cost increases were due to increased work load. In a normal tender situation this would not be a problem as only those contractors with capacity for the work would bid. There seems little incentive for Network Rail or its contractors to drive out inefficiency or to improve under these circumstances as work is effectively guaranteed irrespective of the cost.

It is interesting to note that one of the causes for a decline in efficiency is the devolution of Network Rail's routes. It is ironic that a route based approach is being proposed as a means of increasing efficiency.

**Question 2: Are there any factors that we have not identified? If so, could you explain their significance, ideally illustrated with evidence and/or practical examples?**

The review document appears reasonably comprehensive in identifying the decline in efficiency and the proposed means for addressing this decline.

However while dealing with maintenance and renewals there is little attention directed towards the enhancement of the railway. In many ways the structures developed through enhancements are similar in many ways to renewal work and on this basis if the cost of dealing with renewals is dealt with it should go a long way towards dealing with enhancement costs.

While Network Rail is chiefly focused on maintenance and delivery of the current rail network there are many third parties who see the development of the railway as a key element of delivering local transport improvements and improving economic well-being. Within the Liverpool City Region alone Network Rail is heavily involved in the delivery of 4 major projects including new rolling stock, a new station at Maghull North, the re-instatement of Halton Curve and the refurbishment and expansion of Newton-le-Willows.

The delivery of rail projects has to be done through Network Rail. However there is some concern that Network Rail does not properly take into account the resources it needs to have in place to meet the needs of third parties. This leads to an organisation which is trying to undertake its day to day work while also trying to respond to the requirements of third parties who want to take enhancements forward. This leads to an organisation under-resourced and places more pressure on individuals within Network Rail. This cannot have a positive impact on the management and delivery of projects whether maintenance, renewal or enhancement. There have also been instances where experienced project management resources are moved away from third party schemes and put to work on projects where Network Rail are accountable during delivery with consequential lack of continuity and knowledge.

**Question 3: Do you have any views on Network Rail's planning capacity?**

We would hope that the increased level of stakeholder consultation identified within the ORR consultation document will allow Network Rail to correctly identify the quantity of work which will be undertaken and the resources needed to deliver it. This may require an increase in the establishment of Network Rail but this will lead to direct benefits as projects are managed well and delivered to time and cost.

**Question 4: Do you think we have identified the right priority areas for our scrutiny of Network Rail's plans during PR18?**

The LCR believes that, in the main, the ORR has identified a reasonable way forward which it is hoped will improve the current situation.

It is important that the correct level of work is clearly identified and the resources put in place to deliver the work load whether this is maintenance renewal or enhancement work.

**Any other points that you would like to make**

None.

Thank you for taking the time to respond.



John Larkinson  
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13 September 2017

Dear John

### **CONSULTATION ON IMPROVING NETWORK RAIL'S RENEWALS EFFICIENCY**

I am writing in response to ORR's consultation on improving Network Rail's renewals efficiency, which was published on 20 July 2017. I hope that you find our response helpful in informing your approach to assessing Network Rail's Strategic Business Plan (SBP) submissions and monitoring our performance during CP6.

The purpose of ORR's consultation is to seek views on what Network Rail, ORR and the wider industry needs to do differently to drive improvements in renewal efficiency in CP6. We welcome this focus and recognise that efficiency is a key issue for the Department for Transport (DfT) and Transport Scotland in assessing the level of funding required for CP6. However, renewals efficiency is only one part of our plan, and it is important that Network Rail is appropriately funded to be able to run the railway in a safe and sustainable way and deliver the outputs that our customers and end-users expect.

We broadly agree with ORR's identification of the main factors which explain recent trends in renewals efficiency. Our response acknowledges the issues that we have experienced in CP5 – we discuss these issues in the annex to this letter. We also explain the steps we are taking, through our Transformation Plan, to change our business from an inward facing monopolistic organisation, to an open, outward, customer focused and competitive one.

#### Our transformation journey

Network Rail is changing. We initially set out our ambitious Transformation Plan in July 2016. We updated our plan in February 2017 and will publish a further update shortly<sup>1</sup>, as it is important to keep our plan up-to-date.

We are creating a customer-focused business, to meet customer needs, with clear accountabilities, able to make decisions quickly. Our vision is of a company founded on high-performing devolved route businesses operating within a national framework.

- We have devolved into nine route businesses, placing accountability closer to customers and passengers, so that decisions can be more relevant to their needs and taken faster. These businesses will continue to evolve and grow in strength as capabilities develop and the new regulatory regime, focused on the route businesses, becomes established.

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<sup>1</sup> Our Transformation Plan and subsequent updates are available at: <https://www.networkrail.co.uk/who-we-are/delivering-for-our-customers/>

- We are aligning track and train by creating shared targets between Network Rail and train operating companies, focused on what passengers and freight users want, and holding the industry to account through independently chaired Route Supervisory Boards when it does not deliver. Future franchises should build on this approach.
- We have restructured so that we can deliver externally market tested services to our devolved businesses, bringing a 'do or buy' mindset to all Network Rail services.
- We are changing our approach to infrastructure projects so that we lower costs, drive innovation and create meaningful contestability.
- We are creating a culture of continuous improvement to make Network Rail 'Better Every Day'.
- We have set up the System Operator to help make sure the railway is planned for, and operates, as a whole. This will also enable informed investment decisions based on transparent economic analysis. We have also established the Technical Authority to set and maintain high standards of technical excellence and facilitate effective knowledge sharing.
- We are leading the railway industry in the drive to deliver a digital railway, a whole industry change project that can be a world first, in turn creating export opportunities.

Technology is at the core of modern infrastructure management. Better use of technology and a greater focus on innovation are a key part of our plan. We are seeking more funding for technology and innovation in CP6 so that routes are able to innovate and drive improvements at a local level.

Whilst transformation to date has been largely internal, aimed at getting the company in the right shape, we know that to achieve real transformational change we must look outwards and work with our partners in the rail industry and beyond. We want to break down traditional boundaries to make it easier for others to invest in and deliver rail projects, and look at how we can work with train and freight operating companies, contractors and governments in different ways so that together, as one railway, we can deliver improvements more efficiently and creatively.

#### Learning from our CP5 experience

In CP5, although we are not spending more than ORR assumed, we are delivering lower volumes of work for the funding that we receive. There are a number of factors that have contributed to our experience in CP5, many of which are highlighted in ORR's consultation. For example, our plans for CP5 were not as robust as they needed to be. These plans were based on top-down assumptions, and were not bottom-up reality-based plans. We address each of the 'factors' identified in ORR's consultation in the annex to this letter.

We recognise that change is needed and we will make sure that CP6 is planned and delivered differently. We welcome that ORR's consultation highlights some of the improvements we have already made.

We are producing fully-costed, deliverable efficiency strategies as part of our CP6 Strategic Business Plan. These will focus on a number of areas where we can increase productivity, remove inefficiency or increase existing efficiency, including:

- Driving operations, maintenance and renewals efficiencies by:
  - Increasing productivity (improving access, delivery efficiency and 'Better Every Day').
  - Reducing inefficiency (commercial changes, renewals improvements).

- Increasing existing efficiency (intelligent infrastructure, Digital Railway, and employment cost optimisation).
- Delivering lower cost infrastructure projects by:
  - Reducing project costs (optimising economic value, challenging scope, and alliances).
  - Maximising an asset's life-cycle value (challenging standards).
  - Increasing contestability (driving innovation, increasing private sector funding and publishing potential upgrade projects).

Our newly appointed Director of Transformation and Efficiency will oversee this work, and we will also seek lessons from other companies who have successfully managed major change.

We remain focused on improving safety, to deliver 'everyone home safe every day'. For example, our Planning and Delivering Safe Work (PDSW) programme is focused on improving workforce safety by putting a single person in charge of safety on worksites. This programme will introduce new ways of working and introduce technology solutions to systemise and support the planning process.

### Conclusion

There is much to do to improve our railway. However, it is important that Network Rail is appropriately funded to be able to deliver its Transformation Plan so that we can run the railway safely and sustainably.

We are changing to become an organisation that helps to bring track and train closer together so that the railway focusses on passengers and freight users and is accountable to them. Our strategy and actions have started to take root and there is increasing evidence of positive change.

We have set out the key points of our response above. The annex to this letter provides Network Rail's detailed comments on each of ORR's four consultation questions.

My team and I are keen to continue working with ORR throughout the periodic review process to develop your approach to assessing our SBP submissions and monitoring our performance during CP6. Please note that no part of this response is confidential and we are content for it to be published in full.

Yours sincerely



**Jeremy Westlake**  
Chief Financial Officer

## **ANNEX: NETWORK RAIL RESPONSE TO ORR'S CONSULTATION QUESTIONS**

In this annex, we have set out our responses to the four questions that ORR asked in its consultation. The key points from our response, below, have been reflected in our covering letter.

Question 1: Have we identified the main causal factors explaining recent trends in efficiency? Do you have any views on their relative importance?

We, broadly, agree with the six factors that ORR has identified in its consultation as explaining recent trends in renewals efficiency, and explain these further, below.

### **1. Preparation to deliver renewals at the start of CP5**

The costing of the CP5 renewals portfolio was one of the key areas where we could have been more prepared. Our early CP5 plans had generally been costed using relatively simplistic volume / unit cost based methodologies, which did not reflect the real life complexity of the renewals workbank for CP5.

Framework contracts are often put in place to start early in the control period because this provides the longest-term certainty of funding, outputs and therefore requirements. However, the mobilisation periods for major framework contracts took longer than expected and they then did not deliver in the first year of CP5. These issues caused planning instability that impacted the second year (2015/16) of CP5 and it was not until 2016/17 that we successfully delivered the volumes of work in the route-based plans.

In addition, uncertainty before the start of CP5, in relation to the availability of funding and outputs required had an impact on the delivery at the beginning of the control period as asset managers sought to avoid committing funds to lower priority projects.

We want to avoid the same planning issues that we faced in CP5. Therefore, our CP6 plan is activity-based and built bottom-up by the routes and based on asset condition. It is built up, where possible, using project estimates that factor in the complexity of the work proposed, rather than the simplistic cost/volume approach adopted for CP5.

### **2. CP5 Efficiency Plans**

We agree that our planned CP5 efficiency improvements were overlaid, top down onto our CP5 plan, and were not supported by detailed delivery plans. Ideas identified in the SBP were not translated into plans for delivery. In many cases, factors that were expected to result in savings have instead been sources of increased costs, such as track access, standardisation and contractor rates. Following devolution, without detailed efficiency plans, routes were unable to progress many of the efficiency ideas that were developed by the central organisation.

Another contributing factor was that our plans were based on forecasts of costs at the end of CP4. However, a slowdown in the efficiencies delivered towards the end of CP4 (notably track and civils) meant that we started CP5 with a higher cost base than we expected.

To address this issue, we are producing fully-costed, deliverable efficiency strategies as part of our CP6 SBP. These will focus on a number of areas where we can increase productivity, remove inefficiency or increase existing efficiency. Our efficiency strategies will be granular and deliverable, and include:

- Driving maintenance and renewals efficiencies by:
  - Increasing productivity (improving access, delivery efficiency and 'Better Every Day').

- Reducing inefficiency (commercial changes, renewals improvements).
- Increasing existing efficiency (intelligent infrastructure, digital railway, and employment cost optimisation).
- Delivering lower cost Infrastructure projects by:
  - Reducing project costs (optimising economic value, challenging scope, and alliances).
  - Maximising an assets life-cycle value (challenging standards).
  - Increasing contestability (driving innovation, increasing private sector funding and publishing potential upgrade projects).

Our newly appointed Director of Transformation and Efficiency will oversee this work, and we will also seek lessons from other companies who have successfully managed major change.

We have also recently set up cross-functional asset efficiency groups, each led by a Director of Route Safety and Asset Management (DRSAM). These groups cover each asset category with the purpose of developing efficiency initiatives that routes can then use to inform their CP6 plans.

We remain focused on improving safety, to deliver 'everyone home safe every day'. For example, our Planning and Delivering Safe Work (PDSW) programme is focused on improving workforce safety by putting a single person in charge of safety on worksites. This programme will introduce new ways of working and introduce technology solutions to systemise and support the planning process.

### **3. Reaction to problems in efficiency delivery**

We agree that early cost saving ideas did not realise the benefits expected in our CP5 plans, and alternative plans were not developed quickly enough at the start of CP5.

The delivery issues we experienced in the first year of CP5 were initially considered as a 'one-off' issue. However, it became clear that these issues were ongoing. Therefore, from the second year of the control period (2015/16), there was a significant amount of central coordination to address on-going issues. For example, we carried out substantial re-planning work to reflect higher unit costs and the financial constraints placed on us by the borrowing limit we agreed with DfT.

In 2016, we set up a renewals recovery programme to coordinate a series of workstreams to improve our efficiency delivery over the rest of CP5 and create a solid platform to move into CP6. These included:

- End-to-end process and accountability improvements.
- Standards and policies.
- Access and management of work site contingency including culture change.
- Improving workbank stability.

In mid-2017, we created the new Directorate for Transformation and Efficiency to support the project planning for the overall efficiency plan. This directorate will help to ensure that we deliver what we have committed to do. It will also provide support to the routes and wider parts of the business in developing and implementing new ideas for transformational change.

## **4. Access**

We agree with ORR that access is a significant factor driving renewals costs, and that it has had a resulting impact on efficiency in CP5. Our analysis suggests that delivering around an operational railway adds an average of 50 per cent extra cost, compared to green field access, and significantly more in some cases.

We have identified three key factors, relating to access, that have had a material impact on efficiency in CP5.

### 4.1 Impact from train services

ORR's consultation highlighted that running more trains earlier and later in the day is putting pressure on access which we recognise as a significant factor.

The set-up and demobilisation time required in a possession means that windows for productive time can become unviable. Also, late running last trains can lead to work shifts being cancelled on the night.

Where consensus is not reached with train operators, Network Rail can often be reluctant to trigger industry dispute mechanisms to gain access. This is driven by a combination of consideration of customer relationships and the impact of resulting uncertainty on the delivery programme whilst the dispute is resolved.

Higher Schedule 4 rates in CP5, reflecting greater passenger numbers and ticket revenue also have the impact of discouraging disruption even at the expense of increased project costs.

### 4.2 Impact from enhancements

CP5 has benefited from record levels of investment in enhancements. However, this has had an impact on the size and quality of access available for renewals.

Access for enhancements tends to be booked further in advance and major projects, in particular, are generally prioritised over renewals. There can be synergies between renewals and enhancements – access booked for enhancements can be shared or it can be possible to secure longer line blockages than would normally be available. However, our assessment is that, generally, access opportunities are reduced for renewals rather than improved. This is a particular issue when access is required to flex, to support evolving delivery programmes.

### 4.3 Managing overrun risk

Following a review of the engineering overruns at Paddington and King's Cross in December 2014, we have put significant focus into reducing possession handback risk. We have halved the number of significant overruns over the past three years. Contributing to this reduction, we have been more active at cancelling 'at risk' work and have reviewed the time contingencies in our work plans. However, these actions have had an impact on efficiency rates of Network Rail's renewals activity. We are reviewing the amount of contingency in possession windows as part of our work to improve access efficiency. Whilst we are obviously very keen to mitigate the risk of engineering overruns we must ensure that, as an industry, we do not become unduly risk averse.

Improving access is a key issue for Network Rail. We have a number of workstreams that are already in place, aimed at driving up access efficiency. These workstreams cover the following areas:

- Improved access agreements
- Safer and faster access
- Blockades v multi-night / weekend work
- Right time starts
- Contingency
- Fixed access windows.

We are also reviewing the outputs of the Industry Access Programme (IAP) to assess the viability of the outputs of that work, for the future, so as to make best use of this work.

## **5. Impact of reclassification**

ORR's consultation highlights the potential impact from Network Rail's reclassification to an arm's length government body. In our view, the primary impact of this change is the introduction of a fixed cap on the funds available in CP5.

Given the significant difference between our early planning assumptions and current forecasts, we have had to defer projects to keep the portfolio within funding limits. This in turn has impacted workbank stability and reduced the efficiency of the residual work. This is a particular issue for track renewals, which has high levels of fixed costs associated with staff in delivery teams and the plant and equipment required.

DfT and HM Treasury (HMT) recognised the importance of maintaining flexibilities in our funding arrangements in CP5. This has allowed us to develop the most effective programme of interventions to deliver as efficiently as we can. DfT and HMT have provided this flexibility, in large part, through the classification of Network Rail's CP5 income and expenditure as 'Annually Managed Expenditure' (AME) for government accounting purposes. This provides Network Rail with some flexibility to move its expenditure across the five-year of the control period.

We are currently working closely with HMT and DfT to agree our funding and financing arrangements for CP6.

## **6. Scoping renewals**

ORR's consultation notes the important role played by scope choices in renewals efficiency, which we recognise. The consultation also states that devolution to routes had directly led to unaffordable increases in scope of work, which we do not think is an evidence-based view.

Routes have operated under significant financial constraints for the majority of CP5 as the result of reclassification. Choices made to increase the scope of projects or address expensive complex sites have required other projects to be deferred to keep the portfolio affordable. The devolved model reflects our view that routes are best placed to understand and optimise these trade-offs.

One of the key benefits from devolution has been to allow more integrated decision-making, closer to customers. ORR's consultation highlights the improvement in asset management reliability that has been achieved during CP5. Route teams are encouraged to make the best overall choices for their

customers, within the funding available, but the benefits of this approach are not recognised in the efficiency measures that ORR currently uses.

The following areas have impacted Network Rail's apparent financial performance and, therefore, efficiency assessment.

#### 6.1 Scope choices made within a project

Scope choices have been made in CP5, which have increased the unit costs of delivery. In signalling renewals, for example, route asset managers have typically specified remote condition monitoring technology, removal of redundant assets and replacement of cables to be delivered as part of renewals programme. There are clearly benefits to include these activities within a renewal. However, because these choices have increased unit costs and were not made prior to setting the determination they have negatively impacted our efficiency assessment.

#### 6.2 Additional projects

Financial performance is impacted when work not included in the periodic review is required to be delivered. This includes emergency and reactive work where insufficient allowance was made in Network Rail's early control period plans or PR13.

#### 6.3 Project complexity

There is significant variation in the unit costs of different renewals projects. These differences reflect mainly the specific characteristics of individual schemes rather than underlying difference in efficiency. This leads to the workbank makeup having a significant influence on the portfolio unit cost and hence efficiency assessment. In previous control periods, we could balance complex works with lower cost projects to compensate. Portfolio selection has been much less common in CP5. Route asset managers have been encouraged to target the highest priority works, instead.

Question 2: Are there any factors that we have not identified? If so, could you explain their significance, ideally illustrated with evidence and/or practical examples.

We consider that there are two factors, not included in ORR's consultation document, that have had a material impact of renewals efficiency in CP5

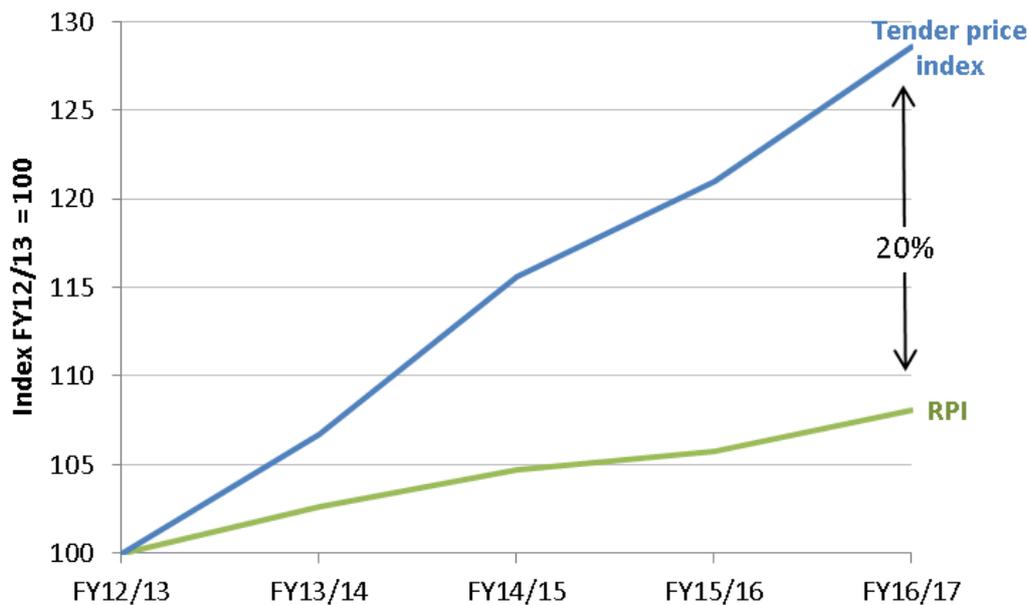
### **Supply Chain**

ORR's consultation did not identify supply chain conditions as one of the main factors driving our renewals efficiency assessment. We consider this to be a key factor in explaining CP5 efficiency trends, notably cost headwinds from supply chain inflation due to an upturn in the economic cycle.

Between 2008 and 2013 (CP4), Network Rail benefited from lower contract prices during the economic slowdown, which followed the financial crisis. There was not sufficient consideration about how sustainable they were and so these lower prices were 'baked into' the CP5 funding settlement.

As the wider economy improved, during CP5, contractor costs have steadily risen. Chart 1, above, shows that between 2014 and 2016 (CP5), price inflation in the construction market has significantly outstripped our income, which is linked to RPI. The Tender Price Index (TPI), which tracks the cost to the client, shows movements in the wider UK construction market over the period.

Chart 1: Tender Price Index (TPI) and Retail Price Index (RPI) 2012/13 to 2016/17



Whilst parts of the supply chain are rail-specific, many contractors work across sectors and so activity elsewhere in the economy drives up the contract prices we face. Increased competition for labour and other resources influences the supplier prices we face. For example, significant increases in signalling and electrification works in CP5 (across both renewals and enhancements) have also absorbed spare supplier capacity, resulting in higher costs to us.

### Impact of enhancements

We have already highlighted the impact of an increase in enhancements work on the availability of access to deliver renewals. However, our enhancement programmes have had a further impact on renewals efficiency in CP5 through the prioritisation of resources such as cranes and specialist contractors to enhancement schemes and away from renewals projects. This is often the right decision to make as enhancement projects are generally much more time critical than renewals – delays in the delivery of enhancement project milestones can impact the introduction of new rail services. This impact was not fully factored into our CP5 plans.

For example, we took the decision to prioritise the Crossrail programme over a Bristol area resignalling scheme. Our decision reflected the negative impact that delaying our Crossrail works would have had on the overall Crossrail programme. However, this decision, led directly to an additional £38m of costs for Network Rail.

### Question 3: Do you have any views on Network Rail’s planning capability?

We recognise that our plans for CP5 were not as robust as they needed to be. CP6 will be planned and delivered differently. We have strengthened our planning capability significantly to enable us to do this. We are producing fully-costed, deliverable efficiency strategies as part of our CP6 Strategic Business Plan. These will focus on a number of areas where we can increase productivity, remove inefficiency or increase existing efficiency.

There is a corporate challenge to our routes to ensure their plans are both evidenced and optimised, and that the activity levels are supported by detailed plans for delivery. We are not prescribing a top-

down view of each plan. However, there is a recognition that we need to plan within the constraints of the overall funding available.

Creation of plans at this more detailed level is driving the careful consideration of the impact of the changing asset base (Thameslink and Western Electrification are obvious examples), future access availability and the development of new technologies and ways of working. It is this activity-led plan that is used to create a robust estimate of the resources and costs necessary to deliver it. An iterative approach has been taken to developing the plans for CP6, with routes and business units submitting a rolling eight-year view of activity at each stage.

Our efficiency plan will contain two different types of efficiency. There will be some national efficiency programmes that span the routes, and route specific efficiency plans. The sum of these will result in a post-efficient route business plan, which will be the basis of the SBP that we plan to submit in December 2017. To ensure that the business owns any efficiency plans in CP6, it is important that all the routes and functions work collaboratively to initiate efficiency plans, then implement and measure them.

Question 4: Do you think we have identified the right priority areas for our scrutiny of Network Rail's plans during PR18?

We welcome the changes that ORR has made for PR18 to the way in which it assesses Network Rail's SBP submission. We understand the benefits of using route-based comparisons to provide insights about the robustness of route plans. We think that ORR's approach needs to be risk-based so that it can prioritise its limited resources to focus on the most important parts of our CP6 plan. ORR should also recognise that overly simplistic comparisons between routes are likely to be misleading due to the very different characteristics of each route.

We have worked closely with ORR over the last 12 months to give early sight of the processes and principles of how we are developing our plans. This ongoing 'progressive assurance' work should provide ORR with a good understanding of how we have constructed our CP6 plan, in advance of the submission date. This early insight should also give ORR information to help it identify the areas of the plan that represent the biggest risks.

We think that the priority areas of our CP6 plan that ORR has identified are appropriate. For example, we recognise that stakeholder engagement is essential to ensure that the SBP is deliverable, realistic and where possible meets the aims and aspirations of stakeholders. It is important that there are realistic expectations about engagement due to the limited time and resource available, particularly as a number of operators have suggested that they will struggle to engage with this process. We also think that it is important that ORR considers the availability of funding for risk and uncertainty in CP6 as a priority area.

We welcome that ORR plans to take account of the changes we are making to deliver our Transformation Plan.

## **Rail Delivery Group**

Response to

### **ORR's consultation on improving Network Rail's renewals efficiency**

**Date: 13 September 2017**

# Rail Delivery Group response

## ORR's consultation on improving Network Rail's renewals efficiency

**Organisation:** Rail Delivery Group

**Address:** 200 Aldersgate Street, London EC1A 4HD

Business representative organisation

**Introduction:** The Rail Delivery Group (RDG) was established in May 2011. It brings together Network Rail and passenger and freight train operating companies to lead and enable improvements in the railway. The purpose of the RDG is to enable Network Rail and passenger and freight train operating companies to succeed by delivering better services for their customers. Ultimately this benefits taxpayers and the economy. We aim to meet the needs of:

- Our Members, by enabling them to deliver better outcomes for customers and the country;
- Government and regulators, by developing strategy, informing policy and confronting difficult decisions on choices, and
- Rail and non-rail users, by improving customer experience and building public trust

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## Introduction

1. This document outlines the key points from RDG's members in response to the ORR's consultation on improving Network Rail's renewals efficiency.
2. All our industry members recognise that efficiency has not been achieved as forecast in CP5. We also agree with the ORR that renewals efficiency is an issue not just for Network Rail but also for the ORR, wider industry and governments. The industry is transforming to provide a means for much closer and deeper collaboration at a local level between Network Rail Routes and train operators. This is vital for improving efficiency but such a major transformation will take time for the benefits to be fully realised.
3. We confirm that we are content for this response to be published on the ORR website.

## Background context - Growing demand and rail's contribution to the economy

4. The benefits to the wider economy from rail are huge. To illustrate this, a report commissioned by the RDG on the contribution of rail to the UK economy<sup>1</sup> found that:
  - The rail sector created benefits for rail passengers and freight users worth £14.3bn in 2014.
  - Travel on rail instead of roads reduces road congestion and enables companies to locate closer to one another. These two benefits made the UK economy more productive by up to £11.3bn in 2014.
5. Demand for rail services has grown significantly in recent years. In 2016/17 there were 1.73bn passenger journeys by rail, double the level 20 years ago and 9% more than at the start of CP5.
6. The reasons for highlighting the above are to demonstrate the importance of having a sustainable and properly funded railway and to provide the context for how the potential for efficiency should be assessed. This is explained further in the following sections.

## Sustainable funding

7. Adequate funding for operations, maintenance and renewals is essential if the network is to be reliable and sustainable and in order to enable long-term stability or improvements in performance and capacity. The adequacy of Network Rail's overall funding is also important to provide certainty to allow medium-term planning of workbanks and to provide suppliers with confidence to invest in people, skills and technology all of which are critical to improving efficiency. Lumpiness and change in the renewal programme is also an issue as it makes it harder for suppliers to maintain resources to respond to the rail industry's demands. This does not help facilitate efficiency because it can increase the cost of contracts.
8. Five-year control periods are well established in rail and other sectors and we support their continuation. This is because they:
  - a. provide certainty of funding over a reasonable length of time;
  - b. better reflect the long-term nature of the industry in terms of asset management, and enhancement and renewal planning. Processes should encourage continuity in planning and avoid disconnects that can occur when there is uncertainty on short-term funding;
  - c. support stability in access charges, allowing train operators to plan their businesses with a greater degree of certainty; and

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<sup>1</sup> <https://www.raildeliverygroup.com/about-us/publications.html?task=file.download&id=469762650>

- d. support the drive for securing investment in skills, innovation and efficiency from suppliers.
9. However, for investments such as renewals, we believe there would be significant efficiency benefits by providing even more certainty to smooth the impact of a new funding settlement. One way to do this would be for ORR to determine the renewals funding for the first two years of CP6 well before the start of the control period rather than waiting for this to be fixed in the ORR's final determination. This would enable better planning for major renewal schemes and reduce the risk of a slow and inefficient start to CP6.
10. There has been uncertainty about the additional funding required to support early stage development and implementation of new signalling technology (e.g. ETCS) and the plans for a digital railway. This does not support the development of a clear and deliverable strategy to move to new technology, causes changes to plans for conventional signalling renewals and hence leads to inefficiency.
11. Network Rail's funding should include a sufficient allowance for risk and uncertainty. This is essential given the funding arrangements for Network Rail which is likely to include a hard budget constraint. During CP6, it is possible that events will happen that could lead Network Rail to incur additional costs. Some of these events are impossible to predict up to six years ahead and so there will always be a degree of uncertainty in the CP6 plan. Funding for risk and uncertainty provides flexibility so that small variations in costs during CP6 do not result in significant and disruptive re-planning of activities that can affect the successful delivery of efficiencies in CP6.
12. It is essential that the efficiency targets built into funding settlements in CP6 are realistic and achievable and encourage decisions that deliver best value for money and the right choices for the railway. If they are not achievable, this will mean it is likely that Network Rail will have to defer work in order to live within a hard budget constraint. Deferring work brings significant performance risks and also results in changes to workbanks and possessions. In turn, these create inefficiency and so represent a downward spiral, leading to poorer outcomes for rail users and the taxpayer.
13. In setting the efficiency targets for CP6, the ORR should take into account that where supply chain capacity has been reduced due to a reduction in volumes in CP5, it will need to be ramped up again once volumes increase in CP6. This is likely to be costly, particularly in specialist areas where resource is already constrained.

## Efficiency assessment

14. We largely agree with the ORR's view of the main factors that have driven renewal costs in the early years of CP5. However, efficiency in renewals is hard to measure and there are some considerations and benefits from the renewal work that are not fully reflected in the ORR assessment. We discuss some examples below:
  - a. The growth in demand (e.g. through more trains, longer trains and faster trains) has a big impact on renewal requirements and means that a more holistic approach is needed when assessing efficiency.
  - b. Like-for-like replacement of an asset is often not the best solution, either in terms of performance or value for money, because the requirements of the infrastructure may have changed since it was first installed and/or because technology has moved on. Also, in some cases, legislation will have moved on, imposing additional requirements. These factors mean that it is more important to consider overall value for money when assessing efficiency rather than a simple unit cost of the renewal.
  - c. Small scale improvements as part of a renewal (e.g. additional renewal scope such as higher speed S&C replacement rather than like-for-like) that have support from operators should not be considered as inefficiency. This is something that the framework should help achieve rather than being resisted. At present, ORR's measure of efficiency could have the unintended consequence of dis-incentivising such improvements.

- d. When Network Rail is planning the best way to undertake renewals work, it considers not only the cost of the work, but also takes into account Schedule 4 costs (a proxy for the impact on train operator revenues). Thus, Network Rail takes a wider view in minimising overall cost when planning work, whereas the ORR efficiency assessment is based on the direct cost of the renewals only and does not consider broader end user impacts.
15. Renewals often present once in a generation opportunities to do significant work in an area and, with a growing demand on the network, the industry considers these opportunities should be taken. Network improvements and, for example, the introduction of faster trains, may have taken place since the infrastructure to be renewed was first installed. As a result, it is sometimes necessary to replace the asset to a higher specification just to maintain current performance.
16. The focus of renewal work should be on doing the right work within the money available to deliver the optimal balance of reliability and capability of today's railway whilst not prejudicing future condition/sustainability for tomorrow's railway. The focus should not be to achieve the ORR assumed volumes.

## Access planning

17. Optimising the access required to carry out renewal work will be key to achieving greater renewals efficiency in CP6.
18. But gaining access to the network to carry out renewal work is complex and requires a trade-off between competing demands. There is a trade-off between long possessions that are more efficient for engineering work versus shorter possessions that are less disruptive for passengers and freight users.
19. There is also a balance required between access for renewal work and that for the major enhancement programmes. In recent years, because of the size and importance of the enhancement programme, it has benefited from many of the major access periods at Christmas and other holidays, leaving fewer opportunities for efficient access for renewals.
20. There is also a balance to be struck between the quantity of work to be delivered in a possession, to maximise efficiency, and the risk of overruns that can have a significant impact on customers and the reputation of the industry.
21. It is not realistic to have detailed renewal plans for the whole control period set a year before the start of CP6. However, it is important to agree access plans at least a year ahead as this is important for efficiency and for operators to plan their businesses, and once planned should not be changed if at all possible.
22. Access was identified early in CP5 as a key area where better cross-industry collaboration could unlock efficiency savings. A key finding from cross-industry work carried out early in CP5 was the importance of involving operators and the supply chain early in the definition and evaluation of possible access options. Greater industry co-operation will be a key element in improving efficiency in CP6 and in providing increased transparency of access decisions (e.g. where the right option for the industry might be a higher construction cost).
23. Access to the track to deliver works has a significant influence on renewals efficiency. Network Rail has six ongoing workstreams, building on the Industry Access Programme (IAP) initiatives started earlier in CP5, to address this issue. It includes working with franchise specifiers to better reflect access needs in franchise competitions and contracts with train operators. Network Rail works with train operators to identify how best to package works and access, to balance the need to run trains and undertake engineering work. For example, in the Tunbridge Wells area, Network Rail and Southeastern worked together to extend engineering access early in the week, enabling reduced access towards the weekend so that there was less disruption at the times when demand was highest. This enabled Network Rail to eliminate a maintenance backlog and increase revenue for Southeastern.

24. Network Rail's access planning workstreams mentioned above cover the following areas:

- improved access agreements;
- safer and faster access;
- blockades versus multi-night / weekend work;
- right-time starts;
- contingency;
- fixed access windows.

25. Local collaboration between Routes and operators is important for improved access planning. A good example of where this worked well was the Reading project. Although this was an enhancement and not a renewal project, the principles that were followed provide a useful lesson on how the industry believes this can be taken forward more widely as route devolution becomes established. The original access arrangement proposed by Network Rail for Reading was for a series of nine weekend all line blocks, as this was the normal preferred possession strategy at the time. However, given the scale of the project, and the complication that after each weekend the full railway would not be available, Great Western and Network Rail looked at alternatives and identified that the work could be completed in one nine-day blockade and that this was achievable over Christmas. This approach saved £10m. A number of mitigations were put in place including ensuring that some trains could continue to serve London using alternative stations and diversionary routes reducing the amount of bus replacement needed. Working together on the approach and on activities such as customer communication, the work was successfully executed. It gave the project team the confidence to repeat the approach, shortening the overall project by a year. Although this is an example from a few years ago, the approach has continued to be used on Great Western.

26. Another example of good local collaboration is where Greater Anglia have recently agreed changes to Sunday services on the Felixstowe branch to allow upgrades that support extra freight capacity, and indirectly reduce the likelihood of passenger service disruption at busier times. Network Rail and train operators would be happy to provide further examples of effective collaboration.

27. The purpose of giving the examples mentioned above is to show that good local collaboration on access planning leads to more overall industry efficient outcomes. We recognise that this local collaboration is not yet as widespread or effective as we would like, but we are certain that Network Rail's Transformation Programme and route devolution will lead to improvements and better joint local working. The key principle is the importance of early and effective planning and collaboration between Routes and operators to bring track and train closer together.

28. It is also important that funders, franchise specifiers and the ORR are supportive of the industry in tackling access issues, particularly where optimising access requires adjustments to services or bespoke negotiations on compensation.

29. We support the ORR recommendation in paragraph 34 about the need for better data and analysis on the availability of access, possession productivity and scope of work delivered. This will give a clearer understanding of true efficiency, where improvement opportunities are and whether they are achieved. We would like to assist with the work to develop the most suitable leading indicators described in paragraph 35 of the ORR consultation document.

## **Incentives for network rationalisation**

30. In some cases, there is a good business case, with support from operators, to remove redundant switches and crossings or other infrastructure that results in a saving in ongoing maintenance and renewal costs. The upfront cost of removing assets can be significant, but we would not want there to be a dis-incentive - either due to lack of funding or because of how efficiency is assessed - in carrying out this type of beneficial investment. It is also, currently, difficult to achieve network optimisation as part of network change.

31. There should also be a mechanism that incentivises train operators to work with Routes to identify where infrastructure savings can be made. The Route Efficiency Benefit Sharing mechanism (REBS) was introduced by the ORR to do this. However, as industry members have previously

noted, the current scheme has not worked. This is because it covers a very wide set of costs that operators have little knowledge or understanding of, the risk of downside payments is too high and the baseline is set too far in advance. The industry is discussing an option for a more bespoke arrangement that could be agreed between operators and a Network Rail Route on a project by project basis.

## Efficiency plans

32. The ORR consultation is largely backward looking at what have been the causes of renewals inefficiency in CP5, but the industry is clear that it needs to learn from CP5 and build on some of the initiatives (e.g. on access planning) already started, to focus on changes that drive improvements in planning and delivery of renewals.
33. Route devolution will help get better Route/TOC/FOC engagement at a local level and help to produce better plans with greater levels of transparency and understanding across the industry. Through better TOC/FOC input, those plans should be better informed by customer needs. Devolution is also creating a strong network system operator that will play a crucial role in the access planning process. These changes are not easy to establish and will need time to become fully effective. We believe that better local collaboration will help improve planning, by getting operators and Network Rail working together to a greater extent than occurs today to consider the optimal solution for the access needed to deliver a renewal efficiently.
34. Network Rail's transformation and devolution to the Routes enables local efficiency plans to be developed with operators in a more coordinated and effective way, balancing the needs of passengers and freight users (through a strong TOC/FOC voice) with the need to maintain and renew the network in as efficient a way as possible.
35. Network Rail will set out its efficiency plans for CP6 when it publishes its Strategic Business Plans later this year and so until then we cannot describe specific details. However, some of the key areas of transformation and broad focus for renewal related improvements in future include the following:
  - Increased and better, more productive, use of access to the railway, including through improved local collaboration between Routes and operators to bring track and train closer together. See also the earlier section on Access Planning.
  - Locking down access requirements and workbank stability.
  - Increased use of remote condition monitoring equipment, including train borne devices on passenger service trains, that enable more asset information (and at lower cost) and better targeted interventions.
  - Faster and safer electrical isolations.
  - Rail milling plant that allows rails to be re-profiled to prolong asset life.

# Improving Network Rail's renewals efficiency: a consultation

## Response from Rail Freight Group

September 2017

1. Rail Freight Group (RFG) is pleased to respond to the ORR's consultation on improving Network Rail's renewals efficiency. No part of this response is confidential.
2. RFG is the representative body for rail freight in the UK, and we campaign for a greater use of rail freight, to deliver environmental and economic benefits for the UK. We have around 120 member companies including train operators, end customers, ports and terminal operators, suppliers including locomotive and wagon companies and support services.

### **General Comments**

3. RFG recognises the imperative to ensure that an affordable and sustainable funding settlement is provided for CP6, which allows the railway to continue to thrive at an acceptable level of funding. Ensuring that renewals are undertaken as efficiently as possible is a key component of this.
4. Although it is not part of this consultation, for freight operators and customers the priority for CP6 is an affordable settlement on access charges. Network Rail's efficiency target is a key component of the calculation of charges, and the extent to which it is reasonable for freight to bear increased charges as a result of inefficiency is an area which must be considered as part of the overall work programme.
5. As documented in the consultation, Network Rail have made some progress in areas such as asset management, technology and organisational capability which are likely to facilitate long term efficiency savings across their operations. We consider it essential that Network Rail are funded and encouraged to continue developing these areas.

### **Structural Issues**

6. We recognise the structural issues highlighted in the consultation which have hampered Network Rail's ability to plan and deliver renewals efficiency in CP5. Some of these areas, including reclassification and the impact of changes in the enhancement programme are unique to the current control period, and whilst their impact has been significant, they are unlikely to be a feature of CP6.
7. Other areas, such as 'boundary issues' between control periods however are a persistent issue. The consultation highlights the lack of preparedness at the start of CP5, with commensurate impacts on the rail supply chain. Similar issues also

arose at the start of CP4, with our members reporting activity levels for engineering services and ballast considerably lower than forecast and indeed contracted.

8. We strongly support the five year control period process, which is essential for providing stability for operators and customers. We also note that the level of some activities, particularly enhancements, can change considerably between control periods. Nonetheless, we consider that Network Rail, ORR and Government should consider how best to 'smooth' the boundaries of control periods so far as renewals activities are concerned, so that the supply chain can have certainty of activity in the early years of the control period.

### ***Route Devolution***

9. We note the ambition for route devolution to help deliver efficiencies through greater alignment with train operators at a local level. We broadly support these aims, including the ability to benchmark between routes. However, we are concerned to ensure that this is not to the detriment of cross route operators. There will be a role for the FNPO route, and the SO, to help oversee this, but given the scale of activity, this can only be at an oversight level.
10. As outlined in our responses to other consultations, we consider that Network Rail's internal governance must be strengthened to ensure that FNPO and SO are able to reasonably leverage the needs of cross route operators with the geographic routes. The Scottish Minister's HLOS makes clear their understanding of this need, by setting explicit freight targets on the devolved routes.
11. The FNPO route is already in discussions with the freight operators regarding ways to deliver additional cost efficiencies from freight operations in CP6.

### ***Engineering Access***

12. The debate over engineering access time is not new, and has been repeated over many years. We note that there was a misalignment between Network Rail's assumptions on access in CP5 and what has been able to be delivered. We also note the work undertaken by RDG in this area.
13. Freight is particularly sensitive to engineering access, as around 2/3 of services operate overnight (to avoid the passenger services in the day). However freight trains can be more readily diverted if access is appropriately planned. Over time, we have seen some improvement in the ability to keep diversionary routes open during closures, and it is imperative that this is not lost through greater route devolution.
14. There have also been good examples where engineering access has been aligned with the needs of the freight customer, for example, on the Oxford corridor, work was scheduled for the same time as the BMW Mini plant's annual

shutdown. Again, this should be encouraged through devolution.

15. Conversely, albeit on enhancements, we have seen numerous examples of conflict between project possession planning and (for example) high output equipment, as well as between competing projects. There appears to be no effective way of resolving this, nor any way that individual managers can access the full information in a sufficiently timely manner.
16. Overall therefore we note the complexities of effective access planning, and consider there to be an important role for the SO in ensuring that cross route operators are protected during devolution. Greater use of technology may be necessary to help improve planning.
17. Fundamentally however, Network Rail needs to further improve the productivity of work within possessions, rather than push for greater access.

### ***Freight's role in the supply chain***

18. Rail freight plays an important role as a supplier to Network Rail's renewals programme, in providing engineering trains, which operate within possessions, and also in the supply of materials to possession sites. RFG members in the construction sector also supply bulk ballast to Network Rail, which is moved by freight operators to site or to strategic storage. Overall, Network Rail is the single largest customer of rail freight, moving 1.7bn tonne-km in the last financial year.
19. Freight as a supplier to Network Rail is managed out with the FNPO which allows commercial separation. However, it also means that opportunities for synergies or efficiencies may not be leveraged. For example, bulk ballast trains are often shorter and less heavily loaded than the equivalent commercial aggregates trains would be. There may also be opportunities for more shared resources including railheads.
20. Engineering trains do not pay an access charge for use of the network, as it would be a 'circular payment' within Network Rail. However this also means that the incentives to operate track friendly vehicles do not apply for Network Rail's own wagon fleet. The holding of paths for engineering services is also a matter for Network Rail, but it has not been subject to the same scrutiny as the holding of paths for commercial freight. All these areas could offer potential efficiency savings.
21. Freight suppliers are also subject to, and frustrated by, the fluctuations in Network Rail's work banks for renewals in the same way as those suppliers in other parts of the business. A greater level of certainty would enable efficiencies in the pricing and delivery of services, and would help to improve planning.

## ***Scope of Renewals***

22. We do not support the view that renewals should be 'like for like' and that no incremental functionality should be added. Renewals offer rare opportunities for low cost interventions, and there should be a presumption of 'best modern equivalent' as the core scope.
  
23. This should include the opportunity to remove redundancy infrastructure as well as including additional items. Recognising that the benefits of renewals will be measured over the long term, ORR should consider how best to capture these efficiencies.

13 September 2017



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**IMPROVING NETWORK RAIL'S RENEWALS EFFICIENCY: A CONSULTATION – JULY 2017**

**1. INTRODUCTION**

1.1 This letter constitutes the formal response from the Railway Industry Association (RIA) to the above consultation document.

**2. BACKGROUND TO RIA**

2.1 The Railway Industry Association is the long-established representative body for the UK-based railway supply sector, with nearly 200 member companies from across the entire field of railway supply with over 30,000 employees and turnover of around £6bn, covering most of the UK rail supply base. Members include manufacturers, consultancies, contractors and numerous specialist service providers. Most major supply companies are members, together with many SMEs.

2.2 RIA provides its members with extensive services, including:

- representation of the supply industry's interests to Government, Network Rail (NR), TfL, HS2, ORR and other key stakeholders
- providing opportunities for dialogue and networking between members, including a number of Special Interest Groups (see 3 below)
- supply chain improvement initiatives
- provision of technical, commercial and political information every week
- export promotional activity, through briefings, visits overseas, hosting inwards
- visits
- organising UK presence at exhibitions overseas.

**3. HOW THIS RESPONSE HAS BEEN INFORMED – RIA RENEWALS UNIT COST WORKING GROUP**

3.1 It became clear towards the end of last year that there was a significant issue around CP5 renewals efficiency and unit costs. Therefore, to get some clarity around the issues and to help find joint solutions to them, RIA established in early 2017 a Renewals Unit Cost Working Group. The Group is chaired by RIA (Peter Loosley) and contains the following representatives bodies/supply chain companies:-

- Network Rail
- ORR
- Colas
- Carillion
- AD Comms (A Panasonic company)
- Atkins
- Siemens
- Amey
- Balfour Beatty
- Babcock
- VolkeRail

3.2 We believe that this is the first time all of ORR, Network Rail and the supply chain have been represented in such a single working group in respect of renewals.

3.3 As an example of the work undertaken, I attach an Annex A a list of some of the cost drivers identified at the inaugural meeting of the Group earlier this year. Some of these areas are examined in more detail later in this response which has been substantially informed by, and agreed with, the supply chain members of the Group.

3.4 And we are all aware also of the significant drop in planned renewals expenditure (particularly in track) for the remainder of CP5; and RIA, NR and Government are working together to see if some money can be brought forward from CP6 to help smooth the shortfall. The implications to the supply chain of this not being addressed have been made clear and are in the interest of brevity are not repeated here. However, a copy of the briefing document provided to DfT is attached for information at Appendix B.

#### **4. THE TOP 4 REASONS WHY RENEWALS COSTS FAILED TO DECREASE DURING CP5**

4.1 The Group believes that of the costs drivers identified, the top four are as follows :-

- I) Restricted network access
- II) Workload instability/scope creep
- III) Blurring between Enhancements & Renewals
- IV) Changes in Standards during CP5

***i) Restricted Network Access***

We understand that there has been 25% less access to the network than that ORR assumed when the CP5 targets were set. The increasing passenger demand drives Train Operating Companies (TOCs) to run additional services which restricts contractor access to the railway. The position is particularly acute in midweek which creates resource profiling difficulties – ie high demand at the weekend with an under-utilised workforce during the week. This is inefficient and leads to increased costs.

***ii) Workload Instability/Scope Creep***

Poor workload visibility creates uncertainty for all suppliers and particularly for the lower tiers of the chain. RIA has for many years been stressing that the lack of a stable workbank adds between 10-30% to industry costs. And there are still considerable post contract variations and changes in scope, without which, costs would be lower.

**iii) Blurring between Enhancements and Renewals**

We believe that there is some blurring here. It could be argued that as a renewal is bringing infrastructure up to current standards, it contains, de facto, an element of enhancement – but in many cases contractors are asked to carry out specific enhancements or renew other infrastructure whilst on site. While in itself this is an efficient use of resource, it tends to artificially inflate the renewals unit costs. Nor is it clear whether the resultant benefits of the additional enhancement work are captured.

Similarly, with an enhanced renewal (eg 125 mph handback) is the increased cost offset against increased benefits? In short we need to be very clear we are comparing ‘apples with apples’ when looking at cost increases for renewals.

**iv) Changes in Standards during CP5**

Contractors are subject to constant standards changes – eg ALO originated 2012; SWL; POS GL/RT1210 and whilst these are generally made for the right reasons it is not clear whether we are seeing improved safety performance as a result of the changes in standards and, if so, where these benefits are being captured – ie is the increased cost netted off against a benefit elsewhere or simply viewed as an increase in renewal cost?

4.2 RIA and other members of the Renewals Unit Cost Working Group will be exploring these four areas in more detail during their presentation slot at the ORR Efficiency Seminar on 19 September.

**5. DETAILED COMMENTS ON PARAGRAPH 16 OF THE CONSULTATION DOCUMENT**

5.1 The substance of the consultation is in paragraphs 16 a-f where we would offer the following comments (there is an element of necessary repetition in Appendix A): -

**16 (a) Network Rail was poorly prepared to deliver renewals at the start of CP5:**

- Appointing new contractors for each new Control Period (CP) comes at a cost (set-up/mobilisation) e.g. the re-letting of the track contracts at the start of CP5 saw all contractors move geographically (except in Scotland); the cost of the separation of Switches & Crossings (S&C) installations and plain line has also increased due to the additional overheads
- The track frameworks were priced against unrealistic scenarios (eg access) which proved unsustainable
- In the Civil Engineering arena where unit costs are harder to identify, the original budget calculations seem to be less well-founded for CP5 than for CP4

**16 (b) Network Rail’s PR13 efficiency improvement plans were not well founded:**

- The fixed 5-year planning time horizon creates hiatus at both the beginning and end of CPs – a rolling programme with review points would be better
- Labour rates have increased during CP5 since the efficiency assumptions were made
- Due to the many interfaces in the delivery mechanism, only Network Rail is able to see / control all the costs.

**16 (c) Network Rail reacted slowly to the problems on efficiency:**

- Insufficient and/or inexperienced staff could have affected Network Rail’s ability to react quickly
- Costs from national supply chain seem to increase year on year well above inflation

- Due to problems with access and the lack of profitability within the sector, the age of rail plant is increasing leading to a drop in reliability and the consequent need for more (and expensive) back-up arrangements

**16 (d) Increased pressure on access to the railway to carry out work:**

- Access has been reduced, especially midweek, which is affecting the preparation and follow up of programmes of work. This also makes for a poor resource profile, with staff shortages on the weekends and staff underutilised midweek – network access is estimated by NR to be 25% less than the basis upon which efficiency targets were set
- The application of the DWWP and mitigation plan to avoid overruns drives down the volume of works to be delivered into the possession. Currently 10% of the possession is kept clear of any works. Where are the savings for Schedule 8 etc captured?
- The end-to-end process needs improving - the control of the plan is not sufficiently effective as there are too many late changes in scope/design
- The reducing workbank pushes up costs as overheads are not reducing at the same rate
- Need improved dialogue with TOCs/NR re: first and last trains to help improve network access
- The rise in social media is leading to a greater reluctance to push the outputs within possessions – leading to a decrease in outputs and higher costs

**16 (e) The reclassification of Network Rail into the public sector, with the introduction of fixed borrowing limits:**

- The political/organisational context has changed with re-classification and devolution which drives changing priorities
- It could be argued that the consequences of reclassification were not fully understood when the CP5 efficiency targets were set. For example, under the old regime, NR could have borrowed the money to tide over the current CP5 dip in renewals expenditure. It cannot do that now which has led to the ongoing discussions between NR, RIA and Government around bringing money forward from CP6.

**16 (f) Devolution initially led to unaffordable increases in the scope of work in some areas:**

- Innovation is being stifled through reliance on input specifications – a greater use of output specifications is needed
- NR Devolution to Routes is importing additional uncertainty with decisions being delayed and timescales compressed, leading to increased costs
- There seems to be a disconnect between the NR Route Asset Managers (RAMS) and the NR Maintenance organisations which adds risk
- It feels that, over the last couple of years, work banks are tending to focus towards London
- The make-up of the works complexity has changed. In the past, to get the volume delivered the Route focused on the easy jobs with easy location access. Today we are only left with complex jobs in difficult areas which obviously put pressures on cost. High output after 10 years in this country takes all Plain Line easy volume.

**6. OTHER COMMENTS ON THE CONSULTATION DOCUMENT**

Page 2 - first bullet

Within electrification there are a number of engineering preferences by NR which are not typical of industry practice elsewhere in Europe, and indeed have not previously been used in the UK.

Page 3 - first bullet

We would suggest that the supply chain needs to be a formal part of any bottom-up approach and would urge NR and ORR to use stakeholder engagement with specialist suppliers as necessary as part of this process.

Page 13 – first bullet

Some thought should perhaps be given to an asset criticality index as well as a condition measure influenced by stakeholder input.

Page 17 – Para 31, second bullet

We note that the guidance referred to does not include suppliers as relevant stakeholders. We would welcome discussion around this.

## **7. CONCLUSION**

7.1 What we believe to be the four key cost drivers are out in section 4 above which we will be talking to in more detail at the ORR Efficiency Event on 19 September. But clearly there are other important drivers as outlined in section 5 and Appendix A.

7.2 We would also point out here that sitting behind all this there needs to be a smarter approach to procurement, building long-term relationships with greater mutual trust and more closely-aligned objectives. RIA has an independently-facilitated workshop based programme called the Value Improvement Programme (VIP) which brings together different parties in a project or relationship to help tackle these issues and we would be happy to discuss with you further the potential use of this.

7.3 The tripartite Renewals Unit Cost Working Group will continue to work on all these issues and we would be happy to discuss any part of this submission with you at any time.

PETER LOOSLEY

**Peter Loosley**  
**Policy Director**

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## **Appendix A – Outputs from January 2017 Meeting of the Renewals Unit Cost Working Group**

### **Condition of existing infrastructure:**

- Rectification of existing non-compliances on the infrastructure as part of the renewal increase the unit rate, as well as the scope – where are these savings in reduced enhancement spend captured?

### **Change Management:**

- Constant changes to standards from NR – ALO, SWL, POS – are we seeing savings through better safety performance as a result and if so where are these savings captured?
- Specific routes will specify a certain points operating equipment or a particular track circuit or new technology which is more expensive, for example Hy drive points, Ebi Track Circuits etc – this is dependent on the opinion of the Route Asset Manager (RAM)
- There are occasions where at key milestone points on atypical possession programmes the client becomes risk-averse and possibility not prepared to continue even though unused contingency remains
- There have been issues with poor workbank visibility which creates uncertainty – work suddenly dries up
- Too many post contract variations

### **Skills & Resources**

- There are implications too for the skills bank – eg where work dries up, skills need to be diverted, and this also creates a disincentive to recruit/retain apprentices to meet industry targets. And there is potential for a smaller, finite skills pool demanding premium rates
- Workload visibility for lower tiers is significantly reduced with 3-6 months not untypical

### **Standards & Specification**

- Preferential engineering is still driving up count at design and hand back (RAMS)
- The market is organised to encourage ‘doing what we do now but ever better’. However, we are starting to see diminishing incremental progress. The current market does not encourage new ways of doing things and this may require investment and patience before improvement materialises.
- For renewals projects with an average value of between £150k-£500k, the GRIP process can be restrictive and not allow projects to be fast-tracked to the obvious solution
- Sometimes the budgets for Civils renewals are undertaken by the RAM without sufficient reference to issues of design, access, methodology or previous cost experience
- Cheapest initial cost is still preferred over Whole Life Costing which is inefficient in the longer term and drives the wrong behaviours down through the supply chain
- Initial Contract Requirement Technical (CRT) needs to be sharper
- New product approval is difficult
- There have been several changes in Standards – see para 4.1 iv) above

### **Others:**

- PRISM is deemed too subjective as a decision-making tool
- We need to make better use of mechanisation
- Could/should all materials be centrally procured?
- There are still issues around buried services/cables
- Due to problems with access and the lack of profitability within the sector, the age of rail plant is increasing – see final bullet relating to 16(c) above

**RIA Renewals Unit Cost Workshop Outputs – 20 January 2017 – updated September 2017**



## **APPENDIX B DECLINE IN WORKLOAD END OF CP5 AND BEGINNING OF CP6: IMPLICATIONS FOR THE UK RAILWAY NETWORK AND INDUSTRY**

**July 2017**

### **1. The Purpose of this briefing note**

The purpose of this briefing note is to highlight RIA members' concerns that the UK railway is suffering a repeat of the damage suffered at the end of previous Control Periods 4 and 5, in which a failure to look ahead into – and commit to – the next Control Period caused increased costs, and project delays on the UK railway network.

We are currently seeing a sharp reduction in workload coming to market from Network Rail towards the end of CP5 and a current lack of GRIP 1-3 development work. This is adversely affecting delivery volumes for at least the early part of CP6, in calendar terms from now to at least 2021. We are also concerned that the negative effect of this slow-down will result in the UK industry being less able to respond when workload picks up again, and specifically when fast and efficient delivery of the Digital Railway is required to unlock capacity to meet increasing demand.

### **2. Executive summary**

#### **The problem**

- Suppliers in track, signalling and consultancy disciplines are reporting falls in demand of between 20%-45% for the remainder of CP5, particularly in renewals.
- This is resulting in redundancies, short-time working, and reduced – or in some cases frozen – graduate and apprenticeship recruitment.
- GRIP 1-3 development work is not being carried out for CP6 projects. This is critical if continuity of project work between CP5 and CP6 is to be maintained.
- If action isn't taken soon, the railway – and the UK railway industry – will suffer a hiatus in investment and project work at the end of CP5 and the start of CP6.
- Continued investment in the industry is necessary if the UK railway and supply chain are to quickly and efficiently deliver the Digital Railway and the other infrastructure improvement the network needs.

#### **Potential impact if not addressed**

- Volatile workload profiles will potentially continue to add up to 30% of rail industry costs.
- Some smaller or niche suppliers may not survive until CP6 and some larger suppliers may choose to use resource in areas where there is a more stable workload – specifically in the resurgent overseas railway market – thus reducing the supply chain available to Network Rail.
- Where supply chain capacity has been reduced, it will need to be ramped up again once volumes increase in CP6 – this is likely to be both difficult and expensive, particularly in specialist areas where resource is already constrained – e.g. there is a danger that the significant momentum and investment in key areas – such as signalling – will be lost if investment isn't maintained.
- Because a lot of the reduced workload is in renewals, there is an increased risk of asset degradation.

These issues are fleshed out further in the '**More Detailed Narrative**' section below.

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### 3. Background to the problem

It had become clear towards the end of 2016 that there was a marked drop-off in projected Network Rail workload towards the end of CP5 (which ends Q1 2019). Data provided in December 2016 by the National Infrastructure Pipeline (see Annex A), showed a dramatic £1bn fall off in maintenance, and particularly renewals towards the end of CP5, which is impacting significantly upon the UK railway network and upon RIA member companies, especially around track renewals. Whilst the same data shows a £200m increase in enhancement expenditure, this in no way improves the overall situation. Further representations from members suggested that the position was either expected to worsen or was worsening already.

We are also aware of the potential adverse impact on the development of the railway resulting from the lack of emerging GRIP 1 – 3 work, which will in turn have a negative effect on essential project work being carried at the start of CP6, and of course a related negative effect on our members and the entire supply chain.

Clearly this poses serious threat to the continuing development of the UK railway network and the supply chain. RIA has in many consultation responses (e.g. Bowe, Shaw and Hendy and in its input to the Initial Industry Advice submitted to DfT and the Industrial Strategy consultation led by BEIS) outlined the damage that an unpredictable and volatile work pipeline and the regular workload hiatus in the transition between Control Periods can do to the supply chain. There is also a detrimental effect on the productivity of the industry as a whole (adding up to 30% to cost) and ultimately to the interests of the paying customer. We believe that it is necessary to act now to avoid irreparable damage to the continuing successful upgrade of the UK railway.

### 4. RIA Member Survey

To provide further, more direct evidence, RIA asked a representative cross-section of its membership for the following:

- Quantification of any downturn in expected volumes for the remainder of CP5.
- Views on the impact this would have for them and their supply chain.
- Indications of the volume of emerging GRIP1-3 work in their sector.

The survey revealed the following:

#### ***Demand downturn and impact***

Demand falls of 20% to 45% are being quoted for the remainder of CP5 in the track, signalling and consultancy disciplines – largely based around renewals, and most particularly in plain line track. This is higher than the National Infrastructure Pipeline (NIP) forecast of 15% overall and 31% in Maintenance and Renewals. Much of this is down to delays/deferrals in Network Rail work packages coming to market (e.g. lack of work emerging from the framework programmes).

Impacts include:

- **Reduced confidence to invest** in developing skills and new products – investment business cases have become unsustainable, often having negative effects on service delivery. By way of example, the impact of this reduction in renewals to rail supply is evidenced by British Steel where the business has been forced to down-shift its rail finishing facilities by 40% and the point is made that the current environment will render significant capital, research and development investment unlikely without further support

- **Reduced Staff Levels** – there are examples of redeployment, short time working, graduate and apprentice recruitment freezes and redundancies – notably in the signalling sector at a time when we need to be recruiting and retraining for the future. In due course, supply chains will have to ramp up staffing levels when deferred work comes to market, assuming the required resource is available – and not at disproportionate cost. This peak and trough workload is a very inefficient way of working especially given the work has been identified as needed and, as RIA has said in the consultation responses and the recent Industrial Strategy Green Paper response referred to above, can add 30% on to costs.
- **Lack of confidence in workbanks** – a number of respondents said that delays and deferrals of work coming to market had eroded supplier confidence in the client’s forward work programme. This in turn contributes to the reduced confidence to invest (mentioned above). There is limited opportunity to redeploy resources to other major clients as the TfL programme is resourced and many HS2 contracts are yet to be issued.
- **SME/specialist companies** – it was felt that the downturn would impact significantly on these suppliers, some of whom currently have a forward workload visibility of only three months, and that some may not survive into CP6.
- **CP6 development activity** – this is worryingly low, suggesting that the downturn could possibly last upwards of three years even if the CP6 settlement restores volumes to pre-downturn levels

All of which will have a significantly detrimental impact on rail delivery at a time when we are seeking to restore the confidence lost through the impact of the Great Western Electrification Programme. And the impact of the reductions in renewals expenditure needs to be carefully considered in terms of asset degradation and what that could mean with regards to a backlog of maintenance, leading to an adverse impact on performance and service to passengers.

## 5. Survey conclusions

If nothing is done to remedy the shortfall both in volumes of work at the end of CP5 and the lack of GRIP 1-3 development work to pump-prime CP6, the supply chain will:

- Further contract and then later need to expand to meet the next bow wave of work – if the necessary resources are available – and almost certainly at extra cost.
- Become less productive because of the above when increasing efficiency is vital.
- Risk losing some small or specialist companies who simply cannot survive in the current stop/go environment.
- Risk losing those companies who will opt to work for other clients outside Network Rail with more predictable workload profiles – with obvious implications for Network Rail and the industry as a whole.

## 6. A suggested way forward

It is essential for the long-term health of the UK railway to avoid a slow-down of work at the end of CP5 and a potential repeat of the 18-month hiatus seen at the start of previous Control Periods. We believe that continuity of work, particularly at early GRIP phases, is essential to allow Government, Network Rail and the UK supply chain to maintain progress made throughout CP5, and to ensure that the world-leading Digital Railway of the future can be delivered in the UK.

We believe therefore that, together, we need to find some way of either injecting new funding into CP5 or advancing some funding from CP6 to enable continuing project work – and specifically GRIP1-3 work for CP6 projects – to avoid the creation of an unnecessary and expensive hiatus extending over the end of CP5 and the beginning of CP6.

RIA is already involved in working level discussions on the issue, but we believe there now needs to be urgent higher-level dialogue between Government, Network Rail, RIA and our key members to move this forward as quickly as possible before any further erosion of the efficient delivery of the railway network the country needs. We consider that the UK is in a unique position to create a railway that other countries are envious of, based on NR capability, the strength of the indigenous supply chain, UK-based academic excellence and as a result of significant investment made by Government and industry stakeholders in recent years.

RIA, and our key members, consider it critical to have discussions as soon as possible, and we are fully committed to play our part in delivering the railway of the future.

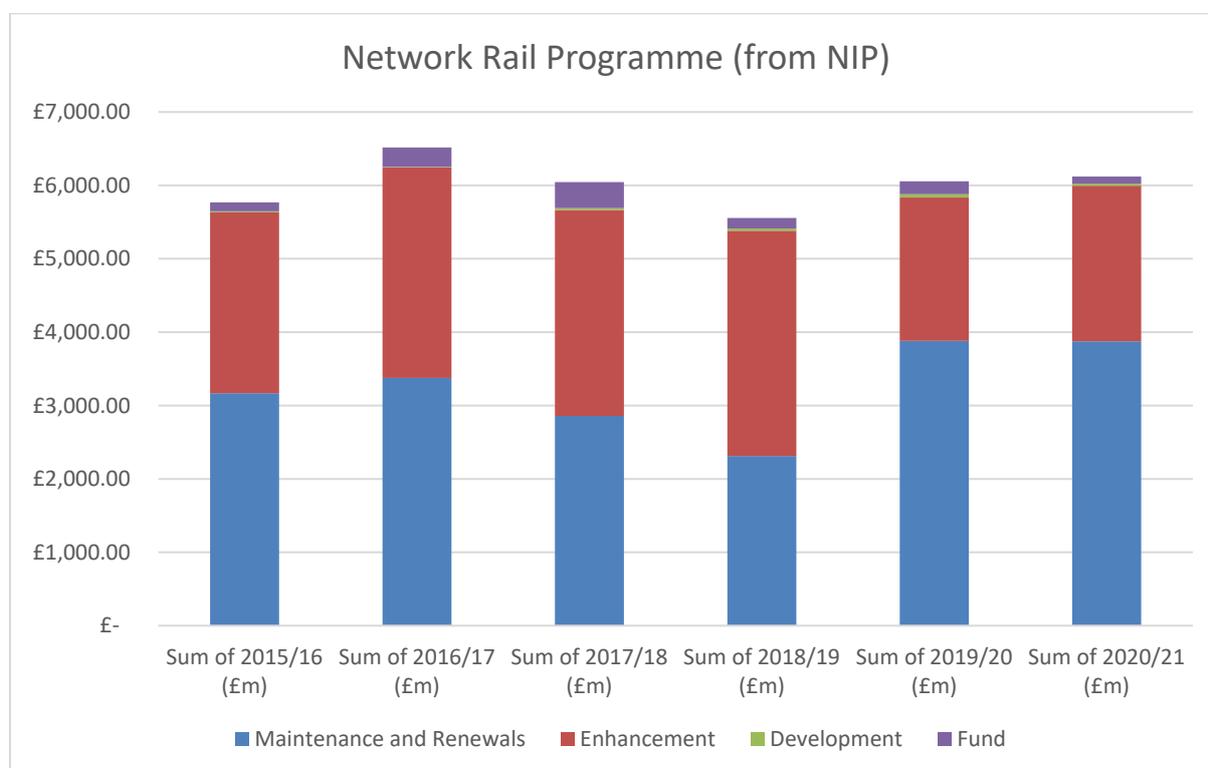
**RIA**  
**July 2017**

## Annex A: CP5 Network Rail Workload Forecast – Network Rail Programme from NIP

The recognition within sections of the draft Initial Industry Advice that the supply chain needs forward visibility in order to invest is very welcome. In the meantime it is a significant concern that expenditure levels will reduce significantly towards the end of CP5 before rising again.

As the following data<sup>1</sup> shows Maintenance and Renewals in 2018/19, the last year of CP5 is 32% lower than its current 2016/17 level but will rise to 15% above the current level in 2019/20. This would appear to be a cash flow rather than asset management issue. The consequences will be an inevitable contraction of the infrastructure supply chain just at a time when investments in skills and plant should be being made to prepare for CP6.

RIA are initiating some activity to understand the implications by work type and will be making the case that the expenditure profile needs to be smoothed to support more consistent supplier investment. An important precursor is the related RIA activity to understand the causes of rising unit costs.



Network Rail Programme	2015/16 (£m)	2016/17 (£m)	2017/18 (£m)	2018/19 (£m)	2019/20 (£m)	2020/21 (£m)
Maintenance and Renewals	£ 3,166.59	£ 3,375.52	£ 2,858.86	£ <b>2,311.93</b>	£ 3,881.03	£ 3,873.58
Enhancements	£ 2,464.50	£ 2,868.28	£ 2,806.28	£ 3,069.28	£ 1,952.28	£ 2,120.28
Development	£ 15.00	£ 8.00	£ 26.00	£ 30.00	£ 46.00	£ 30.00
Ring Fenced Funds	£ 123.00	£ 264.00	£ 353.00	£ 145.00	£ 176.00	£ 98.00
<b>Total</b>	<b>£ 5,769.09</b>	<b>£ 6,515.80</b>	<b>£ 6,044.14</b>	<b>£ 5,556.21</b>	<b>£ 6,055.31</b>	<b>£ 6,121.87</b>

<sup>1</sup> <https://www.gov.uk/government/publications/national-infrastructure-and-construction-pipeline-2016>



# National Union of Rail Maritime and Transport Workers



[www.rmt.org.uk](http://www.rmt.org.uk)

Office of Road and Rail

13 September 2017

Dear colleagues

I am writing in response to *Improving Network Rail's renewals efficiency: a consultation*.

To begin, RMT notes that, in particular, the consultation queries whether or not the ORR have correctly identified the main drivers of the recent trends in efficiency, and whether the ORR is prioritising the right areas to give greater scrutiny to in PR18. We believe that in both cases the ORR has made serious omissions.

Whilst the consultation document recognises that "the impact of being a public sector company largely depends on the government framework within which Network Rail is able to operate", RMT believes that insufficient analysis have been undertaken of the various frameworks within which Network Rail could operate. This is particularly serious given the potential, and likelihood, of Control Period 6 spanning multiple governments and the fact that it ignores the potential opportunities presented by the United Kingdom leaving the European Union.

Furthermore, we welcome the acknowledgement that renewals efficiency "is inevitably difficult to analyse in a purely quantitative way: not least as the various causes are interlinked and it is difficult to separate changes in efficiency driven by Network Rail's actions and the consequences for efficiency of the decisions taken by Network Rail's customers and other stakeholders".

RMT believes that the omission of framework analyses, coupled with a lack of concrete data on the role of the private sector in relation to renewals efficiency, does not bode well for the identification of what we believe to be the main driver of inefficiency in renewals – the marketisation of Network Rail and the outsourcing of much of its renewals work.

We welcome the recognition that "efficiency problems on renewals have been the biggest factor in Network Rail's overall performance on efficiency".

## **Improving efficiency: the need to return all renewals work in-house**

RMT believes that the ORR must recognise the productivity benefits of work being undertaken in-house and also acknowledge the benefits of a long term funding cycle accompanied by workforce planning.

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Prior to privatisation, British Rail recorded the highest labour productivity of any railway in Europe, with also a lower public subsidy than any other European country<sup>1</sup> and following the disastrous experiment of RailTrack infrastructure maintenance had to be returned in-house. Dr John Stittle has highlighted the importance of maintenance work being undertaken in-house and an end to the outsourcing of maintenance:

"Once NR acquired the infrastructure, its deputy chairman at the time, Ian Coucher was clear about the failings of out-sourcing maintenance: the railway does not 'lend itself to output-based specifications, which give people the freedom to decide how to do it and when they're going to do it. It makes it very difficult to change something if you are not quite sure what people are doing out in the field.' In a warning that the ORR should heed, especially in relation to the devolution/fragmentation agenda, Coucher<sup>2</sup> also cautioned that when 'every contract was renegotiated locally by the regions... you ended up with a large amount of variations. Some were cost-plus, some had special performance regimes - it was a real mess.'"

The McNulty report added that Network Rail has saved £400m a year through unifying and bringing rail maintenance in house. The consultation document recognises that "some maintenance initiatives have probably improved efficiency through greater effectiveness" while the ORR's own Network Rail monitor acknowledges that maintenance activities (in-house) have been far more efficient than renewals activities (outsourced). The most recently produced Network Rail monitor even highlights the corrosive impact the marketised renewals programmes are having on maintenance efficiency. It makes clear that inefficiencies are arising from those areas of work which are dominated by private contractors and warns that the renewals backlog will ultimately lead to delays and inefficiencies in maintenance due to increasing volumes that need to be maintained when they were planned to be renewed.

The document states that there will be higher maintenance costs due to "reactive maintenance which had been largely budgeted within renewals" and "increased levels of maintenance needed because of the delay in renewals projects".

It is therefore of concern that despite the clear benefits of workforce integration and bringing work in-house, Network Rail are still overly reliant on outsourcing. For example in respect of the renewals workforce where some 88,000 PTS (Personal Track Safety) cardholders, 67,000 are not directly employed by Network Rail. Of these 67,000 RMT believes that less than 10% are full-time employed and that the remainder may well be working under bogus self-employment on zero-hours contracts. In some cases an individual worker may be sponsored by up to 8 contractors at any one time, and in an extreme case by up to 20 contractors. This means it is extremely difficult to regulate working hours and quality, and to develop more efficient working practices.

Network Rail is majority funded by the taxpayer and it is clear that the taxpayer is now paying for a largely casualised workforce, with potentially serious consequences in a safety critical industry. In addition, the activities of payroll companies cost the Treasury millions every year.

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<sup>1</sup> Jean Shoal 2004, Renaissance delayed, New Labour and the Railways

<sup>2</sup> <http://www.railwaygazette.com/news/single-view/view/uk-brings-infrastructure-maintenance-back-in-house.html>

The Office of Rail Regulation, when questioned by RMT, acknowledged that zero hours contracts “appear to be a common form of securing staff for the engineering contract business” and stated that they are “mindful of the considerable risks that can arise from safety critical staff working for more than one employer”.

Furthermore, Ian Prosser, the Director of Railway Safety in the Office of Rail Regulation has stated that “The widespread use of notionally ‘self-employed’ staff on zero hour contracts has some immediate and short term benefits with regard to staff flexibility and costs, it has a generally negative effect on the attitudes and behaviour of those involved, which is not conducive to the development of a safe railway”.

The consultation document also recognises the need for detailed diagnostic information “to improve the productivity of renewals worksites” where it is clear that the most effective and efficient means of gathering information is where it is generated solely within that organisation, and not distorted or detracted from by private sector interests.

The ORR should positively consider both the safety and economic benefits of bringing work in-house, such as renewals, on a unified basis as recognised by Ian Coucher, the McNulty report and numerous academics.

PR18 provides the opportunity to end the cause of inefficiency - current levels of casualisation and fragmentation in the Network Rail workforce - and to increase safety levels as a result, by bringing renewals work back in-house.

### **Feast or Famine**

One area of particular importance is the ongoing skills shortage and the detrimental impact that the current levels of fragmentation and casualisation of the renewals workforce are having as a direct result of the entry of private contractors into the industry.

RMT welcomes the call for Network Rail to put in place better “leading indicators of delivery and the quality of delivery – such as stability of workbanks”. The feast or famine approach to planning has driven many skilled workers from the industry, and resulted in a race to the bottom amongst those who remain. The working practices which peaks and troughs in the workbank create have led to a plethora of terms and conditions of employments, and employment statuses which, as previously noted, the ORR has stated are “not conducive to a safe railway” in addition to the obviously negative impact on the individuals engaged.

The evidence of skills shortage in the rail sector is included in the Tier 2 Shortage Occupation List for the period starting on 6 April 2015 - produced by the UK Visa & Immigration section of the Home Office - which lists all of the UK-wide shortage occupations for Tier 2 of the points-based system. Skilled railway jobs have appeared on the List over a number of years now and the skills shortage on our rail network is a direct consequence of the short-term funding cycles for Network Rail, and the consequences on dependence on the market for the supply of short-term casual posts undesirable to the vast majority of skilled workers.

The requirement set out for PR13 regarding improving the capability of staff has been demonstrated to be wholly inadequate, as the majority of the workforce (and consequently its development) is outside of the control of Network Rail as it is not the employer of those workers.

### **Devolution/fragmentation**

The ORR recognise that Network Rail's PR13 efficiency improvement plans were not well founded and that this "was mainly due to how the company prepared for PR13, with a centrally driven strategic business planning process that was to an extent disconnected from the business itself". RMT believes that the introduction of additional tiers of bureaucracy arising from the devolution/fragmentation agenda, and the probable increase in the extent to which private sector interests are involved, can only compound the difficulties already experienced.

The consultation document also recognises that "devolution to Network Rail's routes initially led to unaffordable increases in the scope of work in some areas".

Furthermore, the consultation document recognises that devolution and, implicitly alliancing, has created additional cost pressures due to local managers adhering to private train operating company requests for local improvements at public expense. Despite this, the document continues to advocate a greater role for train operating companies ("customers") in determining Network Rail's work.

### **Comparisons between routes**

RMT notes that Network Rail did not have a systematic and controlled cost planning process for renewals at the beginning of PR13. Where maintenance cost planning now includes labour, plant and materials required to deliver that maintenance, and its costs no such system is in place for renewals and "there is a risk that not all the improvements will be implemented in time to support the CP6 SBP submissions".

RMT considers the difference between maintenance and renewals in how planning costs are estimated to be highly problematic. It is clear that peaks and troughs in renewals activity will be exploited by the market through the basic principle of supply and demand.

Furthermore, the lack of a direct comparison between the planning costs for maintenance and renewals (due to the development of different systems to suit the marketised nature of renewals work) is deeply concerning especially where the maintenance work, conducted in-house, is highly efficient in comparison to the renewals work. If cost planning is to be improved, with a view to improving efficiency, the cost planning process for the most efficient activities undertaken by Network Rail (maintenance) surely provide a useful example? However, it is clear that the outsourced nature of much of the renewals work is a further obstacle to efficiency in cost planning.

It is obvious that a cost planning regime, based on known, in-house costs would be a more substantial improvement to efficiency than comparing a fundamentally flawed model between routes.

## **Access pressure**

The consultation document correctly notes the "increased pressure on access to the railway to carry out work" and that "reduced access will tend to reduce productivity, and hence efficiency".

The farce of rail privatisation is neatly summed up within the consultation document where it questions whether Network Rail's "relationships with local stakeholders are sufficiently strong to balance the short-term interests of train operators and the longer-term effects on the network of not carrying out the work that is required". Such a conundrum would easily be addressed by the renationalisation of rail operations, and the development of a single guiding mind for the industry in which such a balance could be achieved, free from the short term avarice of the private sector. It is illogical that further embedding short terms interests, in an antagonistic relationship with both the safety and the further development of the rail network, is so often proposed.

The current arrangements disincentivises Network Rail, and there can be no doubt that further or deeper "alliancing" (increasing the influence of the short-term interests of private operators) will neither increase the time available to undertake the work or incentivise greater volumes being planned.

## **Summary**

To conclude, RMT has identified a number of barriers to renewals efficiency which we believe should be considered as part of PR18. These include:

- RMT believes the main causal factor explaining recent trends in efficiency to be the marketisation of renewals activity.
- RMT believes that the ORR has failed to consider various governmental frameworks for the next control period which will span more than one government, and has failed to consider the opportunities presented by the United Kingdom leaving the European Union.
- RMT notes the lack of concrete quantitative data on the role of the private sector in relation to renewals efficiency despite the majority of the work actually being carried out by the private sector at public expense.
- RMT further notes the difficulties in collecting detailed diagnostic information as a consequence of reliance on private sector interests.
- We further note the failure to draw comparison between renewals and maintenance activities in efficiency, and relevant outputs, despite the interconnectedness of the work e.g. renewals inefficiencies causing maintenance inefficiencies. Any comparison should include a cost planning comparison.

- We are deeply disappointed that no analysis of the consequences of marketisation on renewals activity has been undertaken, and in particular the impact on the skills base and working practices both of which impact on safety.
- We are also concerned by the continuation by the ORR of advocating devolution despite recognising the inefficiencies of past attempts.
- We welcome the recognition of the conflict of interests leading to access pressure, and the additional costs created by alliancing, and we encourage the ORR to work to bring an end to these inefficiencies.

RMT remains committed to our full engagement in the process and we look forward to hearing from you in due course.

Yours sincerely

A handwritten signature in dark ink, appearing to read "Mick Cash". The signature is fluid and cursive, with a long horizontal stroke at the end.

**Mick Cash**  
**General Secretary**

The Office of Rail and Road  
One Kemble Street  
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WC2B 4AN

13<sup>th</sup> September 2017

**TfGM's response to 'Improving Network Rail's renewals efficiency: a consultation'**

Thank you for offering the opportunity to comment on your review of Network Rail's renewals efficiency and we hope that our thinking contributes to a positive outcome. In the main we agree with your proposals and our detailed response is attached but in summary we would like the scope extended to include:

1. Network Rail's capacity and its decision-making capability and how these factors may combine to limit the organisation's ability to plan effectively.
2. The impact of the asset renewals and maintenance backlogs on decision making, resource allocation and works planning.
3. Network Rail's understanding of its long-run asset renewal requirements for stations beyond the Control Period cycle.

Finally, we also wish to draw attention to the issue of incentives and a possible contradiction. In the consultation, you reference your 2016 Efficiency and Financial Assessment, and in this you state:

*'Monitoring operational performance is important in helping us to verify that Network Rail has delivered its obligations in return for the money it has received from train operators and the governments, and that it only retains the benefit of the savings that it has genuinely achieved.'*

4. We agree that incentives are a powerful mechanism for changing behaviour but if that behaviour is not changing as expected it would suggest that how savings benefits are accrued and used by Network Rail should form part of the scope of the review.

Yours sincerely,



Amanda White  
Head of Rail

**Pro-forma for responding to Improving Network Rail’s renewals efficiency: a consultation**

This pro-forma is available to those that wish to use it to respond to our consultation. Other forms of response (e.g. letter format) are equally welcome.

Please send your response to [pr18@orr.gsi.gov.uk](mailto:pr18@orr.gsi.gov.uk) by **5pm 13 September 2017**.

<b>Full name</b>	Amanda White
<b>Job title</b>	Head of Rail
<b>Organisation</b>	Transport for Greater Manchester
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\*This information will not be published on our website.

**Question 1: Have we identified the main casual factors explaining recent trends in efficiency? Do you have any views on their relative importance?**

Our analysis agrees with your findings but adds two further dimensions.

**Recommendation 1. Scope is widened to include organisational capacity.**

Network Rail is an organisation with many and varied responsibilities. These responsibilities compete for scarce resources placing pressure on capital and revenue, analysis time, decision-making governance, directorate and regulatory time.

The factors for further consideration should include:

- a. Efficiency of internal governance,
- b. Adequacy of capacity to deal with the scope of responsibility
- c. Suitability of resource allocation given a back-log of asset defects or new works.

**Recommendation 2. Scope is widened to include system Decision-Making capability**

You correctly identify staff and asset management capabilities as important but we suggest these are only components of wider organisational capability.

In your analysis of the impact of route-based devolution you say that ‘The question is whether Network Rail has had sufficiently robust governance arrangements in place to understand and manage the impact of individual decisions on the affordability and efficiency of the renewals portfolio as a whole’.

We believe that effective decision-making is a function of capability, information and process (governance). The more complex the environment, the more effective these elements must be for the decision quality to be maintained. There is a risk that a move toward a route-based approach could make matters worse if the local progress is slowed by a secondary corporate wide bottleneck.

The consultation appears to assume that inefficiencies resulting from the move to devolved routes are due to the process of change itself, and is likely to be temporary. We agree with devolution and support localisation, but it must come with a programme designed to implement the right capabilities locally or centrally as required.

The consultation references both improved decision support tools and steps to improve the quality of asset data, both we agree are essential, and a balance must be found to avoid Network Rail becoming 'data rich information poor'. In our experience, the quality of station asset data is very poor and we believe that better asset knowledge is essential for efficient planning and delivery.

**Question 2: Are there any factors that we have not identified? If so, could you explain their significance, ideally illustrated with evidence and/or practical examples?**

No further factors.

**Question 3: Do you have any views on Network Rail's planning capacity?**

This is answered in the response to question 1.

**Question 4: Do you think we have identified the right priority areas for our scrutiny of Network Rail's plans during PR18?**

In your 2015-16 assessment of Network Rail's efficiency and finances you state that:

The backlog of work is increasing. Work to the value of £953m (compared to our PR13 determination) was delayed from 2015-16 to a later date including £579m on renewals work, £340m on enhancements work and £34m on associated schedule 4 compensation payments for track possessions.

An increasing back-log can only increase the pressures on scarce resources and, unless decision-making capability improves correspondingly it must mean the risk and frequency of poor quality planning decisions will increase. In this context, we recommend that the review is widened to consider the cumulative impact of the back-log on CP6 forecasting.

Your consultation makes no explicit reference to the issue of station asset renewals. It is our view that inadequate station asset data conceals a considerable back-log of station repair and renewal requirements that have yet to be quantified or indeed recognised. There is a double risk of future 'bow-wave' of unfunded station renewals resulting from poor quality repair and maintenance, and a lack of effective understanding of the cost of renewing stations to modern equivalent standard. We would like to see a basic requirement for Network Rail to understand its long-run asset renewal requirements and to plan the renewal of each station (or required station components) beyond the CP cycle, say comparable to and over a 100-year lease period.

Finally, you state in the 2015-16 assessment of Network Rail's efficiency and finances that:

'Monitoring operational performance is important in helping us to verify that Network Rail has delivered its obligations in return for the money it has received from train operators and the governments, and that it only retains the benefit of the savings that it has genuinely achieved.'

This poses a serious question in that if Network Rail is allowed to retain the benefit of savings whilst it is highly inefficient elsewhere it would seem logical to question how these savings have been used to effect positive change. We agree that incentives are a powerful mechanism for changing behaviour but if that behaviour is not changing as expected it would suggest that how savings benefits are accrued and used by Network Rail should form part of the scope of the review.

**Any other points that you would like to make**

-



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13 September 2017

Dear Sir/Madam,

## **Improving Network Rail's Renewals Efficiency**

This letter sets out TfL's responses to the questions raised in the ORR's consultation. TfL is content for its responses to be published and shared with Third Parties.

### ***Q1. Have we identified the main causal factors explaining recent trends in efficiency? Do you have any views on their relative importance?***

ORR has identified the main factors that led to the deterioration in renewals efficiency, especially poor preparation and lack of well founded plans and slowness to respond to emerging problems. The lack of a bottom up planning process is highlighted as a particular issue although it is not clear that the Route based approach to regulation will solve this problem.

### ***Q2. Are there any factors that we have not identified?***

Changes in the status of Network Rail and Route level devolution are cited as contributing factors. There has been a large amount of change in management structure and responsibilities which may have diverted attention away from routine matters.

### ***Q3. Do you have any views on Network Rail's planning capability?***

Evidence from enhancement projects raises concerns about Network Rail's cost planning and the lack of incentives to deliver robust and efficient cost estimates. It is important that this is addressed during Control Period 6 through Network Rail's Business Planning process combined with appropriate oversight from ORR, funders and operators.

### ***Q4. Do you think we have identified the right priority areas for our scrutiny of Network Rail's plans during PR18?***

Although we welcome the increased scrutiny of Network Rail's plans at PR18,

we do not see evidence that this will result in improved efficiency. TfL would like to see a stronger focus on monitoring and incentivisation of Network Rail. Scorecards developed by Network Rail and customers and comparisons between Routes are useful tools but we believe that ORR should be more proactive in setting and enforcing performance targets. This should be done in a way that incentivises performance to the benefit of all operators including minority operators on a route.

It is essential that renewals are delivered more efficiently in CP6 than in CP5 and that any lapses are spotted early and addressed. Inefficient delivery of renewals adversely affects performance and reduces the funding available for enhancements.

Yours faithfully,



**Carol Smales**  
**Rail Development Manager**

**Pro-forma for responding to Improving Network Rail’s renewals efficiency: a consultation**

This pro-forma is available to those that wish to use it to respond to our consultation. Other forms of response (e.g. letter format) are equally welcome.

Please send your response to [pr18@orr.gsi.gov.uk](mailto:pr18@orr.gsi.gov.uk) by **5pm 13 September 2017**.

<b>Full name</b>	Rob Jenks
<b>Job title</b>	Policy Advisor
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<b>Email*</b>	
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\*This information will not be published on our website.

**Question 1: Have we identified the main casual factors explaining recent trends in efficiency? Do you have any views on their relative importance?**

One area TSSA wants to highlight, in particular, is that of Network Rail’s Transformation Plan and its impact on efficiency, something picked up in the consultation document.

Over the years, TSSA members in Network Rail have reported a sense of constant change within the company with the current Route focused Transformation Plan being the latest instalment. Ideas and recommendations floated in the Shaw Report published in March 2016, including the effective privatisation of certain Routes, as well as Network Rail’s commitment to introduce “sweeping reforms” after it accepted the findings of the recent Hansford enquiry all demonstrate that for some time to come the company and its staff will lose some of their focus on efficiency and just at a time when they are being asked to become more efficient.

Related to this aspect is the issue of how the government and the wider industry, by their actions, can affect the scope for efficiency improvements (identified in Paragraph 32, Page 17-18). Many of the issues that Network Rail now face we would contend originate from political drivers, whether in the form of the company being asked to over commit to enable hasty announcements of uncosted schemes by politicians looking for soundbites or in the form of dogma that wants to privatise some, or all, of the infrastructure manager and introduce private sector investment by mortgaging the railway via PFI type schemes (rather than the use of public money).

Similarly, page 10 and 11 of the consultation recognises the issue of access for renewals work to take place. There are conflicting priorities for train operators intent on selling tickets to increasing numbers of passengers and running trains to make a profitable return, and that of Network Rail and its contractors wanting to upgrade the rail network. Chris Gibb, in his recent report for the DfT on the GTR franchise, identified access by Network Rail to its own infrastructure as an issue on the Southern route. From TSSA’s perspective, the only way that this is resolved is by an alignment of incentives that lead to greater integration between rail operators and the infrastructure manager (see Paragraph 40, pages 19-20), with the best way to achieve that integration being by a common ownership (and thus management) in the public

sector. The long called for “guiding mind” within rail would sort out these issues of competing priorities.

**Question 2: Are there any factors that we have not identified? If so, could you explain their significance, ideally illustrated with evidence and/or practical examples?**

One area that has not been considered is that of the cost of renewals in terms of the profit made by Network Rail’s contractors and other organisations in the supply chain.

For instance, in its last published accounts (6<sup>th</sup> October 2016 in respect of the year ending 31<sup>st</sup> December 2015) Colas Rail Limited (Company Number 02995525) showed a gross profit of nearly £24.03million on a revenue of £230million, suggesting that over 10% of Network Rail’s costs go as profit to its renewals contractors. The profit margin quoted is only in respect of 2015 but the accounts show that Colas made over £28.4million in gross profits in 2014 so the point is to see the profit margin as applicable in the life of the Control Period, not just one year selected at random.

It should also be noted that the profit margin of over 10% is in addition to any costs that Network Rail may additionally be liable for under the contract that it has with firms like Colas, thus increasing units costs for renewals projects.

Both of these elements contribute to reducing the financial efficiency under which Network Rail could otherwise operate, and is one reason why TSSA is calling for the work and staff associated with renewals contracts to be taken in house to Network Rail under the TUPE arrangements in the same way as track and signal maintenance was in 2004, saving £400million.

**Question 3: Do you have any views on Network Rail’s planning capacity?**

**Question 4: Do you think we have identified the right priority areas for our scrutiny of Network Rail’s plans during PR18?**

### **Any other points that you would like to make**

TSSA also wants to highlight other points, some of which have been referred to in the consultation document:

- a). The second bullet point on Page 18 talks about focusing resource on the drivers of renewals inefficiency in CP5. In this context, TSSA would highlight the potential upheaval every time renewals framework contracts are re-tendered. The last track renewals framework contracts re-drew boundaries and meant that large numbers of staff were TUPE transferred between contractors and some very experienced contractor staff were lost to the industry through redundancy. It also meant that not only did Network Rail lose efficiency as the new supply chain arrangement bedded in, it also led to the track renewals contractors having to adjust to the new way of working, including in terms of recruiting or upskilling workers;
- b). The issue of a continuous work bank so skills and expertise are not lost, noting the way some jobs are currently being deferred into CP6 and as a result leading to some contractors (such as Babcock which has decided to close its depots at Newport and Eastleigh) laying staff off through redundancy;
- c). The relatively short-term nature of the Control Periods which only last for five years but which if over a longer period, say twenty years, might enable more long term planning to be carried out and avoid the feast and famine reality (especially at the end of a period when funding has run out);
- d). The impact of delayed schemes (referenced on Page 9, Paragraph 16(a)(i) in respect of CP4 to CP5 and Page 19, Paragraph 35 in terms of the stability of workbanks). For instance, schemes delayed from CP5 will now potentially cause overloaded programmes in the first few years of CP6 because they will need to be completed at the same time as fulfilling those projects planned for the new Control Period (it may also cause cuts to programmes at the end of CP6 as funding runs out). There may also be an impact on funding that introduces additional delays in completing projects, especially if being done as part of an enhancement (via the government's "pipeline" approach) – as referenced in Paragraph 24, Page 14.

Thank you for taking the time to respond.

Office of Rail and Road  
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Date:  
September 2017

By email:- [pr18@orr.gsi.gov.uk](mailto:pr18@orr.gsi.gov.uk)

## **Response to the ORR's consultation on improving Network Rail's renewals efficiency**

Thank you for the opportunity to comment on the ORR's consultation on Network Rail's renewals efficiency. Set out below are some general points, alongside the annex which contains comments on the specific questions raised.

The starting point for this response is that, according to the ORR's Monitor, the delivery of the renewals programme is more efficient in Scotland than in E & W. It is therefore of critical importance that this consultation, and the associated Nichols work, is able to get underneath the reasons for this and where lessons learned can be rolled out to the other routes.

The position on efficiency in Scotland is in a more positive place, and I would suggest that this is largely down to more advanced devolution on the Scottish route. This has facilitated close relationships between Network Rail and the other parts of the industry in Scotland, such as the ScotRail Alliance, and with Transport Scotland. It has also enabled increased levels of partnership working, but also more opportunity for scrutiny and healthy challenge.

However, things could undoubtedly be better. Key to this is the further empowerment of the Scottish route, and all opportunities to devolve central Network Rail functions to the route should be a key part of the considerations in this consultation and the wider periodic review. For example, we would not accept, as is suggested in the consultation document, that a central team be established to provide leadership, policy and independent assurance on efficiency. This would present a risk that the better practices, which have led to less inefficiency on the Scottish route, will be diluted by a need to adhere to centralised processes. Ensuring that the Scotland route can stay at the leading edge of devolution is of critical importance and will, among other things, enable other routes across GB to continue to learn from the Scottish experience.

The consultation has asked for any further causal factors in the decline in efficiency. I would suggest that a thorough examination of the system of regulation is required, in particular:

- Funders of the railway need to be assured that any decline in efficiency or productivity will be identified early and that the ORR will work with Network Rail and the industry to

ensure that it is dealt with speedily and effectively. This has not been the case in this and previous Control Periods.

- Funders also need to be assured that the ORR and the industry have a clear idea of what efficient delivery actually looks like, including unit costs, and that this has been fully benchmarked against international best practice in railways and similar engineering disciplines.
- Does the regulatory framework in any way impinge on the ability of Network Rail to deliver its work to maximum efficiency, for example, through the setting and monitoring of standards, the management of risk and the structure of the financial framework e.g. Schedule 4?

The Scottish Government does not accept that reclassification and the setting of a fixed borrowing limit has been a significant causal factor. It seems a perverse notion that requiring Network Rail to live within its means to deliver its regulated outputs, including a reasonable amount of financial flexibility in the borrowing headroom, has contributed to renewals inefficiency. The opposite should be the case, driving Network Rail to work with its supply chain to deliver maximum value for public funding. Rather, the costs escalations that we have seen are down to inefficient planning, technical specification, procurement and delivery practices, and the extent to which these have gone unchecked.

The Scottish Ministers have recently outlined their priorities for Scotland's railways and this will be followed in the Autumn by their strategy for capital rail investments. The likely change in the funding arrangements for Control Period 6 is a watershed for the rail industry, where more than ever on-going investment in our railways will be under intense public and political focus.

It is therefore essential that Network Rail, working with its industry partners, can convince the Scottish Ministers that the railway activities which are publicly funded will be delivered efficiently and bring significant benefits to Scotland's railway users, its communities and its economy. And critically, that the ORR can provide assurance that it will bring rigour to the process of regulation. In summary, we need assurances that renewal efficiency, and efficiency across the piece, will be better in Control Period 6.

Yours sincerely

***John Provan***

Head of Rail Strategy and Funding

## **Annex A – Detailed comments on the specific questions raised by the ORR**

### ***Has the ORR identified the main causal factors explaining recent trends in efficiency? Do you have any views on their relative importance?***

There is insufficient analysis of the relevant significance of the various drivers for renewals inefficiency. Whilst causal factors have been identified there is no levels of importance attributed to these. In addition, experience in Scotland does not support the assertion that route devolution and the reclassification of Network Rail have been contributing factors to renewal inefficiencies. A clear example of this is the devolved Scotland route where renewal work has been less inefficient than in other parts of the UK.

There is also need for more consideration of the efficiency of engineering specifications, and the approach to designing for acceptance. There is clear evidence in Scotland of both over-specification and a poor understanding of the efficient use of standards and acceptance processes contributing to unnecessary increases in project costs, and delays in delivery.

I would suggest that a thorough examination should be undertaken to establish whether the system of regulation has been a causal factor. We would expect the ORR to regulate Network Rail in a manner that gives funders assurances around governance and efficiencies. Funders should be given confidence that the appropriate solution has been identified to meet the required outcomes and that this solution is efficient in terms cost and value, having regard to relevant external benchmarks, as well as Network Rail cost trends.

### ***Are there any factors that the ORR has not identified? If so, could you explain their significance, ideally illustrated with evidence and/or practical examples?***

The Scottish Government would like to highlight the critical importance of identifying standard, efficient unit costs. Without a clear understanding of this it is impossible for funders to explore and understand fully the value of renewal or enhancement projects. Although the paper refers to establishing a common cost breakdown there needs to be analysis of the costs in comparison with other providers, for example, other rail networks and the wider construction industry, to ensure that they are robust and efficient.

In addition, there are opportunities for improved efficiency through a more joined up approach in Network Rail's structure to allow more effective working practices to reduce costs. Given the significant Scottish Government investment in renewals, we would have a clear expectation that renewals are integrated and combined with enhancement projects where possible and align with the Scottish Ministers' strategic priorities for rail. Also that the scope for infrastructure projects has been developed to take account of often cheaper timetable and rolling stock based solutions. A more holistic approach to renewal and enhancements projects integrated with timetable and rolling stock options would drive a focus on optimum solutions and reduce costs and inefficiencies.

### ***Do you have any views on Network Rail's planning capability?***

Planning should be carried out by the team closest to the users of Scotland's railway and which has the greatest knowledge of its distinct needs and characteristics. This should also be supported by a sufficient delivery capability which is located within the Scottish route. Centrally driven processes, which lack this insight, lead to a lack of accountability and understanding of Scottish priorities.

It is important to plan efficiently to get the balance of a proper flow of work through control periods. Delivery units have improved recently but it is evident that the planning system does not appear to take account of resource capability to deliver the programme of minor renewals and high volumes of reactive work. Therefore, as a consequence, minor renewals can often be deferred with major renewals outsourced. This must be resolved for Control Period 6, and greater autonomy within the route is key to this.

The alignment of incentives between Network Rail and train operators is critical to efficient delivery. Our railways are more efficient when the industry works together to drive solutions that are focussed on the needs of the end-users. That is why the ScotRail Alliance was created to integrate track and train more closely. This whole industry approach drives transformative change and ensures that industry planning is focussed on the needs of customers and end users.

***Do you think that the ORR has identified the right priority areas for our scrutiny of Network Rail's plans during PR18?***

The areas identified for scrutiny in CP6 are broadly right. However, consideration should be given to looking at best practice with rail and other similar service providers, both in the UK and internationally. I would recommend Scottish Water as a comparator of best practice.

In addition, a key to good governance is an organisation's approach to disclosure. There must be earlier communication if there is a change to timescales or costs.

The consultation notes that scorecards will be a key driver in making comparisons between routes and promoting best practice. It is important, therefore, that scorecards should reflect the priorities and investments of specific routes, so that the detail presented is relevant and meaningful. The value of metrics for comparison is understood. However, it would not be acceptable if metrics which are not consistent with, or might compromise, the requirements of the Scottish HLOS were to be introduced solely for the purposes of comparison.



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13<sup>th</sup> September 2017

**Re: Virgin and Stagecoach Group (incorporating West Coast Trains Ltd, East Midlands Trains and Virgin Trains East Coast) Response to ORR's Consultation on "Improving Network Rail's Renewals Efficiency"**

Dear Sir, Madam,

Virgin Rail Group and Stagecoach Group (Virgin Trains and Stagecoach) support the Rail Delivery Group's (RDG) Response to the ORR Renewals Efficiency Consultation. However, we feel that we should highlight some key areas that the ORR need to particularly focus on.

Virgin and Stagecoach believe it is vital that Network Rail continue to plan asset renewals on a cyclic basis. This, whilst demonstrating value for money in that if the life of certain asset components can be extended without compromising industry performance levels. However, this stability can only be achieved if Network Rail and Government take a view that 'life' does not end at the end of a Control Period. It is vital that ORR and Network Rail take the view that efficient asset renewals require seamless funding certainty across Control Periods; effectively managing a rolling five year cycle as opposed to a closed five year cycle – this approach is not dissimilar to other infrastructure businesses; i.e. National Grid; whereby, cyclic renewal investment is planned on a continuous 'pipeline' basis. To underpin this, we believe Network Rail needs to sharpen its focus on its engineering planning and procurement processes; this is fundamental to achieving stability.

As important as the measuring and monitoring of renewals efficiency is, we also need to ensure that the work is actually delivered and the volumes specified – solely targeting being efficient can lead to perverse behaviour such the work not being done, therefore building up problems for the future.

We would also like to see much more evidence based detail of Network Rail undertaking more whole asset life maintenance and renewal planning, as often it appears Network Rail only undertakes control

period to control period maintenance and renewal planning. Whilst we'll make greater comment in the NSO Consultation, we have previously stated that the Scorecard tool maybe an option to undertake this measurement.

Virgin and Stagecoach would like to see a ringfenced fund for Infrastructure Rationalisation. This would enable outdated/redundant infrastructure to be removed, thus avoiding potential asset failure causing detrimental effects on future performance of train services. The current Route Investment Review Group (RIRG) would be the key Stakeholder meeting to monitor Network Rail's output against its renewals strategy and targets.

In addition to those points already mentioned, we would also like to raise the following:

- 1) As previously alluded, Route scorecards need to measure renewals and life extension volumes with regards to delivery and whether the work planned was carried out. In addition, Route scorecards also need to measure access (and Network Rail's utilisation of that access) and where an enhancement to the network has been achieved; for example, a line speed improvement, the benefit to the users is realised.
- 2) How will ORR measure/monitor Network Rail's procurement process and its management of its suppliers?
- 3) Virgin and Stagecoach will be interested to see how improved renewals efficiency translates into Improved timetables/journey times for Operators.

Yours sincerely



Darren Horley  
**Head of Commercial**  
**Virgin Trains 'West Coast Trains Ltd'**

**On Behalf of Stagecoach**