PR18 working paper

Working paper 5: Options for the treatment of enhancements in PR18

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Overview

A number of significant changes affecting Network Rail have taken place since the last periodic review in 2013 (PR13) including reclassification and the Bowe and Shaw reviews.

PR18 is an opportunity for us to look afresh at how enhancements are treated in the context of the periodic review in light of these developments, taking into account the preferences of the Department for Transport (DfT) and Transport Scotland in relation to their high level output specifications (HLOSs)[1] whilst also maintaining an approach that works for the Welsh Government and other funders.

The focus of this paper is on developing options for DfT and Transport Scotland in terms of how to treat enhancements in the context of the periodic review. We see three broad options:

(i) Commitment to fund an enhancement separated from the periodic review process, grant funded;

(ii) Commitment to fund an enhancement separated from the periodic review process, debt funded; and

(iii) Commitment to fund an enhancement as part of the periodic review process, debt funded.

These options are not mutually exclusive and being able to select the most appropriate option for individual project circumstances could provide DfT and Transport Scotland with practical choices to fund and manage the delivery of enhancements in ways that fit their objectives.

[1] In a periodic review, Schedule 4A of the Railways Act 1993 (the Act) requires the Secretary of State and the Scottish Ministers to provide us with information about what they want to be achieved by railway activities during a prospective control period. They must also provide us with information on the public funds that are or are likely to become available to be applied to the achievement of those railway activities. In the last two periodic reviews, we have called these two pieces of information the “high-level output specification” (HLOS) and the “statement of funds available” (SoFA) respectively but these specific terms are not defined in the Act.

If, after the final determination is completed, DfT or Transport Scotland subsequently requires Network Rail to deliver significant volumes of enhancements within the control period that were not taken account of in the periodic review, the impact on a number of linked areas would need to be considered and dealt with, for example maintenance and renewals efficiency and deliverability of the works programme.

In relation to options for funders other than DfT and Transport Scotland, consideration will need to be given to whether changes to the current Investment Framework are required to better facilitate and encourage industry and private sector investment in the network.

We welcome your views and comments on the ideas and emerging thoughts expressed in this paper. Contact details for responding are shown at the bottom of this page.

How to respond to this working paper

Working papers are intended to facilitate a more dynamic process of engagement and consultation with stakeholders, to support an iterative approach to developing policy. We welcome all responses to the paper, including less formal responses such as emails, bilateral or multilateral discussions on any aspects covered in the paper, as well as alternative ideas and proposals. We have set a deadline for responses, but this should not prevent stakeholders from sending thoughts to us ahead of this date; indeed, we hope that our on-going conversations with stakeholders following publication of this paper mean we will be able to make significant progress by the deadline. Earlier responses on this paper, or just on particular issues raised in it, would help us in this respect.

Where written responses are made to us (particularly more formal responses), we may publish these on our website. If you wish any information that you provide, including personal data, to be treated as confidential, please say so in your response (an automatically generated confidentiality disclaimer by IT systems will not necessarily be sufficient in this respect). However, please be aware that regardless of any such request, we may be obliged to disclose or release any submissions made to us under the access to information regimes, such as the Freedom of Information Act 2000 or Data Protection Act 1998. Further information about how we may treat your response is available in paragraphs 6.40-6.43 of our initial consultation on PR18.

Contact details for responding to this working paper

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Responses and engagement on this paper are requested by 14 October 2016

Introduction and context

1. The purpose of a periodic review is to set Network Rail's funding and outputs for the following five years[2]. This five-yearly cycle fits better with regular activities such as maintenance and renewals than it does with enhancement projects, as these involve bespoke engineering solutions that may not be ready for assessment or have robust and mature estimates at the time at which the periodic review is determined. In addition, they may take more than five years to develop and deliver, or be subject to significant changes in their timing and/or scope as they go through the development process.

2. This is not altogether a new challenge and has previously been managed within the periodic review process for a significant level of spend; Thameslink, Reading and the Intercity Express Programme for example all spanned control period 4 (CP4) and control period 5 (CP5) and were included in both the 2008 and 2013 periodic reviews (PR08 and PR13).

3. However since our PR13 Final Determination was published in October 2013 a number of significant changes affecting Network Rail have taken place which we need to consider in the context of enhancement projects and the 2018 periodic review (PR18).

4. The reclassification of Network Rail in September 2014 has led to a number of changes of relevance to enhancements, including a much closer relationship between Network Rail and DfT. Of particular significance for enhancements, reclassification has led to Network Rail borrowing directly from the UK Government, subject to a binding borrowing limit for CP5. This has affected how Network Rail manages the risk of overspending as it no longer has the flexibility to borrow additional funds in response to project costs increasing or requests to deliver additional benefits.

5. Furthermore, as a result of the Bowe review[3] the DfT and Network Rail have recently published a Memorandum of Understanding[4] to clarify the client and deliverer roles and re-set the relationship to ensure effective and efficient planning and delivery of

[2] This period can change, but has historically been set at five years.

[3] https://www.gov.uk/government/publications/bowe-review-into-the-planning-of-network-rails-enhancements-programme-2014-to-2019

[4] https://www.gov.uk/government/publications/improving-the-delivery-of-railway-investments-mou-between-dft-and-network-rail

rail enhancements. This Memorandum of Understanding establishes common ways of working between the two organisations including a lifecycle for enhancements with joint decision gateways and strengthened joint governance arrangements. DfT has also indicated their preference to separate more widely their commitment to new enhancements from the periodic review process in order to give more flexibility to align with franchises and with the joint decision points set out in the Memorandum of Understanding. Therefore one option that DfT is considering in England and Wales is to include in their HLOS only the completion of enhancements already specified in CP5, with any new enhancements being committed to after the periodic review is completed at the appropriate time, in line with the improved governance arrangements in England and Wales. Transport Scotland is also considering similar options with regard to the treatment of enhancement projects in Scotland.

6. DfT and Transport Scotland both have statutory roles in producing an HLOS and a statement of funds available (SoFA) which feed into the periodic review process. The main focus of this paper is on the treatment of enhancements specified by these two bodies. However they are not the only funders of investment in the rail network and the diversity of other funders is likely to increase with the greater focus on devolution to sub-national transport bodies and on encouraging private investment as set out in Shaw. Funders for enhancements in CP6 could therefore include the Welsh Government, sub-national transport bodies, train and freight operating companies, local authorities and private investors. Part of our work for PR18 will include consideration of how the process for funders other than DfT and Transport Scotland (third party funders) could work from a regulatory perspective to better facilitate and encourage such investment. Initial thoughts on this topic are covered in paragraphs 45 to 48 but this is not the main focus of this paper and will require further work to define.

7. In light of these developments, PR18 is an opportunity for us to look afresh at how enhancements are treated in the context of the periodic review, to take account of DfT and Transport Scotland's thinking in relation to their HLOSs whilst also maintaining an approach that works for the Welsh Government and other funders. This paper aims to set out openly the options available and consideration of the possible impacts in order to promote thought and open debate. Responses to this paper will help inform and develop our thinking in this area in preparation for PR18.

Previous approach to enhancements

8. In CP4 and CP5 the majority of government promoted enhancements were committed to as part of the periodic review process. In brief, for the previous periodic review (PR13):

(i) the Initial Industry Plan set out industry views on options for enhancing the network;

(ii) taking the industry views into account, DfT and Transport Scotland specified their requirements for enhancing the network in the HLOSs and a funding envelope in the SoFAs;

(iii) ORR scrutinised Network Rail's estimates and our final determination set baseline costs[5] and outputs for the five year control period;

(iv) output requirements relating to enhancements were linked to Network Rail's Enhancement Delivery Plan, where the regulated milestones were recorded;

(v) during the control period we then measure Network Rail's financial performance by comparing what Network Rail actually spends against this baseline[6]; and

(vi) all the enhancements included in this process were funded via debt[7] (i.e. Network Rail borrowing the money) and added to the Regulatory Asset Base (RAB). The regulatory financial framework defined in the periodic review includes a pain-gain mechanism, whereby 75% of the variance between the forecast and actual costs are reflected in the RAB. This, along with the financial performance measure described in the previous bullet, is intended to incentivise Network Rail to bear down on costs.

9. Within the generic process described above some variations existed, most significantly:

(i) ring-fenced funds – where DfT or Transport Scotland set a capped budget with broad objectives. Network Rail was required to deliver as much as possible in line with the broad objectives but staying within the budget. The decision on precisely what to spend the funding on was often delegated to an industry board (e.g. Strategic Freight Fund). These funds were not subject to the pain-gain mechanism as the total spend was capped; and

(ii) bespoke arrangements – where a bespoke agreement was established between Network Rail and DfT/Transport Scotland. This was used for large programmes including Thameslink, Crossrail and the Edinburgh-Glasgow Improvement Programme (EGIP). These agreements usually included details of

[5] Where projects were at an early stage of development there was too much uncertainty to set the baseline costs at the time of PR13. For these projects an assumption was made in the final determination which would be subject to adjustments through the Enhancements Cost Adjustment Mechanism (ECAM). This involves ORR assessing – once projects reach a more developed stage – whether Network Rail's cost estimate for each project is fully justified, whether it has sufficiently considered opportunities for more cost effective delivery in line with best practice and whether the scope of the project has been developed in line with Network Rail's governance with input from key stakeholders.

[6] As adjusted through ECAM or other agreed processes.

[7] A small number were later switched to include an element of grant funding.

requirements and timing, with a target cost being set (by either ourselves or DfT/Transport Scotland) alongside a bespoke pain-gain mechanism applied through the RAB. In some cases separate cash incentives for meeting milestones also applied.

10. The above mechanisms were included within the two HLOSs and formed part of the periodic review process.

11. In addition, the Investment Framework[8] provided a mechanism by which governments could commit to fund enhancements outside of the periodic review where that was more appropriate. For example, the Investment Framework was used in the second half of CP4 to begin development of a number of new schemes including Northern Hub and Great Western Electrification. These enhancements could be funded via Network Rail's debt and the RAB, but government also had the option of directly grant funding schemes[9] at any time. For example, in CP5, Gospel Oak to Barking Electrification was grant funded in this way.

12. The Investment Framework also provides a mechanism for third party funders such as train or freight operating companies and local authorities to fund schemes either via Network Rail's debt and the RAB with a payback mechanism, or in cash. This framework has been previously utilised by a number of third parties to fund schemes ranging from a substantial Chiltern Railways contribution to East West Rail to numerous small improvements at stations. Options for funders other than DfT and Transport Scotland are considered further in paragraphs 45-48.

Drivers for change

13. Since PR13 there have been a number of changes that highlight the need to consider new approaches to the treatment of enhancements in this periodic review. These include the following.

    (i) The problems that have been experienced in the delivery of some PR13 enhancements, both in terms of schedule delay and large forecast cost increases. This led to the whole portfolio of enhancement projects and programmes in England & Wales being reviewed both for deliverability and

[8] http://orr.gov.uk/what-and-how-we-regulate/investments.

[9] Where DfT or TS provide Network Rail with a project specific grant. This is distinct from the network grant Network Rail receives from DfT and TS in lieu of fixed track access charges that it would otherwise receive from franchised train operators.

affordability[10], with material changes proposed to the timing of some major enhancement projects as a result. Transport Scotland has also commissioned a review of governance structures for the delivery of major rail enhancement projects in Scotland, which is expected to report in September. This is in response to its concern over increasing cost estimates and heightened risks of not meeting previously committed delivery milestones.

(ii) Linked to the above, development of a number of projects specified by DfT and Transport Scotland in their 2012 HLOSs were not sufficiently mature at the time of Network Rail's SBP submission. This led to the setting up of the ECAM process as part of PR13 to address the associated cost uncertainty. More recently the ECAM process itself has been the subject of debate.

(iii) The impact of reclassification on the financial framework for Network Rail, where the UK Government has imposed binding borrowing limits on the company. This reduces Network Rail's ability to manage the consequences of over-spends or changed requirements on individual projects through issuing additional debt.

(iv) Moves towards political devolution and the increased diversity of funders, whereby national and regional governments, transport authorities and other third parties could play a larger role in identifying and funding enhancements.

(v) The establishment of a memorandum of understanding between DfT and Network Rail that clarifies each party's role on enhancement projects in England & Wales.

14. More generally, there are potential benefits from aligning major enhancement, franchising and rolling stock decisions, which could point towards moving away from a five yearly specification of enhancements using the periodic review process. Instead there could be a 'pipeline' of enhancements with the decision to commit to specific enhancements being taken at a variety of decision points, for example at the same time as decisions on franchises or in response to emerging freight needs.

Key considerations for PR18

15. In considering how enhancements could be treated post CP5 our thoughts on the main questions and issues that would need to be considered were set out in paragraph 4.38 of our initial consultation under three headings: planning; regulatory; and financial. We have not reproduced this list in full here but some points of most relevance to the subsequent discussion are summarised below.

[10] Report from Sir Peter Hendy to the Secretary of State for Transport on the replanning of Network Rail's Investment Programme, Network Rail, November 2015, available at http://networkrail.wpengine.com/wp-content/uploads/2015/11/hendy-report.pdf.

Planning and reporting

(i) DfT and Transport Scotland will need to decide whether, where they intend to detach the commitment to develop or deliver and fund enhancements from PR18, this would apply to only new enhancements, or whether enhancements already in delivery would also be excluded.

(ii) DfT and Transport Scotland will need to decide whether they wish to retain the concept of ring-fenced funds in CP6, as described in paragraph 9(i).

(iii) Once projects are committed (either for development or delivery or both), should Network Rail publish all of its commitments to government in a delivery plan, whether or not these are part of the periodic review and however they are funded?

Regulatory treatment

(iv) Network Rail's delivery of enhancement projects should still be monitored in the context of its wider performance (such as for safety, punctuality, asset management) and, if necessary enforced through its network licence. Does whether projects are funded within PR18 or not affect how this works, and how does this differ with the scale of inclusion/exclusion?

(v) There needs to be clarity around the link to RAB additions and the process by which the cost that is added to the RAB is determined, both for enhancements included in PR18 and for those committed to separately.

(vi) We need to decide what happens to the current investment framework which already provides for enhancements to be funded outside of a periodic review.

(vii) There needs to be clarity around how the decision to fund projects within PR18 or not links to Network Rail's business as a whole.

(viii) Transport Scotland and DfT may wish to consider including different proportions of projects in the respective HLOSs; are there any issues around how different approaches from different funders would work together?

(ix) For projects committed to outside PR18 we would need to agree the mechanism by which they are incorporated into the regulatory framework if appropriate. For example this might be a similar process to that currently used for projects committed to through the Investment Framework.

Financial

(x) How does the decision to fund within or outside a periodic review affect the setting of the borrowing limit and our HLOS affordability assessment? Could an allowance be made in the borrowing limit for future schemes funded via debt, or could it be adjusted as new schemes are committed to.

(xi) The choices around how enhancement projects are funded, as the funding decision could be separated from PR18, but projects could also be funded through grant funding instead of the current debt funding. This would mean projects were funded upfront rather than through their cost being spread over time.

(xii) The financial considerations above are those particularly linked to a change in whether enhancements are specified as part of the periodic review process. There are also regulatory financial considerations not directly linked to this question that will not be discussed further in this paper but will be considered later in a working paper on the financial framework. This may consider questions such as whether the operators who benefit most from an enhancement should pay more towards its cost (particularly relevant for cross-border projects like Carstairs Journey Time Improvement) or whether the unfunded societal benefit of an enhancement (i.e. the difference between the cost of the scheme and the commercial return) should be treated differently on the RAB (for example amortised over a short period of time).

Principles of ORR's role in enhancements

16. In addition to the considerations above, the options available are both shaped and constrained by the roles of the parties involved.

17. A key finding of the Bowe Review was that in the planning of CP5 enhancements there was a lack of clarity among and within the DfT, Network Rail and the ORR about their respective responsibilities, despite these roles being set out in legislation. It goes on to report that this was exacerbated by inconsistent communication between the organisations, allowing misunderstandings to persist. The Secretary of State accepted all of the recommendations, and quickly acted on strengthening the DfT and Network Rail's joint day-to-day management of the process for planning and overseeing rail enhancements, providing clearer accountability for associated costs and project management. These measures reset the formal framework and are underpinned by the published Memorandum of Understanding between DfT and Network Rail. As indicated in paragraph 13(i) above, Transport Scotland are also undertaking a review of Network Rail's enhancements programme in Scotland, which will include reviewing governance structures.

18. As this paper is primarily considering regulatory treatment of enhancements it is useful to set out what role we think we have in respect of enhancements. This is particularly important as we work to identify a process by which enhancements can be committed to outside of the periodic review process, but recognising that enhancements still have a significant impact on areas of Network Rail's activity that remain within periodic reviews, as discussed further from paragraph 25 onwards. Reflecting this, our roles in relation to enhancements can be thought of as follows:

(i) **To protect users in respect of the charges they pay**: we play an important role in determining the appropriate level of charges, to be paid by franchise, open-access and freight operators. A practical consequence of this is that we will continue to take a role in deciding what level of cost can be added to the regulatory asset base. This could be through undertaking our own scrutiny of enhancement costs or through taking assurance from DfT or Transport Scotland. In the latter case this could take the form of independent (external) challenge of Network Rail's cost estimates overseen by DfT or Transport Scotland, as was the case with Thameslink through its protocol arrangements, Where enhancements are funded by grant we will need to understand the costs of any knock on effects that may be passed on through charges.

(ii) **To hold Network Rail to account for delivery of all agreed outputs**: we have a formal role to hold Network Rail to account for delivery of the outputs contained in the periodic review determination, which we enforce through Network Rail's licence.

(iii) **To protect network condition for the benefit of current and future users**: we have a role in holding Network Rail to account, through the licence, for its operation of the network and how it maintains and renews the assets to ensure its long-term sustainability. These activities have many interfaces with enhancements (see paragraphs 34-44) and in light of this we need sufficient information about the enhancement portfolio, the financial resources available to the company, and how the company is balancing its enhancement activities with its other responsibilities, to carry out this role.

(iv) **To hold Network Rail to account for how the network expands**. Network Rail has obligations in its licence in respect of how it improves, enhances and develops the network. These require it to act in accordance with best practice and in a timely, efficient and economical manner. We would take enforcement action if we believed Network Rail's delivery of enhancements was causing it to breach its obligation under condition 1 to do everything reasonably practicable to manage the network in accordance with best practice.

(v) **To publically report on Network Rail's delivery and cost performance.**

(vi) There is also potential for us to **support further devolution and encourage third-party funding and financing including from the private sector.** In particular, transparent and impartial oversight of the investment process may help to attract greater private sector investment in the network, by giving private investors additional confidence that initiatives will be appraised fairly and transparently and are not subject to the uncertainty of government control.

19. The next section of this paper will go on to consider potential approaches for treatment of DfT and Transport Scotland promoted enhancements, given the context

and questions already discussed. Consideration will also be given to the potential impact of these approaches.

Potential approaches for regulatory treatment of DfT and Transport Scotland promoted enhancements

Introduction

20. In order to fully develop and agree an approach for the regulatory treatment of DfT and Transport Scotland promoted enhancements that meets the needs of all parties, substantial collaboration between ORR, DfT, Transport Scotland, Network Rail and other stakeholders will be required. This paper and associated consultation is intended to support and inform this discussion.

21. This section will set out some initial thoughts on potential approaches and areas of possible impact. We welcome views on the ideas discussed in this section, including whether we have missed any material points. The ultimate decision for when and how governments choose to commit to enhancements and how they are funded will remain with those governments, consistent with existing legislation.

Criteria for an overall approach

22. It is useful to consider what criteria should apply to explore options and decide on the overall approach for the regulatory treatment of enhancements. This cannot be definitive, but helps us to check whether the combination of processes taking place in the different organisations work together effectively.

23. Possible criteria include whether the options developed:

    (i) supports the planning and delivery of enhancements;

    (ii) supports the necessary interactions between enhancements and the rest of Network Rail's business for planning, delivery and monitoring purposes, and hence also for the assessment of financial risks;

    (iii) promotes efficiency in the costing and delivery of enhancements and a clear and robust process for RAB additions;

    (iv) works for a variety of both current and future funders, public and private, and facilitates different funding models;

    (v) promotes transparency around the planning, delivery and financial aspects of enhancements; and

    (vi) supports clarity of roles between all parties.

24. Working to these criteria would protect the interests of users and funders and should build trust and confidence in the overall process in the future.

Options for DfT and Transport Scotland

25. To further the discussion we have sought to identify some broad options, taking into account the considerations discussed earlier in this paper and the roles set out above. These options are specifically in relation to DfT and Transport Scotland on account of their statutory role in producing an HLOS and SoFA.

26. To some extent these options are limited by the current legislative framework that – whilst it could be changed in future –affects how some of the processes could currently work.

27. At this stage we see three broad options for the treatment of DfT and Transport Scotland promoted enhancements in the context of the periodic review. The three options are not mutually exclusive and could work as a set of options from which DfT and Transport Scotland could each choose different approaches in different circumstances. This could provide practical choices to fund and manage the delivery of enhancements in ways that fit their objectives.

28. **Commitment to fund an enhancement separated from periodic review process, grant funded:**

    (i) Funders would take successive investment decisions (develop, design, deliver) on individual enhancement projects at the appropriate time in the project's development, whenever that falls in the control period, for example in line with the Memorandum of Understanding between Network Rail and DfT, or an equivalent process agreed with Transport Scotland.

    (ii) These enhancements would be funded directly by a grant from DfT and Transport Scotland and would not be added to the RAB. DfT and Transport Scotland would need to make provision for the treatment of financial risk (i.e. how an overspend is treated).

    (iii) Links to other areas of Network Rail's business including outputs already set in the periodic review would need to be considered.

    (iv) Although enhancements may not be included in the periodic review, they would still be relevant to condition 1 of the licence (see paragraph 18(iv)).

29. **Commitment to fund an enhancement separated from periodic review process, debt funded**:

    (i) Funders would take successive investment decisions (develop, design, deliver) on individual enhancement projects at the appropriate time in the project's development, whenever that falls in the control period, for example in line with the Memorandum of Understanding between Network Rail and DfT, or an equivalent process agreed with Transport Scotland.

(ii) Development of enhancements could be grant funded by DfT or Transport Scotland until the next periodic review. Alternatively, as with the current Investment Framework process, they could be fully debt funded and added to the RAB without any changes to the final PR18 settlement; the differences between forecast and actual spend would be logged up on an annual basis and the appropriate amount would be added to the RAB at the following periodic review. This may require a change to the borrowing limit if this has been fixed based on the costs included in PR18.

(iii) Links to other areas of Network Rail's business including outputs already set in the periodic review would need to be considered.

(iv) Although enhancements may not be included in the periodic review, they would still be relevant to condition 1 of the licence (see paragraph 18(iv)).

30. **Commitment to fund an enhancement as part of periodic review process, debt funded:**

(i) Funders would identify enhancement requirements as part of the periodic review process (i.e. in the HLOS and SoFA).

(ii) We would only include these projects in the periodic review where development is sufficiently mature, otherwise, they would need to be handled through alternative processes (e.g. the option described in paragraph 28).

(iii) These enhancements would be funded via Network Rail's borrowing and be added to the RAB.

(iv) Links to other areas of Network Rail's business would be considered as part of the periodic review process.

(v) Enhancements would be included in the periodic review and also relevant to condition 1 of the licence (see paragraph 18).

31. Within any of these three options, rather than specifying scheme outcome requirements, DfT and Transport Scotland could identify a broad set of objectives and a total fixed budget but could delegate detailed decisions on drawdowns from the fund to Network Rail or an industry board as with the ring-fenced fund approach used in CP5. This approach could be at route or national level to deal with national strategies (e.g. for freight schemes) and might also be appropriate for smaller enhancements, such as those linked to renewals projects where relatively moderate spend can increase network capability.

32. We will also need to consider the approach to assuring efficiency, which may differ between the options outlined above and between different funders (see paragraph 18(i)).

33. PR18 sits alongside these options and should be designed in such a way to fit in with DfT and Transport Scotland's requirements alongside our duties. The next part of this paper discusses areas of Network Rail's business that are linked to enhancement projects and that may be impacted by the options set out here, depending on how funders choose to treat enhancements. We will need to consider how these can be managed in the context of these options.

Areas that may be impacted by the options selected

34. Network Rail needs to plan its business holistically to ensure that it captures synergies and manages efficiently across all areas of delivery. It also needs to be able to understand the impact of any new investment decision on its output obligations and its core business of maintenance and renewals. If, after the final determination is completed, DfT or Transport Scotland subsequently requires Network Rail to deliver significant volumes of enhancements that were not taken account of in periodic review, the impact on the following linked areas would need to be considered.

Other outputs

35. An emerging pipeline of enhancement projects might impact on the targets for other outputs set at the time of the final determination, such as for route capacity or reliability. A possible solution would be to introduce some kind of change control mechanism whereby existing targets could be altered to take account of new enhancements when they are committed to. Work will be needed to understand the feasibility of this approach particularly for some complex outputs.

Maintenance and renewals efficiency

36. Lack of either visibility or certainty, or both combined, about the forward enhancements pipeline could also affect Network Rail's ability to plan and deliver its maintenance and renewals work efficiently and avoid abortive work. One way to minimise this could be to ensure that enhancement business cases consider the impacts on the programme of maintenance and renewals (e.g. include the costs of replacing existing assets before end of life, or the impacts of deferring renewals in favour of later replacement during enhancement works).

Deliverability of the work programme

37. Assuring the deliverability of Network Rail's forecast portfolio of maintenance, renewals and enhancements is an on-going iterative process that Network Rail needs to carry out as part of its business as usual activities. In a periodic review, we assess the robustness of Network Rail's own deliverability assurance process at that point in time. This includes whether it is appropriately taking account of committed investment decisions, its asset renewal policies and the longer term plans of the industry. As was the case in PR13, the principal challenge with this is dealing with the uncertainty of projects at development stage when scope and cost are undefined.

38. Enhancements that become committed subsequent to a periodic review will impose additional demands on supply chain and other critical resources, which could affect the deliverability of the existing programme, including maintenance and renewals. This could be addressed by ensuring that deliverability of the entire portfolio of work is reassessed as part of the enhancement business case, and that the project includes plans to resolve any shortfalls. Such a process would seek to ensure that new commitments do not jeopardise existing ones - or take priority over essential renewal work. Our focus in PR18 would therefore be on Network Rail's ability to model such investment scenarios to the extent that it can be both ambitious and avoid over-committing.

39. Access planning is a key issue and potential constraint that could impact delivery, efficiency and achievement of other outputs depending on the lead times required to integrate proposed enhancements into the existing work bank planning. The more condensed the timescales between the commitment from DfT or Transport Scotland to fund an enhancement for delivery and the desired completion date, the greater the likelihood and scale of impact.

Portfolio Efficiency

40. There are substantial financial benefits if a large set of projects is funded and managed as a portfolio rather than a set of individual 'pipeline' projects with ring-fenced funding. For example, the required portfolio risk uplift is statistically less than the sum of individual project risk, which could equate to a significant value across a multi-billion pound portfolio. Therefore in deciding on funding options, it should be considered how Network Rail and its funders can realise these benefits when managing a pipeline of enhancement decisions.

Financial risk and affordability

41. Network Rail needs to manage its financial risk across of all its activities. For this reason, even if the process for government to commit to new enhancements is outside of PR18, we still need to consider the financial consequences.

42. One of the key issues that we need to consider is how should we deal with the risk and uncertainty of enhancements. In particular, if there is a borrowing limit in CP6, how enhancements should be incorporated into it. Some of the issues include:

    (i) as enhancements are approved are they added to the borrowing limit separately for England & Wales and Scotland;

    (ii) would investment projects have discrete budgets and separate ring-fenced debt allowances if they are not grant funded; if not how would the necessary spend on renewals and maintenance be protected and

    (iii) how would under/over-spends on a project affect the funding of other projects?

43. Availability of third party funding may also impact affordability, for example if Network Rail assumes in its Strategic Business Plan that third party funding will be available for a project included in the HLOS and this funding is subsequently withdrawn.

Incentives

44. In PR13 most enhancements were included in the HLOS and consequently in the determination. This meant that the financial performance measure and RAB pain-gain mechanism described in paragraph 8 applied at portfolio level to incentivise Network Rail. We would need to consider whether an alternative incentive mechanism should be put in place for enhancements not included within the periodic review framework.

Options for other funders of enhancements

45. Previously the Investment Framework[11] provided a route for funders other than DfT and Transport Scotland to invest in the railway (and for those bodies to invest between periodic reviews as discussed in paragraphs 11-12, either in cash or with financing through the RAB. In the past the Investment Framework has been successfully used by train operators, local authorities, Transport for London and other third parties to invest in the network.

[11] http://orr.gov.uk/what-and-how-we-regulate/investments

46. Whilst cash funding is still an option, reclassification and the introduction of a fixed borrowing limit, combined with increases in the forecast costs of government sponsored enhancements, has significantly reduced the opportunity for third party funders (that is anyone besides Network Rail, DfT and Transport Scotland) to access financing through the RAB. Previously this route was mainly used by train operating companies to promote investment such as station and depot improvements that could have strong positive business cases, with the investment paid back over time during its (and future) franchises via station/depot facility charges.

47. Prior to reclassification we had started working jointly with Network Rail and with stakeholders to revise the Investment Framework guidance to improve clarity. This work was paused due to the affordability problems emerging in CP5. Alongside the periodic review process we now intend to consider whether changes need to be made to the third party element of the Investment Framework.

48. Additionally we will consider whether changes need to be made to better facilitate and encourage new sources of funding and financing as discussed in the Shaw report. For example one option to maintain the ability for third parties to invest utilising financing through the RAB could be for a ring-fenced allowance for third party schemes to be explicitly included in the determination (and promoted) to better encourage and facilitate investment by those on the operational frontline where business cases can be strong and pay-back periods short. Such a ring-fenced fund would also have to be reflected in Network Rail's loan agreement and consideration would need to be given as to how schemes would be prioritised in a resource constrained environment

Next steps

49. We welcome your views and comments on the ideas and emerging thoughts expressed in this paper. Contact details for responding are shown at the bottom of page 2.

50. We will then work closely with stakeholders:

    (i) to further develop the detail of the options outlined here for the regulatory treatment of DfT and Transport Scotland promoted enhancements; and

    (ii) to consider and develop an approach that facilitates third party funding of enhancement schemes, including private investments.

51. These approaches will need to consider, and address where necessary, the questions and issues raised in this paper in a way that meets the needs of all parties. The responses to this paper will support and inform this discussion.