OFFICE OF RAIL AND ROAD

Second consultation on the PR18 financial framework

March 2018

Contents

Executive summary

This is our third publication on the financial framework for PR18. It follows on from our first consultation and our update letter, which were published in January 2017 and December 2017 respectively.

In this document we set out our 'minded to' proposals on a number of financial issues for Network Rail for control period 6 (CP6), which covers the five years from 1 April 2019 to 31 March 2024. We also outline policy considerations, and possible approaches, for budgetary flexibility and financial risk management for Network Rail in CP6.

Proposed change from RPI to CPI as inflation indexation measure

Our main minded to proposal is for access charges to be indexed by the consumer price index (CPI) instead of the retail price index (RPI). This would also apply to payment rates in other mechanisms where we set the method of indexation[1]. We are making this proposal because RPI is no longer regarded as a robust measure of inflation. Overall, this would have a limited impact on Network Rail and charges for CP6, but there would be a change to the profile of charges across the control period, with higher initial charges followed by lower increases from year to year (assuming that RPI remains higher than CPI and both are positive).

Budgetary flexibility for Network Rail

Network Rail operates complicated infrastructure assets and its work programmes can be spread over a number of years. Railway expenditure is inherently 'lumpy' due, in particular, to reliance on track access windows for the delivery of major works (typically across bank holidays). Any internal issues (such as delays in project development and difficulty integrating multiple projects across the network) or external factors (such as severe weather and stakeholder pressure to defer works) can lead to a requirement to move large sums of money between years.

Therefore, we also consider the degree of flexibility the governments could give Network Rail to move money between financial years and between resource and capital spending. One of the consequences of a lack of flexibility could be more uncertainty around workbanks with adverse impacts on supply chain sustainability. In addition, short notice changes to work programmes would be likely to drive inefficiencies because of the likelihood of wasting resources that have already been allocated, or having to procure resources at premium rates.

We consider that an appropriate amount of flexibility will be necessary to allow Network Rail to deliver its outputs efficiently. Ideally, this flexibility would allow money to be brought forward from later in the control period as well as being carried forward from one year to

[1] These include station charges, Schedule 4 and Schedule 8 payments.

another. However, it might also include the flexibility to transfer funding between resource and capital budgets[2], and flexibility to change planned expenditure between the time of Network Rail's supplementary estimate submissions and full year outturn expenditure.

This would also help to reinforce the integrity of route level settlements because the likelihood of Network Rail having to transfer funding between routes, to deal with cost shocks, would be reduced so that the need for such transfers should be exceptional.

Network Rail will need to ensure that an effective financial governance regime is in place so that flexibility cannot simply become a buffer against inefficient management. In this context, Network Rail's performance at forecasting and controlling expenditure requirements will need to be improved for CP6. We are developing our approach to efficiency and financial performance assessment to hold Network Rail to account and to promote transparency at both business wide and route-levels (see associated document 4 in Annex A).

Discussions on budgetary flexibility are taking place with the Department for Transport (DfT), Transport Scotland, HM Treasury and Network Rail. We recognise that the governments have a strong interest in the stability of public sector finances. In particular, we recognise that a business needs to have an appropriate level of governance over its budget. However, we need to ensure that the framework Network Rail operates within, supports its drive to become more efficient and deliver improved value for money.

Financial risk management

Network Rail, like any other company, faces the risk that actual income and expenditure levels could be different from those forecast. It is important that Network Rail efficiently manages financial risks. These risks (which will vary across Network Rail's routes) include:

- macro-economic conditions;
- supply chain issues;
- efficiency outturns versus planned levels;
- cost headwinds[3];
- underlying network asset condition; and
- inflation (given the non-indexation of network grants in CP6).

Network Rail thinks that it needs £2.6bn of funding to cover the risks it faces across CP6. With this funding, it thinks that there is an 80% probability that it can deliver its outputs for the level of expenditure set out in its strategic business plans (SBPs).

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[2] We note that no public sector organisation presently has flexibility to transfer capital expenditure funding to resource expenditure.

[3] Factors outside the control of the business that tend to increase costs.

Without this funding, Network Rail thinks this probability would reduce to 50%. We think it is right to be realistic about how outputs can be delivered and we will decide in our draft determination whether we agree with Network Rail's views on:

- the amount of money it requires;
- the probability of it delivering its plans for given levels of funding; and
- if applicable, the balance between money held at the centre and at route-level.

We will also consider alternatives for financial risk management including:

- the allocation of funding to activities that could be cancelled at relatively short notice, with limited impact on outputs and stakeholders; and
- a hybrid risk funding/cancellable activities approach.

We think that the flexibility Network Rail needs to efficiently manage financial risk should be recognised as part of our determination in the context of potential impacts on the delivery of its outputs. We will decide how financial risk should be taken account of and how much funding will be provided in our draft determination. We also note that risk funding could also be managed to some extent at a government level.

There are a number of interactions between the arrangements for the efficient management of financial risk (including any possibilities for transfers of funding between routes) and the wider change control arrangements that should apply to route financial settlements. We are consulting on these wider change control arrangements in our separate working paper on the overall framework for PR18, which will be published shortly.

Calculation of revenue requirements and the governments' SoFAs

We describe how we will calculate route-level and England & Wales and Scotland revenue requirements for Network Rail in CP6 using our PR18 financial model. We set out, in particular, how the relationship between the geographic routes, Freight and National Passenger Operator Route (FNPO) and System Operator (SO) settlements and Network Rail's central and route support costs are taken account of.

Our revenue requirements will not include funding for enhancements that are incremental to Network Rail's strategic plans for operating, maintaining and renewing the railway[4]. Funding for these will be decided by the governments. We will take this into account when we decide whether the outputs in the HLOSs can be delivered for the funding in the SoFAs.

Transport Scotland's SoFA includes some funding during CP6 for railway improvements. This is not restricted to enhancement of the rail network, i.e. Network Rail only, but could also include service based and/or rolling stock solutions in other parts of the rail industry in

[4] It will also not include funding for any Transport Scotland improvement projects.

Scotland, depending on what represents best value for the use of public funds. The approach to investment will be governed by the Scottish Government's Rail Enhancement and Capital Investment Strategy which was published recently.

We make clear that the revenue requirements do not include payments for legacy debt liabilities, British Transport Police (BTP) costs[5] for England & Wales and corporation tax, because these items will be funded by the UK Government under separate arrangements in CP6.

Responses invited

Stakeholders are invited to provide comments on our 'minded to' proposals and the issues referred to in this document. We have included some particular questions at the end of each chapter. We will take all responses received into account for our PR18 draft determination, which we expect will be published in June 2018. The deadline for responding to this consultation is 24 April 2018. Further information on how to respond is included in chapter 4.

[5] The approach for the funding of transport police costs in Scotland is still under discussion with the Scottish government. At this stage, our working assumption is that the costs of policing the rail network in Scotland will be included in our revenue requirement determination.

Introduction

This paper is our third publication on the financial framework for our 2018 periodic review of Network Rail (PR18). It takes account of the responses we have received to date, latest policy developments, and our review of the strategic business plans for PR18 prepared by Network Rail's routes and central functions.

We outline how our development of the financial framework fits into the timeline for ORR's draft and final determinations for PR18 and, where relevant, note the way in which our work interacts with the other PR18 project work streams.

In chapter 1, we summarise the funding structure for CP6 and the aspects that have been updated/confirmed since our last publication. We also outline the position on some remaining uncertainties. We provide our minded to positions on a range of financial issues for our PR18 determination.

Chapter 2 describes our approach to calculating route revenue requirements for CP6 and revenue requirements for England & Wales and for Scotland using our financial model (a draft of which we will publish with our draft determination). We set out, in particular, how the relationship between the geographic routes, Freight and National Passenger Operator Route (FNPO) and System Operator (SO) settlements and Network Rail's central and route support costs are taken account of. We also show how our revenue requirements for operating, support, maintenance and renewals (OSMR) activities fit into a financial bigger picture that includes the separate funding for enhancement projects and a number of other costs in CP6.

In chapter 3, we explain how income and expenditure risks could be managed by Network Rail and the routes in the context of the funding structure for CP6.

In chapter 4, we set out next steps and the current timetable for PR18.

Annex A contains a list of related documents that provide context for this consultation. These include:

- our first consultation on the financial framework for PR18 – January 2017;
- our update letter setting out policy developments – December 2017;
- Network Rail's strategic business plans; and
- our recent consultation on assessing Network Rail's efficiency and financial performance in CP6.

Annex B contains the impact assessment for our minded to proposal to change the indexation of access charges (and payment rates in other mechanisms where we set the method of indexation)[6] in CP6, from RPI to CPI.

Summaries of the responses we received to our first consultation and update letter are included in Annex C. We are grateful for the time and effort that respondents put into their comments and suggestions. For completeness we have summarised the points made, even though some of the issues referred to in our first consultation, such as an approach for Network Rail's cost of capital, have been overtaken by the policy developments addressed in our subsequent update letter and in this document.

The content of this document applies to both England & Wales and Scotland, except where we explain variations.

References to routes in this document include the FNPO Route and the System Operator except where we refer to 'geographical routes' or state otherwise.

[6] These include station charges, Schedule 4 and Schedule 8 payments.

1. Policy positions on financial issues for PR18 and remaining uncertainties

Updates to the funding structure for PR18

1.1 In the update letter we published on the financial framework in December 2017, we said that in this publication we would:

- refer to the Statement of Funds Available (SoFA) published by Transport Scotland;
- provide an update on the governments'[7] funding policies and associated mechanisms that had not been finalised at the time of our update letter; and
- set out our minded to proposals on a range of financial issues.

1.2 We cover the points set out above in this chapter and also note that some existing mechanisms and adjustments will not be needed in CP6. However, they might need to be revisited in a scenario where Network Rail's funding structure changed or network assets were transferred out of Network Rail's ownership (for example under concession arrangements), or Network Rail (or a part of it) was privately financed. These are:

- early start provisions;
- corporation tax and VAT; and
- regulatory asset base (RAB) roll forward incentive and spend to save mechanisms.

DfT and Transport Scotland SoFAs

1.3 The SoFAs published by DfT and Transport Scotland set out the cash funding totals for the whole of CP6 that are, or are likely to become, available for operations, maintenance and renewals activities.

1.4 The DfT's SoFA includes amounts for some ongoing/additional railway enhancements, which we will need to exclude when we decide whether the required outputs can be delivered for the funding included in its SoFA.

1.5 Transport Scotland's SoFA includes some funding during CP6 for railway improvements. This is not restricted to enhancement of the rail network, i.e. Network Rail only, but could also include service based and/or rolling stock solutions in other

[7] Refers to the UK and Scottish Governments.

parts of the rail industry in Scotland, depending on what represents best value for the use of public funds. The approach to investment will be governed by the Scottish Government's Rail Enhancement and Capital Investment Strategy[8] which was published recently. We will need to exclude these when we decide whether the required outputs can be delivered for the funding included in its SoFA.

1.6 The SoFAs do not specify revenue profiles for the five years of CP6 and we will determine these in light of Network Rail's strategic business plans.

1.7 The DfT published its SoFA on 13 October 2017[9] and Transport Scotland published its SoFA on 25 January 2018[10].

Funding structure for CP6

Revenue requirement building blocks

1.8 In our update letter, we outlined the building block approach we would use to calculate the revenue requirement for each of Network Rail's routes for each year of CP6. Our approach to the calculation of revenue requirements is covered in chapter 2, and our building blocks diagram is shown in Annex F.

1.9 After accounting for the other single till income (OSTI) that Network Rail is expected to receive, the net revenue requirement is recovered through the network grants paid by the governments and the fixed and other charges paid by train operators.

1.10 The net revenue requirement covers expenditure on:

- operations;
- support costs;
- maintenance; and
- renewals.

1.11 DfT has also ring-fenced some grant funding in England & Wales for expenditure on:

- ongoing enhancement projects;
- development funding;
- Access for All[11]; and
- development of the strategic freight network (SFN).

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[8] https://www.transport.gov.scot/public-transport/rail/rail-policy-and-strategy/

[9] https://www.gov.uk/government/publications/railways-statement-of-funds-available-2017

[10] https://www.transport.gov.scot/publication/statement-of-funds-available-for-rail-control-period-6-2019-2024/

[11] https://www.gov.uk/government/collections/access-for-all-programme

1.12 Transport Scotland noted in its SoFA that its funding also covers the completion of some enhancement projects which will be carried over from Control Period 5, and some provision for railway improvement projects that could include service based and/or rolling stock solutions.

1.13 Once we have calculated revenue requirements (for England and Wales and for Scotland) for CP6, we will check that they are not higher than the corresponding SoFA totals - i.e. that there is not a ‘mismatch’.

1.14 We expect to present our revenue requirements in both cash prices (which will reconcile to the SoFAs) and in real (constant 2017-18) prices. The network grant amounts included in the SoFAs represent total cash limits, which are not subject to adjustments for outturn inflation during CP6 and we comment on this in chapter 3 (financial risk management).

Separately funded expenditure and pipeline approach to enhancement projects

1.15 As noted in our update letter, some costs will be funded by the governments under separate arrangements in CP6. These are:

- legacy debt liabilities[12];
- British Transport Police (BTP) costs for England & Wales; and
- corporation tax.

The administrative arrangements for this funding have not yet been confirmed.

1.16 The approach for the funding of transport police costs in Scotland is still under discussion with the Scottish government. At this stage, our working assumption is that the costs of policing the rail network in Scotland will be included in our revenue requirement determination.

1.17 In CP6, the governments propose to make some enhancement project decisions under a pipeline approach and fund them through project grants (although as noted above, DfT and Transport Scotland included funding for some enhancements[13] in their SoFAs)[14].

1.18 The governments might also choose to make additional funding available to Network Rail for particular programmes during CP6. Transport Scotland has commented that this could include some ‘renewal plus’ schemes (see glossary).

[12] Including the associated financial indemnity mechanism and any collateral facility costs.

[13] Transport Scotland will also use some of the funding in the SoFA to fund improvements in the whole of the railway network in Scotland, this is not just for Network Rail.

[14] Some enhancements might also be funded or financed by third parties during CP6.

Funding mechanisms

1.19 The mechanisms associated with the funding structure are summarised below.

Network grants and track access charges

1.20 The public sector arm's length bodies that receive grant payments from governments, usually receive them on a monthly basis in line with their expenditure requirements and we expect that this will be the case for Network Rail.

1.21 The balance between fixed track access charges (FTAC) and network grants will be set out in our draft determination, taking account of stakeholder views and the SoFAs. The structure for both fixed and other charges will be confirmed by ORR as part of the PR18 charges and incentives project. The payment of charges is governed by Network Rail's track access contracts with operators.

1.22 Network Rail will need to ensure that the ring fencing of funds referred to in paragraphs 1.11 and 1.12 is respected. We will monitor this through regulatory accounts submissions.

Early start

1.23 In our first consultation on the financial framework for PR18 (our first consultation) we referred to the 'early start' policy we used in our PR13 review of Network Rail. For PR13, this allowed Network Rail to apply for confirmation of financing in CP5, for particular renewals and enhancements (that would commence during CP4) ahead of our determination.

1.24 Respondents to our consultation were supportive of this policy. However, following reclassification, this issue is not relevant for our determination of Network Rail's revenue requirement in CP6. We would revisit this issue if Network Rail, or a part of it, were to be privately financed at any time or other changes to Network Rail's funding structure took place.

Corporation tax and VAT

1.25 As noted in paragraph 1.15, DfT proposes to fund Network Rail's corporation tax liabilities separately from our determination of revenue requirements for CP6. This applies to the whole of Great Britain.

1.26 We will still model Network Rail's corporation tax liabilities for CP6 (see chapter 2), but this will be for information purposes only, e.g. to show the total costs of the business.

1.27 In our first consultation, we noted that Network Rail's business is broadly VAT neutral and we do not take VAT into account in our modelling of revenue requirements. However, we also explained that our policy in CP5 in relation to any material VAT rebates, corporation tax credits and enhanced capital allowances on environmental expenditure received by Network Rail has been to allow Network Rail to retain 25% of the benefit. This provided it with an incentive to pursue potentially recoverable amounts.

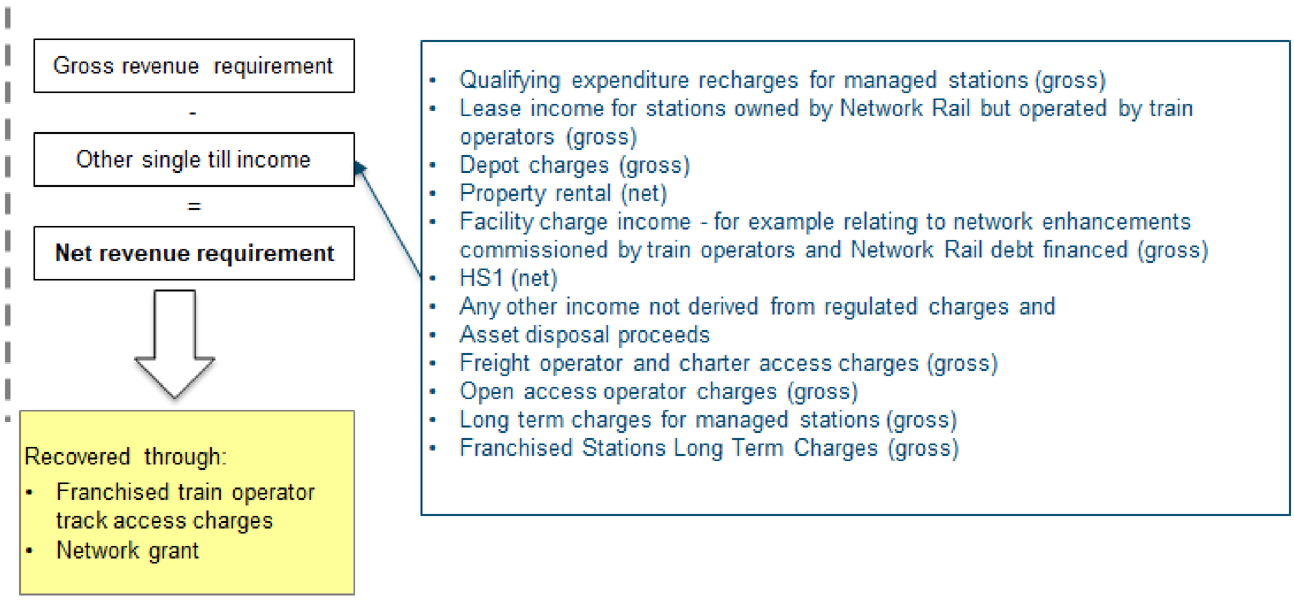
1.28 Following reclassification, and DfT's decision to directly fund Network Rail's corporation tax payments, this issue is not relevant for our determination of Network Rail's revenue requirement in CP6. However, we would revisit this issue if Network Rail, or a part of it, were to be privately financed at any time or other changes to Network Rail's funding structure took place.

Revenue requirement and other single till income categories

1.29 Network Rail has worked with us on the presentation of the revenue requirement and, in its strategic business plan (SBP), has changed the classification of other single till income. We propose to make the same presentational changes to the classification of Network Rail's income categories by adjusting the income included in OSTI, so that it consists only of income from charges that ORR does not set and income from commercial agreements. OSTI would consequently be reduced by around 30%[15] but there would be an equivalent uplift to the net revenue requirement. This means there would be no overall impact on revenue/charges.

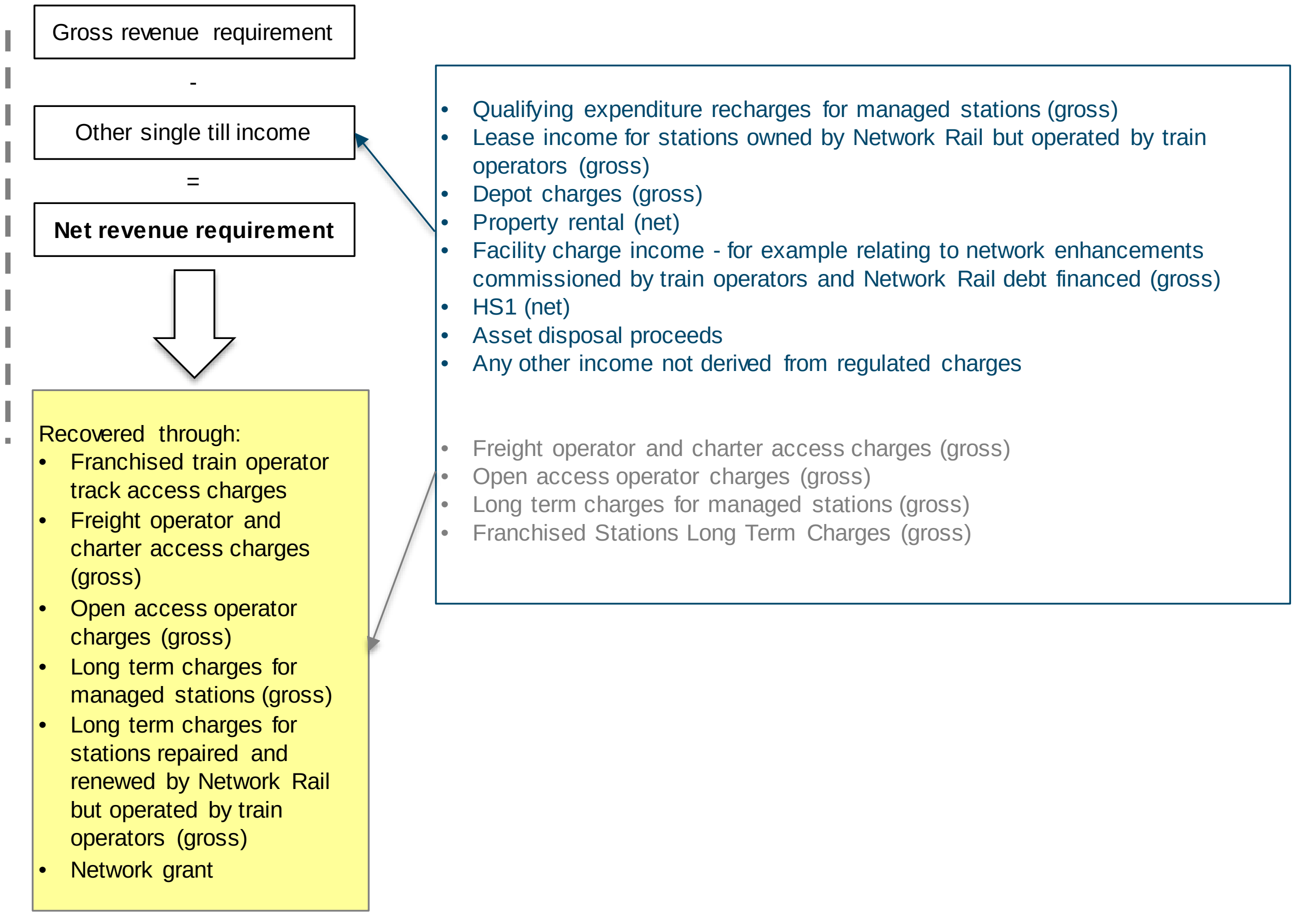
1.30 Figures 1.1 and 1.2 below illustrate the current and proposed classifications. References to 'gross' and 'net' in the blue text/yellow boxes mean gross or net of associated costs.

Figure 1.1- Current classifications



[15] Based on OSTI levels in CP5.

Figure 1.2- Proposed classifications



Budgetary flexibility for Network Rail and the routes

1.31 In our update letter we commented that, as an arm's length public sector body, Network Rail might be subject to restrictions on:

- spending money in different years than it originally agrees with the governments (i.e. moving money between years); and
- switching expenditure between operating (resource) and capital expenditure[16].

It might additionally be subject to restrictions on revising income and expenditure submissions it makes under supplementary estimate submissions[17].

1.32 We understand that restrictions could apply to all of Network Rail's income from network grants and track access charges. As a complex infrastructure business,

[16] No public sector organisation presently has flexibility to transfer capital expenditure funding to resource expenditure.

[17] https://www.gov.uk/government/collections/hmt-supplementary-estimates

Network Rail's work programmes (which can be spread over a number of years) can be affected by, for example:

- delays in the development of capital projects (such as complex renewal schemes); and
- limitations on access to carry out works (reflecting stakeholder needs and weather conditions).

1.33 Also, railway expenditure is inherently 'lumpy' due, in particular, to reliance on track access windows for the delivery of major works (typically across bank holidays). Any internal issues (such as delays in project development and difficulty integrating multiple projects across the network) or external factors (such as severe weather and stakeholder pressure to defer works) can lead to a requirement to move large sums between years.

1.34 Therefore, an appropriate degree of budgetary flexibility will be necessary to allow managers to respond to changing circumstances and deliver outputs efficiently. Ideally, this flexibility would allow money to be brought forward from later in the control period as well as being carried forward from one year to another. It might also include flexibility to transfer funding between resource and capital budgets[18], and flexibility to change planned expenditure between the time of Network Rail's supplementary estimate submissions and full year outturn expenditure.

1.35 This would help to reinforce the integrity of route level settlements because the likelihood of Network Rail having to transfer funding between routes, to deal with cost shocks, would be reduced so that the need for such transfers should be exceptional.

1.36 The issues covered by the term 'budgetary flexibility' include whether Network Rail could:

(a) move annual capital funding between the relevant year (i.e. the year in the control period that the issue would relate to, e.g. 2020-21, if we were considering the 2020-21 budget) and future years in the control period;

(b) move annual capital funding between future years and the relevant year in the control period;

(c) move annual resource funding between the relevant year and future years in the control period;

(d) move annual resource funding between future years and the relevant year in the control period;

[18] We note that no public sector organisation presently has flexibility to transfer capital expenditure funding to resource expenditure.

(e) transfer expenditure in the relevant year's annual resource budget to the capital budget;

(f) transfer expenditure in the relevant year's annual capital budget to the resource budget;

(g) change planned capital expenditure in the relevant year between the time of the supplementary budget submission and full year outturn expenditure; and

(h) change planned resource expenditure in the relevant year between the time of the supplementary budget submission and full year outturn expenditure.

1.37 We recognise that the governments have a strong interest in the stability of public sector finances. In particular, we recognise that a business needs to have an appropriate level of governance over its budget. However, we need to ensure that the framework Network Rail operates within, supports its drive to become more efficient and deliver improved value for money.

Efficiency considerations

1.38 If Network Rail is not allowed any budgetary flexibility a number of risks, outlined below, could arise:

(a) Work banks would be more uncertain with adverse impacts on supply chain sustainability. In addition, short notice changes to work programmes would be likely to drive inefficiencies because of the likelihood of wasting resources that have already been allocated, or having to procure resources at premium rates.

(b) Procurement decisions driven by short term budgetary considerations could result in inefficient decisions. For example, the use of fixed price contracts to minimise risk instead of seeking the best value.

(c) Wariness of committing to larger projects, because of the risk of losing funding if work is delayed beyond year-end, might lead to loss of scale economies and less efficient use of resources (including network access).

(d) Inevitably in a complex industry like the railway, some projects will be delayed. Once this happens, without budgetary flexibility, there will be broad knock-on impacts, as other projects will need to be cancelled to free money for delayed projects, leading to further knock-on effects in future years and ultimately the sort of work bank instability that leads to inefficiency and a downward spiral of cost escalation and further deferrals.

(e) In order to meet outputs, short-term interventions may need to be made to sustain performance (e.g. to counter weather impacts). These are typically lower value operating cost schemes. Removing the ability to make these interventions would tie the hands of asset managers to respond to changing conditions.

(f) When a project is going wrong, the pressure of losing budget has the potential to drive the wrong behaviours, for example continuing with work regardless. This has the potential of causing a greater loss for the railway due to over runs and incomplete works.

(g) Opportunities might be missed, for example:

- technology solutions to problems (which might require proportionately more operating expenditure in the short term but lower expenditure in the future); and

- 'renewal plus'[19] options. This might entail proportionately more capital expenditure in the short term but lower expenditure in the future, or boost value for money outcomes. For example, replacing a worn out crossover with a higher capacity configuration.

(h) Network Rail might inefficiently prioritise its activities in response to a cost shock and might then need to resort to short term and potentially inefficient cost cutting measures.

(i) Network Rail might plan activities that are not be needed in a particular year, but have been chosen largely because they can be completed before the end of the year; and it may spend surplus cash because otherwise it would be lost at the end of the year.

(j) There might be inefficient stockpiling of materials ahead of year end cut-offs.

1.39 Network Rail has assumed that flexibility will be allowed in its strategic business planning for CP6.

Financial risk management considerations

1.40 It is also important that Network Rail should be able to effectively manage business risks associated with unexpected cost and income variances. Examples of 'cost shocks' include:

- high impact low probability events such as extreme weather incidents; and

[19] This means an asset renewal where the opportunity is taken to improve, rather than just replace the existing arrangements. It is therefore a hybrid renewal/enhancement. A renewal plus scheme might include improved infrastructure, system operation capabilities, or a combination of both. The expression 'enhanced renewal' is sometimes used and it has the same meaning as renewal plus.

- Schedule 8 (service disruption) payment spikes[20].

1.41 Appropriate levels of budgetary flexibility should allow Network Rail to efficiently prioritise its activities in such cases and avoid the need for it to resort to short term and potentially inefficient cost cutting measures.

1.42 We consider the management of financial risk further in chapter 3.

Governance and transparency considerations

1.43 We consider that, in light of the factors outlined above, an appropriate amount of budgetary flexibility will be necessary to allow Network Rail to deliver its outputs efficiently in CP6. Several respondents to our earlier consultations said that Network Rail should retain sufficient budgetary flexibility for the reasons outlined above.

1.44 However, Network Rail will need to ensure that an effective financial governance regime is in place so that flexibility cannot simply become a buffer against inefficient management. In this context, Network Rail's performance at forecasting and controlling expenditure requirements will need to be improved for CP6. We are developing our approach to efficiency and financial performance assessment to hold Network Rail to account in this respect and to promote transparency at both business wide and route-levels (see associated document 4 in Annex A).

1.45 Any rules on budget flexibility are also likely to be subject to governance provisions in the framework agreement between Network Rail and DfT.

Route-level considerations

1.46 An appropriate level of financial flexibility (to move money between years and expenditure categories) will also be needed at route-level. Although not directly subject to the type of restrictions referred to in paragraph 1.31, the arrangements applicable to routes will need to be consistent with whatever overall financial flexibility regime is in place for Network Rail.

1.47 In exceptional circumstances Network Rail should be able to move funding between routes. For example, an enhancement project decision might have a significant impact on the, operating, support, maintenance and renewals (OSMR) profiles of more than one route. Transfers of this type would be subject to the change control arrangements that we will outline in our separate working paper on the overall framework for PR18, which we will publish shortly.

Draft determination

[20] For example, Network Rail has said that the snow conditions in early March 2018 led to Schedule 8 costs of around £40m.

1.48 We are engaged in ongoing discussions on the question of budgetary flexibility with DfT, Transport Scotland, HM Treasury and Network Rail. Once the governments' positions have been finalised, we will take them into account, together with views expressed by Network Rail, in our draft determination.

Inflation – indexation of access charges and payment rates in other mechanisms where we set the method of indexation

1.49 We expect to present our PR18 determination in real (constant 2017-18) and cash prices.

1.50 Access charges for CP6 will initially be set in real (constant 2017-18) prices and then be indexed to reflect changes in general inflation. However, network grants will not be indexed.

1.51 In our update letter we discussed how, given the non-indexation of network grants, we could nonetheless present all revenues in real prices (as well as cash prices) for consistent illustration purposes.

1.52 In CP5, Network Rail's access charges, and payment rates in other mechanisms where we set the method of indexation, have been indexed using the RPI measure of inflation. However, for CP6 we are considering whether they could be indexed by the CPI measure of inflation.

1.53 In our first consultation we:

- noted that the Johnson Review[21] recommended regulators move away from RPI as a measure of inflation because of its shortcomings; but
- expressed an emerging view that we should continue to use RPI because, although we recognised CPI was a technically more robust measure, there were two other relevant issues:
  - rail passenger fares are presently RPI linked; and
  - Network Rail still has RPI-linked debt.

1.54 There were mixed views from respondents to our first consultation with some favouring the retention of RPI, others favouring CPI, and one suggesting a transition plan.

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[21] https://www.statisticsauthority.gov.uk/archive/reports---correspondence/current-reviews/uk-consumer-price-statistics---a-review.pdf

1.55 The factors we now consider most relevant to our decision on the inflation indexation measure for access charges, and payment rates in other mechanisms where we set the method of indexation[22], are:

- the growing consensus of the technical benefits of CPI over RPI (i.e. CPI is more robust) and the likelihood that economic regulators will move to the use of CPI over time[23]; and
- the new funding structure for Network Rail in CP6, in particular the exclusion of new borrowing by Network Rail and the separate funding of existing debt liabilities by DfT, so Network Rail is no longer exposed to movements in RPI on its index-linked debt.

1.56 The shortcomings of the RPI measure were recently referred to in:

- the Governor of the Bank of England's evidence to the House of Lords Select Committee on Economic Affairs[24]; and
- the Treasury Committee report on the autumn 2017 budget[25].

1.57 If we did decide to switch from the use of RPI to CPI for indexation, there should be a limited direct impact on Network Rail. This is because:

(a) Our input price assumption will be adjusted by the difference between our forecast of RPI and CPI as shown in the table below. For example, if CPI were forecast to be one percentage point lower than RPI, our assumption would be that the incremental input price component of overall inflation for Network Rail would commensurately be one percentage point higher.

(b) Network Rail's total revenue requirement will be set to equal our forecast of cash expenditure in each year (including the effect of input price inflation). This means that there would be a compensating movement in network grants to offset the change in charge income (as illustrated in Table 1.1).

[22] These include station charges, Schedule 4 and Schedule 8 payments.

[23] For example, in its final methodology for the 2019 price review for water and waste water service providers in England & Wales, Ofwat said that it is transitioning to the consumer price index (CPIH) for customers' bills and indexation of the regulatory capital value (RCV). https://www.ofwat.gov.uk/wp-content/uploads/2017/12/Final-methodology-1.pdf

[24] http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/economic-affairs-committee/governor-of-the-bank-of-england-2017/oral/77776.html

[25] https://publications.parliament.uk/pa/cm201719/cmselect/cmtreasy/600/60011.htm#_idTextAnchor070

Table 1.1 - Example of inflation indexation effect on revenue requirement[26]

Scenario	Baseline (year 0) revenue (2017-18 prices)	Incremental input price inflation assumption	Revenue requirement (2017-18 prices)	Forecast revenue in year 1 (cash prices)
RPI (assume 3%)	100	1%[27]	101	104 (RPI indexed)
CPI (assume 2%)	100	2%[28]	102	104 (CPI indexed)

1.58 This means that Network Rail should be able to manage the risks associated with a switch to CPI, including those associated with RPI terms in its contractual obligations. However, there are two points to note:

(a) A switch to CPI would result in a relatively higher increase for access charges at the start of CP6 (we estimate around 2% of the charge). However, there should be relatively lower indexation increases during CP6, as this effect unwinds over the control period. It should therefore be broadly neutral for Network Rail and train operators.

In practice, this would only affect variable track access charges, because fixed track access charges are considered together with network grant levels.

(b) If the differential between RPI and CPI were to change significantly from the level we assume in our final determination (current estimate is around one percentage point) the amount of money received by Network Rail (and paid by operators) using RPI indexation could be different to the money received if a CPI approach was used.

1.59 Taking into account the current position on the factors outlined above, we are now minded to switch to a CPI measure of inflation for the indexation of access charges and payment rates in other mechanisms where we set the method of indexation.

1.60 If we decide to move to a CPI measure, we will also need to decide whether to use CPI or CPIH. We note that Ofwat is transitioning to the consumer price index (CPIH) for customers' bills and indexation of the regulatory capital value (RCV) for water undertakers.

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[26] This is a simplified example covering a one year period which ignores the effect of compounding.

[27] This is 1% in addition to the RPI forecast of 3%, i.e. the forecast underlying inflation on Network Rail's cost base is 4% (1% + 3%).

[28] This is 2% in addition to the CPI forecast of 2%, i.e. the forecast underlying inflation on Network Rail's cost base is 4% (2% + 2%).

1.61 CPIH, which includes a measure of owner-occupiers' housing costs, has been the measure of inflation preferred by the Office for National Statistics since March 2017. However, we presently consider that CPI is likely to be a more appropriate measure than CPIH for the indexation of access charges, and payment rates in other mechanisms where we set the method of indexation, in particular because:

- it is the measure of general inflation currently targeted by the Bank of England; and
- there is greater availability of CPI forecasts.

1.62 We also note that the differential between CPI and CPIH over the last ten years has been relatively small, with CPI having been, on average, 0.18 percentage points higher than CPIH [29].

1.63 We have included an impact assessment for our proposal to move to a CPI measure of inflation for indexation in Annex B.

Indexation of RAB balance

1.64 We are also minded to switch to CPI for the indexation of Network Rail's RAB balance as that is consistent with the policy proposed for the indexation of track access charges and payment rates in other mechanisms where we set the method of indexation.

Cross border enhancements

1.65 In our first consultation, we noted that the economic benefits from enhancement expenditure in one location could arise in another and we referred to the Carstairs junction project as an illustrative example. We expressed a view that, in principle, the costs and benefits associated with enhancement projects should be aligned but commented that there might be practical difficulties in achieving this.

1.66 We asked Europe Economics to consider this issue for us and to suggest possible approaches at a high level. We have reviewed their report (see associated document 5 in Annex A) and outlined some of the important considerations in Annex D.

1.67 However, the use of the pipeline approach for some enhancement decisions adopted by the governments for CP6 means this issue may no longer be directly relevant for the PR18 financial framework, as the governments will be much more involved in enhancement funding decisions, which should mean that they will decide between themselves the balance of funding for cross border enhancements.

[29] https://www.ons.gov.uk/economy/inflationandpriceindices/bulletins/consumerpriceinflation/latest

Proposals on financial issues

RAB values for CP6

RAB values

1.68 Network Rail's regulatory asset base (RAB) is a value that represents historical investment in Network Rail's business. The value of Network Rail's RAB for the whole of Great Britain stated in its regulatory financial statements at 31 March 2017 was £61.8bn.

1.69 As noted in our update letter, although Network Rail's RAB will not be used in the calculation of the revenue requirements for CP6, we will maintain a RAB value for each route (except the FNPO) and values for England & Wales and Scotland to:

- provide a metric for valuing railway assets;
- enhance understanding of the long-term financing of the network;
- facilitate comparability with other regulated network businesses; and
- support the valuation of assets for disposal or transfer purposes.

1.70 We propose to use the RAB balances included in Statement 2a of Network Rail's regulatory financial statements[30], as the basis for the opening RAB value, for each route in CP6. These values are reported in accordance with the Regulatory Accounting Guidelines. We will however, need to forecast values for 31 March 2019 as these will not be available at the time of our PR18 final determination.

1.71 We will then adjust each route's RAB each year to reflect:

- indexation by general inflation;
- the addition of actual capital expenditure on renewals and enhancements;
- the deduction of enhancement grants; and
- the deduction of renewals allowances[31].

1.72 We also expect to establish a RAB value for the SO because it has assets. There would be a proportionate deduction to the route RAB values to accommodate this.

[30] https://cdn.networkrail.co.uk/wp-content/uploads/2017/07/network-rail-regulatory-financial-statements-2017.pdf

[31] In CP5 we deducted an amortisation value based on Network Rail's long-run average renewals expenditure. In CP6 we propose to deduct the renewals expenditure assumptions used in our revenue requirement calculations.

1.73 We propose to continue adding enhancements expenditure to the RAB and we will deduct enhancement grants from the RAB. As noted in paragraph 1.17, the governments propose to fully fund enhancements through project grants in CP6[32].

1.74 This approach would be transparent as the two separate transactions would be shown gross (the capital expenditure on enhancements and the funding) and it would align most closely with the factors noted in paragraph 1.69. Network Rail will need to consider how this would be presented in its statutory accounts.

1.75 Network Rail will still be required to report its expenditure on enhancements during CP6 in its regulatory financial statements under the regulatory accounting guidelines (RAGs).

1.76 We propose to continue our policy of not amortising enhancements. This reflects the view noted in paragraph 4.4 of our first consultation that enhancement projects give rise to infrastructure that is relatively permanent and brings long-term economic benefits.

RAB roll forward incentive and spend to save mechanisms

1.77 To incentivise Network Rail to make savings on capital expenditure where possible during CP5 and to efficiently share risk, we adjust the expenditure added to the RAB balance so that Network Rail benefits from an underspend by 25% and bears 25% of the cost of an overspend. This is termed the RAB roll forward incentive and further information is provided about it in chapter 6 of our first consultation. We take into account the effect of any rescheduling of activity so that Network Rail does not retain/bear the financial impact of the rescheduling. Given reclassification, we do not think this mechanism is necessary in CP6 but it is useful to continue using it to maintain the process of rolling forward the RAB. This is because if Network Rail, or a part of it, were at some point to be privately financed, this type of incentive/risk sharing mechanism would be necessary.

1.78 We also included a spend to save incentive for Network Rail in CP5. This involved adjustments to the RAB roll forward incentive referred to in the preceding paragraph to ensure that Network Rail was just as motivated to make spending decisions with ongoing savings benefits at the end of CP5 as at the start.

1.79 Respondents to our first consultation thought the spend to save mechanism was useful. However, as it is not consistent with how Network Rail will be funded in CP6, we propose to discontinue it, but retain it for use if Network Rail, or a part of it, were at some point to be privately financed or its funding structure changed.

[32] Therefore we expect the net change in the RAB for enhancements in CP6 to be zero.

Other RAB adjustments:

1.80 There are two other issues we need to consider with respect to possible RAB adjustments:

(a) any grant payments by DfT to Network Rail to pay down existing debt liabilities; and

(b) significant asset disposals.

1.81 We propose that grant payments by DfT to pay down existing debt liabilities should not entail a RAB adjustment. This approach would be consistent with maintaining a RAB balance for the purposes set out in paragraph 1.69.

1.82 Our proposed position on RAB adjustments in respect of asset disposals is set out below.

Asset disposals

1.83 As noted in paragraph 4.41 of our first consultation, our treatment of asset disposals by Network Rail in the normal course of business has to date been:

- to consider net disposal proceeds to be other single till income (OSTI); and
- not to adjust the RAB, even if the investment relating to the asset concerned was considered to have been included in the RAB.

1.84 We also noted that we would consider whether this approach is still appropriate for PR18.

1.85 Given the potential materiality of the disposal of non-core assets following the report from Sir Peter Hendy to the Secretary of State for Transport in November 2015 on the re-planning of Network Rail's Investment Programme, we also said that we would consider our approach for these disposals and in particular:

- whether we should deduct the proceeds from the RAB given the materiality of these disposals; and
- how the disposals should be treated in our calculation of financial performance.

1.86 Network Rail’s revenue requirement for CP6 will be affected by any forecast income from asset disposals that are included in our OSTI forecasts (under the single till approach) but, as noted in paragraph 1.69, RAB values will not be used in the calculation of revenue requirements.

1.87 Network Rail's reported income from property sales in 2016-17 was £55m. The routes' strategic business plans set out how they will work with Network Rail's central property team (which has also produced a strategic plan) in respect of property disposals during CP6.

Possible approaches to RAB adjustments

1.88 Drawing upon views expressed by stakeholders including Network Rail and a report for us by Europe Economics (see associated document 5 in Annex A), we think there are a number of possible options for RAB adjustments for asset disposals in CP6 and we have outlined these below.

1.89 The options we have identified, especially with respect to property disposals, are

(a) No RAB adjustment.

(b) Deduction of actual net sale proceeds. In theory, actual sales proceeds should represent an efficient market valuation and be transparent/easily understood. This option is consistent with the broad concept that an economically regulated network is indifferent to receiving £1 in cash or a £1 addition to its RAB.

(c) Deduction of an amount from an independent expert valuation. Possible difficulties with this approach include a lack of suitable benchmarks for the valuer.

(d) Deduction of the property book value in the accounting records. One concern with this approach is that the depreciated value might not be a good representation of the economic value of the asset.

(e) Deduction of the present value of future income from the asset. Issues with this approach include the subjectivity around income levels/discount rates to use in calculations and the relative complexity/lack of transparency and the increased regulatory burden.

(f) Deduction of the replacement cost of the asset less depreciation. Network Rail holds information on modern equivalent asset replacement values. However, use of these values in this way might overstate the value of the assets disposed of, as these values are higher than the RAB.

1.90 In assessing these options, it is relevant to take into account the basis on which the asset values were originally added to the RAB. However, it is also relevant to note that:

- individual asset values are not identifiable within Network Rail's total RAB;
- the RAB includes non-capital expenditure related items that were added to it in CP3. So, it does not just reflect the cost of infrastructure assets; and

- the initial allocation of RAB values to routes was based on long run renewals forecasts.

1.91 We also need to consider whether the same adjustment should apply to all asset disposals, or different treatments should apply to:

- property versus other asset disposals;
- business as usual versus material, one-off disposals; and
- core versus non-core assets[33].

1.92 Europe economics looked at the treatment in other regulated sectors. However, they did not consider there were are any directly relevant treatments that had been published by other organisations, given the funding structure for Network Rail in CP6.

Network Rail's position

1.93 Network Rail considers that we should continue to not adjust the RAB for non-core asset disposals. It has expressed a preference for any RAB adjustments relating to core asset disposals to be based on replacement costs, scaled to the value of the RAB. This is a version of the adjustment noted at paragraph 1.89(f). Network Rail thinks that scaling adjustments to the value of the RAB would address the overstatement risk identified. Network Rail acknowledges that this approach might not accurately reflect historic investment levels across routes.

1.94 Network Rail considers that any RAB adjustment treatment should be the same for any core asset disposals and that it should only apply to disposals with a value greater than £100m.

Our minded to position

1.95 Having considered all of the information above, our minded to proposal is that:

(a) a common RAB adjustment policy should apply to all asset disposals (core and non-core) by Network Rail in CP6, subject to the possibility of:

- a de minimis level in respect of individual assets which we could refer to in the RAGs; and
- bespoke treatment where we think there are exceptional circumstances[34].

[33] Core assets are those used in the operation of the railway network.

[34] An example of bespoke treatment might be the disposal of assets by Network Rail to Transport for Wales as part of the process of devolving responsibility for the core valley lines. In this case we have referred to a depreciated replacement value as a starting point for ascertaining a value for the assets concerned because of the inter-governmental nature of the process.

This approach would mean that assets which no longer formed part of the business would not be included in the RAB, which is the most appropriate approach for the purposes outlined in paragraph 1.69.

(b) RAB deductions should be valued as an amount equal to the actual sales proceeds because of the objectivity/transparency associated with this approach.

(c) Adjustments should be applied to the RAB for the route in which the asset is located (and to Network Rail's England & Wales, and Scotland RAB values).

1.96 Transfers of assets between routes could be recorded using the scaled replacement cost basis proposed by Network Rail because no sales proceeds value would be available and the total RAB value for the business would not change.

1.97 RAB adjustments for asset disposals would be included in Network Rail's annual regulatory financial statements produced under the RAGs.

1.98 Forecast disposal proceeds will continue to be treated as OSTI in our determination of revenue requirements.

Efficiency and financial performance assessment

1.99 As noted above, it will be important for Network Rail to account for the use of net asset disposal proceeds in CP6. Transparency will be required on any impact of disposals on:

- outputs and financial performance; and
- OSMR budgets for assets disposed of (noting that these costs might have been reflected in the net OSTI income associated with the asset).

1.100 We will consider these aspects in developing our efficiency and financial performance assessment regime for CP6.

WACC value

1.101 As noted in paragraph 33 of our update letter we will determine a notional real vanilla weighted average cost of capital (WACC) for Network Rail and include it in our draft determination for CP6. Although the WACC value will not be used in our revenue requirement calculations, we will use it to show what the revenue requirement would be under a WACC approach. It will also be used to:

- calculate the cost of capital for facility charges payable by third parties who have promoted enhancements financed by the governments through Network Rail[35]; and
- provide a potential benchmark discount rate for investment projects (and other) decisions by Network Rail in CP6.

1.102 Because we refer to a real notional cost of capital, we will need to consider the impact of any switch from RPI to CPI indexation on the calculation.

Other financial issues

1.103 We referred to a number of other financial issues in our first consultation and where relevant we set out our minded to positions for these below.

Industry costs and business rates

1.104 In our first consultation on the financial framework, we raised the issue of how we should treat a variance in Network Rail's expenditure on industry costs and rates, between our forecast and the outturn cost, as some of these costs are not controllable by Network Rail.

1.105 In other words, if there is a variance should Network Rail's future funding increase or decrease (depending on whether the actual cost is higher or lower than we assumed) and how should we treat the costs in our assessment of financial performance.

1.106 However, it is now clear that the funding from DfT and Transport Scotland is fixed for CP6. Therefore, whether our assumption for these costs is fixed or we adjust future funding by logging up the variance to the opex memorandum account, is no longer relevant for CP6 as there will be no change to the money provided by DfT or Transport Scotland. However, we may reintroduce an opex memorandum account in future, if circumstances change.

1.107 Therefore, in CP6, there will be no explicit mechanism for logging-up items such as these. Network Rail will need to manage the expenditure risks for these items as is the case for other costs.

1.108 It is still important that we forecast these costs as accurately as possible and that we reflect how controllable they are in our assessment of financial performance, which we will confirm in our draft determination.

[35] For example, Transport for London pays a facility charge to Network Rail in respect of infrastructure associated with Crossrail (although in this particular case, only the cost of debt component of Network Rail's WACC is used in charge calculations).

1.109 In England & Wales, Network Rail's share of British Transport Police costs will be separately grant funded by DfT. The approach for the funding of transport police costs in Scotland is still under discussion with the Scottish government. At this stage, our working assumption is that the costs of policing the rail network in Scotland will be included in our revenue requirement determination.

Electricity for traction

1.110 We do not propose any changes to the treatment of electricity for traction costs in CP6. Network Rail procures electricity for the railway from EDF Energy under a long-term contract and the cost of the electricity used to power trains is then recharged to train operators, increasingly on a metered basis. This is therefore a broadly neutral item for Network Rail.

1.111 Network Rail does use some traction electricity for its own rail vehicles and stations. The cost of this and non-traction electricity used by Network Rail is an operating cost of the route or central function concerned.

Schedule 4 and 8 costs

1.112 Payments under Schedule 4 of track access contracts are paid by Network Rail to train operators to compensate them for planned service disruption caused by Network Rail.

1.113 Schedule 8 payments compensate train operators for unplanned service disruption caused by Network Rail and other train operators. The benchmarked regime with operators is calibrated so that in our calculation of Network Rail's revenue requirements, Network Rail's forecast position is a net zero cost/income apart from freight and charter regimes, where Network Rail is funded to pay for all the cancellations they cause to freight and charter operators. Network Rail will need to manage the risk that it is required to make payments under Schedules 4 and 8 during CP6.

Network Licence and Track access contracts

1.114 We may propose changes to conditions in Network Rail's network licence as part of a wider review of the licence that is underway. In particular, we may propose updates to the debt-to-RAB restrictions contained in Condition 3 (Financial indebtedness). Any proposed changes will be subject to a separate consultation.

1.115 We consider that the following provisions in the track access contracts of franchised train operators should be retained:

(a) Grant dilution provisions.

These provisions allow for the variation of track access charges if, for any reason, Network Rail is not due to receive expected levels of network grant from the governments. We will need to reconsider these when we have full information on the form of grant arrangements that will exist for CP6.

(b) Re-opener provisions (see chapter 3 - Financial risk management).

Third party funding/financing[36]

1.116 In its strategic business plans for PR18, Network Rail draws an important distinction between:

- third party financing of network development; and
- third party funding.

1.117 Third party financing usually entails Network Rail repaying an investor's capital together with a return. In the case of third party funding, whilst the funder might derive economic benefits from its participation, there is generally no repayment by Network Rail.

1.118 In their strategic plans, the geographical routes have explained recent developments in relation to third party funding possibilities including, for example, the appointment of business development managers.

1.119 We are supporting the development of third party initiatives by continuing our review of the investment framework (including the role of the risk fee funds) and we have recently published guidance to interested parties on the regulatory requirements associated with investment in the railway[37].

Consultation questions

[36] Third party in this context means a party other than Network Rail or a funding government.

[37] http://orr.gov.uk/rail/investing-in-the-rail-network

- Do you think our proposed changes to the presentation of OSTI and charge income categories will improve transparency?
- What are your views on budgetary flexibility for Network Rail in CP6?
- What are your views on our minded to proposal for CP6 to switch from RPI to CPI for the indexation of access charges and payment rates in other mechanisms where we set the method of indexation?

  Have we identified all of the relevant impacts?
- What are your views on our minded to proposals for RAB adjustments and asset disposals?
- Do you have any other comments on our minded to proposals for the financial framework for PR18?

2. Calculating route revenue requirements

2.1 A core part of PR18 is the process for determining Network Rail's revenue requirements for CP6 at route-level and for England & Wales and Scotland. This chapter explains:

- the process for calculating route-level revenue requirements and the revenue requirements for England & Wales and Scotland;
- the presentation of information in our draft and final determination; and
- our approach to other matters that affect the calculation of route revenue requirements.

Process for calculating route-level revenue requirements

2.2 We are using a single-till 'building block' approach to determine Network Rail's revenue requirement. This approach sums Network Rail's expected efficient expenditure for OSMR activities then deducts expected OSTI. The expected expenditure/income values used in our modelling, and their time profiling, reflect our review of Network Rail's strategic business plans for CP6. A diagram of the building block approach is included in Annex F.

2.3 Under our approach to calculating revenue requirements, all OSMR (and any headroom funding reserved to manage financial risk – see chapter 3) is ultimately attributable to a route, where appropriate through recharges or allocations of central and route support costs.

2.4 We will use real (constant 2017-18) prices in our calculations and we will explain how these have been arrived at in the context of our proposal to use a CPI approach to index track access charges and payment rates in other mechanisms where we set the method of indexation (see chapter 1). We will, determine the route revenue requirements in both cash and real (constant 2017-18) prices.

Structural changes to the presentation of the revenue requirements since PR13

2.5 We have developed our approach for PR18 in a number of ways to reflect structural changes to Network Rail's organisation and funding. Our policies on the SO and the FNPO were set out in our January 2018 overall framework publication and we explain below how they have affected our financial modelling for:

- the determination of a regulatory settlement for the SO;
- the creation of the FNPO route; and
- changes in the way Network Rail presents its central and route support services.

2.6 There will be revenue requirement settlements for the:

(a) eight geographical routes;

(b) SO; and

(c) FNPO.

2.7 In addition to calculating revenue requirements for the geographical routes, SO and FNPO, we will also calculate revenue requirements for England & Wales, Scotland, and Great Britain as a whole.

Freight and National Passenger Operator and System Operator

2.8 The calculation of the FNPO and SO revenue requirements will differ from that for the geographic routes.

System operator

2.9 Our development of the overall framework for PR18 means we will be placing greater emphasis on our regulation of the SO. This includes giving the SO its own revenue requirement settlement within our PR18 determination.

2.10 We will use the SO's forecast expenditure to calculate a revenue requirement for it. The SO provides its services to the geographical routes and FNPO, and accordingly its expenditure will be recharged to them and be included in the building block calculation of their respective revenue requirements. To avoid double counting, we will not sum the SO revenue requirement with the geographical routes' revenue requirements when calculating the revenue requirements for England & Wales and Scotland.

2.11 The SO will have debt and RAB balances to reflect it has assets.

Freight and National Passenger Operator

2.12 The FNPO is a new route Network Rail established in 2016, designed to provide an interface between Network Rail and those operators whose interests cut across multiple geographic routes (primarily CrossCountry, Caledonian Sleeper, freight and charter train operators).

2.13 Although the FNPO incurs its own support and operations expenditure, this is relatively small compared to the expenditure in the geographical routes, and it does not directly incur expenditure operating infrastructure assets. Instead, the FNPO will be charged a share of each geographical route's expenditure[38], to reflect the costs attributable to FNPO usage. These recharges will be included in the building block calculation of the revenue requirement for the FNPO.

2.14 We are reviewing Network Rail's methodology for allocating costs to the FNPO to understand the results of the new approach, and its impacts on different types of services and funders, before taking a decision on the allocation to include in our determination. In this regard, we are considering whether so-called 'non-avoidable'[39] costs should be included in recharges to the FNPO.

2.15 The FNPO will not have debt and RAB balances because it does not have significant assets (all of which are reflected in the RAB values of the geographical routes and the SO).

Treatment of central and route support costs

2.16 Network Rail has a number of central and route support services (some of which may be regionally based) whose expenditure is recharged to the geographical routes, the FNPO and the SO (and ultimately from the SO to the geographical routes and FNPO). This is consistent with our premise for PR18 that all OSMR funding/expenditure can be directly or indirectly attributed to the routes.

2.17 We are reviewing Network Rail's methodology for allocating costs between the central and route support services, SO, FNPO and geographical routes. If we do not think this is a reasonable and transparent recharge methodology, we will adjust it for use in our draft determination.

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[38] This is because it is the geographical routes that directly incur expenditure on operating infrastructure assets.

[39] Non-avoidable costs mean those costs that would not be avoided in the long-run if freight services stopped using the network. Network Rail refers to these as "minimal network geographic route costs", in its SBP.

England & Wales and Scotland revenue requirements

2.18 The activities of the SO and FNPO cover the whole of Great Britain, so we will also need to show how their revenue requirements are attributable to England & Wales and Scotland for the purposes of:

- the comparison of total revenue requirements to SoFAs referred to in paragraph 1.13; and
- the setting of track access charges.

2.19 As noted in paragraph 2.10, an appropriate share of the SO's expenditure will be recharged to the Scotland route, so no further adjustment is required for our calculation of the total revenue requirement attributable to Scotland.

2.20 However, we will need to share the FNPO's revenue requirement between England & Wales on the one hand, and Scotland on the other hand by:

(a) reattributing the amounts recharged by the geographical routes to the FNPO (see paragraph 2.13) to England & Wales and to Scotland; and

(b) allocating a share of the FNPO's own support and operations expenditure, plus its share of SO costs to:

- England and Wales; and
- Scotland.

2.21 This means there will be two revenue requirement figures relating to Scotland:

(a) the revenue requirement for the Scotland route; and

(b) a total revenue requirement being the sum of:

- the revenue requirement for the Scotland route (see subparagraph 2.21(a));
- the amount recharged by the Scotland route to the FNPO (see paragraph 2.20(a)); and
- the share of the FNPO's own support and operations expenditure, and recharged SO costs, attributable to freight operations in Scotland (see paragraph 2.20(b)).

2.22 The calculations flows described above are illustrated in figure 2.1 with accompanying notes below. Note that:

- the figures shown are for illustration purposes only and do not represent actual expenditure forecasts; and
- a single period is illustrated.

Figure 2.1 – Illustration of revenue requirement calculations

Calculation of revenue requirements for geographical routes, FNPO and SO

		GB	FNPO	Scotland	Anglia	South East	LNE & EM	LNW	Wessex	Western	Wales
1	FNPO's own support and operations costs	8	8								
2	System operator costs	96	8	11	11	11	11	11	11	11	11
3	Geographical route OSMR	800		100	100	100	100	100	100	100	100
4	FNPO recharge		160	-20	-20	-20	-20	-20	-20	-20	-20
5	**Gross revenue requirement**	**904**	**176**	**91**	**91**	**91**	**91**	**91**	**91**	**91**	**91**
6	Other single till income	-40		-5	-5	-5	-5	-5	-5	-5	-5
7	**Net revenue requirement**	**864**	**176**	**86**	**86**	**86**	**86**	**86**	**86**	**86**	**86**

Calculation of total revenue requirements for England & Wales and Scotland

		GB	E&W	Scotland
8	Geographical routes net revenue requirements	688	602	86
9	Recharges to FNPO reattributed to England & Wales and Scotland	160	140	20
10	FNPO cost allocations (including FNPO share of SO costs)	16*	14	2
11	**Net revenue requirement**	**864**	**756**	**108**

*This is the sum of the values in rows 1 and 2 for the FNPO

Notes on Figure 2.1

Calculation of revenue requirements for geographical routes, FNPO and SO

Row 1 shows the FNPO's own support and operations expenditure for the whole of Great Britain.

Row 2 shows total SO expenditure and its recharge to the geographical routes and FNPO.

Row 3 shows OSMR expenditure for each geographical route and the total for Great Britain.

Row 4 shows the recharge of some costs by the geographical routes to the FNPO.

Row 5 shows gross revenue requirements.

Row 6 shows other single till income.

Row 7 shows net revenue requirements.

Calculation of total revenue requirements for England & Wales and Scotland

Row 8 shows the net revenue requirements for geographic routes (including SO recharges) for England & Wales, Scotland, and Great Britain.

Row 9 shows amounts recharged by the geographical routes to the FNPO being reattributed to England & Wales and Scotland (with a total for Great Britain).

Row 10 shows the FNPO's own support and operations expenditure, together with its share of SO costs, being allocated to England & Wales and Scotland (with a total for Great Britain).

Row 11 shows net revenue requirement totals for England & Wales, Scotland, and Great Britain.

2.23 Figure 2.2 shows how we expect to present a geographical route's revenue requirement in our draft determination.

Figure 2.2 – Presentation of geographical route revenue requirements

£m in 2017/18 prices	2019-20	2020-21	2021-22	2022-23	2023-24	CP6
Operations, support and maintenance costs (including recharges of central and route support services)	x	x	x	x	x	x
Traction electricity, industry costs and business rates	x	x	x	x	x	x
Schedule 4 & 8 costs	x	x	x	x	x	x
Renewals costs	x	x	x	x	x	x
Recharge of FNPO costs	x	x	x	x	x	x
Recharge of System Operator costs	x	x	x	x	x	x
Route controlled headroom funding (if applicable)	x	x	x	x	x	x
Contribution to centrally controlled headroom funding (if applicable)	x	x	x	x	x	x
Gross revenue requirement	**x**	**x**	**x**	**x**	**x**	**x**
Other single till income	(x)	(x)	(x)	(x)	(x)	(x)
Net revenue requirement	**x**	**x**	**x**	**x**	**x**	**x**
Recovered by:						
Variable track access charges	x	x	x	x	x	x
Fixed track access charges	x	x	x	x	x	x
Network grant	x	x	x	x	x	x

2.24 As noted in paragraph 2.27 below we will, for information only, additionally present a calculation of revenue requirements under a WACC approach (as if Network Rail were financed by a mix of equity and debt capital).

Other matters

Allocating corporation tax to routes

2.25 In CP6 Network Rail's corporation tax liabilities for Great Britain will be funded directly by DfT, so they are outside the scope of our revenue requirements calculation. However, to be transparent we will show the share of corporation tax costs for each route.

2.26 To do this, we need to allocate costs that are calculated at a Great Britain level[40], to the routes, by:

- calculating corporation tax on a Great Britain-wide basis;
- calculating corporation tax at a route-level using high-level assumptions to allocate tax balances; and
- proportionally scaling up (or down) route-level corporation tax balances to reconcile to the Great Britain total - this is because, as Network Rail's corporation tax liabilities are calculated for Great Britain as a whole, there will be a difference between the total of the route calculations and the total for Great Britain.

WACC basis

2.27 We will, for information purposes only, present a calculation of revenue requirements under a WACC approach (as if Network Rail were financed by a mix of equity and debt capital).

Our PR18 financial model

2.28 We will use a spreadsheet model to carry out the revenue requirement calculations referred to in this chapter. Our model will be independently audited to provide assurance on its functionality.

2.29 To promote transparency we propose to publish a copy of our model with our draft determination.

Consultation questions

- Do you have any views on how we are proposing to calculate SO, route-level and England & Wales and Scotland revenue requirements for CP6, i.e. is it clear enough?
- Are there ways we could make the presentation of financial information for our PR18 determination more transparent?

[40] This is because Network Rail is one company and taxed accordingly at the Great Britain level.

3. Financial risk management

Introduction

3.1 DfT has not included funding specifically to cover financial risks in CP6 in its SoFA. It considers that this would not be appropriate because Network Rail is an arm's length public sector body. Transport Scotland has not yet decided its position on this point.

3.2 However, because Network Rail, like any other company, faces the risk that actual income and expenditure levels could be different from those forecast[41], the assumptions in our determination will take account of financial risk. This is important because Network Rail needs to develop a workbank that is deliverable after taking account of supply chain issues and our view of efficiency and financial risk.

Financial risks in CP6

3.3 In its SBP, Network Rail refers to a number of risk drivers that might mean that its cost and income levels vary from the forecasts in its plans. The mix of risk factors for CP6 will be different from CP5. For example, Network Rail will be exposed to some general inflation risk in CP6 because its network grant income will not be indexed. On the other hand, it should be less exposed to risks associated with interest rates, BTP costs[42] and corporation tax liabilities.

3.4 Some of these risks are controllable by Network Rail such as the organisation of maintenance work. Others are less controllable, such as the impact of macro-economic events and severe weather. The management of these risks is also affected by the risk sharing relationships Network Rail has with key supply chain partners and the planning and stability of its work banks.

3.5 The tools available to Network Rail to manage financial risk will also be different in CP6. In particular, it will not be able to borrow money for OSMR activities, so it will have to manage these activities within the constraints of the funding levels set out in the DfT and Transport for Scotland SoFAs.

[41] Although any liabilities are ultimately underwritten by the UK Government, Network Rail still has to manage business financial risks efficiently.

[42] The approach for the funding of transport police costs in Scotland is still under discussion with the Scottish government. At this stage, our working assumption is that the costs of policing the rail network in Scotland will be included in our revenue requirement determination. Therefore, Network Rail may be exposed to the risk of these costs being different to the assumptions in our determination.

3.6 In CP5, Network Rail has mainly dealt with higher than forecast levels of expenditure by deferring renewals activity. This has been disruptive and has had significant impacts on the supply chain, efficiency and the deliverability of required outputs. To avoid this happening in CP6 Network Rail needs to exercise tight financial control and in PR18, we are assessing Network Rail's plans to deliver efficiency and manage risk effectively.

Financial risks associated with operations, support, maintenance and renewals and income

3.7 The main financial risks for Network Rail and the routes in respect of OSMR activities and income are that:

- planned activities can cost more than forecast (for example as a result of new asset condition information);
- more activities have to be carried out than were planned (scope risk), or there are a higher proportion of expensive activities (mix risk);
- high impact/low probability cost shocks occur (such as extreme weather damage);
- income levels are lower than forecast (in particular from lower levels of OSTI); and
- high levels of payments have to be made under Schedule 4 and 8 provisions.

Financial risks associated with enhancements

3.8 Most enhancement activities in CP6 will be grant funded under a pipeline approach, meaning that the associated project cost risks will be managed separately from the financial risks associated with OSMR activities and income. Therefore, we do not directly address the financial risks associated with enhancements in this document. However, enhancements will have an indirect effect on Network Rail's OSMR risk profile. This is because, although the funding Network Rail will receive for enhancements should include funding for the effect on OSMR, Network Rail will still need to adjust its business plan to deliver these projects and the requirements set out in PR18. For example, if an enhancement goes ahead it may mean that a renewals project is no longer needed, or that supply chain resourcing is affected.

Inflation risk

3.9 As noted in paragraph 3.3, Network Rail will be exposed to some risk in CP6 that actual levels of general inflation will be higher or lower than forecast levels, because its network grant income will not be indexed.

3.10 If, following this consultation, we decide that in CP6 access charges, and payment rates in other mechanisms where we set the method of indexation, should be indexed by CPI in instead of RPI (see chapter 1 and Annex B), we will explain in our draft determination the impact on financial risk management for Network Rail[43].

Route strategic plans

3.11 A significant portion of each geographical route's budget is spent with central and route support services:

- Infrastructure Projects (IP) – Network Rail's regionally based project delivery business, especially in respect of renewals schemes; and
- Route Services (RS), for example for nationally procured vehicle fleets.

3.12 A key premise of our route-level approach for CP6 is that all of the expenditure for OSMR activities is allocated to the routes, in the determination of their revenue requirements. This is because there is no regulatory settlement for non-route costs (i.e. central and route support services[44]), even though a significant proportion of Network Rail's expenditure will be 'spent' by them on central and route support services.

3.13 These arrangements mean that economies of scale and advantageous contractual arrangements can be pursued. The geographical routes have worked in partnership with regional IP and RS teams in developing their strategic plans and expenditure forecasts. However, the geographical routes are not directly responsible for managing expenditure risks in IP and RS even though they affect their own risk levels. It will be important to have visibility of the impact of IP/RS cost variances on the financial performance of geographical routes, and this will be particularly relevant for Scotland in the context of the separate determination provisions for that route.

3.14 In its strategic plan for CP6, each route has set out forecast expenditure levels for OSMR activities. These forecasts have been prepared on a P50 basis, that is to say that the route considers there is a 50% chance that it can deliver its planned OSMR outputs for that level of expenditure or lower, taking into account planned efficiencies as well as forecast headwinds and tailwinds. To help inform the analysis of risk, Network Rail has also provided a range for the route-level income and expenditure upside and downside risks.

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[43] As we explain in chapter 1, we are proposing that Network Rail's access charges should be indexed by CPI instead of RPI. However, there should be a limited direct impact on Network Rail (see paragraphs 1.57 and 1.58).

[44] Information on Network Rail's organisation structure is available on its website: https://www.networkrail.co.uk/who-we-are/about-us/

Network Rail's proposed approach to financial risk management in CP6

Background

3.15 Network Rail proposes to use a group portfolio fund (GPF) approach to manage most financial risks in CP6[45]. Under this approach, a portion of each route's budget (c£2.6bn in total) for CP6, split into opex and capex components, would be committed to the GPF. This would mean that the funding would not at that stage, be committed to particular network investment[46].

3.16 Each route would retain control of some of this money (c£660m in total for CP6 at a 'route' level), with the remainder (c£1.9bn) held corporately at a 'portfolio level', but still allocated across routes in our determination.

3.17 Network Rail considers that by including the route-level GPF funds in the determination it can provide confidence at a P60[47] level and by including the portfolio level funds and 'pooling' risk, the confidence would be at a P80 level across the business as a whole. Network Rail would operate the portfolio fund by allocating the funds amongst routes as risks (or investment opportunities) materialised.

3.18 Network Rail proposes to profile more GPF funding to the later years of CP6 to reflect the greater degree of planning uncertainty associated with them. It is also proposing to have a reasonably prudent policy for releasing GPF funds for network investment each year, if they are not needed to fund risks that have materialised, or may materialise in the future.

3.19 GPF funds for Scotland would be ring-fenced to reflect the separate determination provisions for Scotland.

Governance

3.20 Network Rail has said that the route and portfolio level funds would each be subject to different governance frameworks in relation to their release for:

(a) the management of financial risks that have materialised (i.e. to pay for them); and

(b) network investment.

[45] Network Rail proposes to manage some risks by purchasing insurance from commercial companies.

[46] This proposed approach is reflected in the forecast expenditure totals set out in routes' current strategic (February 2018) plans for PR18.

[47] This means there is a 60% chance that Network Rail will deliver its outputs for this level of expenditure or lower.

3.21 Network Rail proposes that each route would be able to decide how to use the GPF funds under its own control, subject to Network Rail's governance rules and business planning framework for CP6.

3.22 Network Rail proposes that access to corporately held portfolio level funding should be governed by its executive committee under its corporate business planning processes.

Our consideration of financial risk management issues

3.23 Network Rail will not be able to raise funding during the control period in excess of the amounts available in the governments SoFAs. Furthermore, as outlined in chapter 1, it may be subject to restrictions on:

- spending money in different years than originally agreed; and
- switching expenditure between operating (resource) and capital expenditure.

3.24 We need to consider how Network Rail can manage financial risk (the risk that expenditure on activities is higher than expected) in this situation.

3.25 Network Rail needs an effective approach to financial risk management because short notice/forced cancellations of activities are likely to:

- be inefficient; and
- have adverse effects on supply chain relationships.

3.26 Ideally, the approach should:

- obtain maximum value from the money provided by the governments in the SoFAs;
- efficiently deal with cost shocks;
- remain responsive to the best interests of rail and freight service users;
- not encourage inefficiency by acting as a buffer against inefficient activities[48]; and
- support appropriate risk sharing arrangements with third party investment partners.

3.27 Arrangements for the Scotland route would need to be ring-fenced, to the extent that is consistent with the separate funding arrangements and determination provisions for Scotland.

[48] We are developing our approach to efficiency and financial performance assessment to hold Network Rail to account and to promote transparency (see associated document 4 in Annex A).

3.28 In responses to our earlier consultations, several respondents said that Network Rail should be allowed adequate funding for risk in CP6. Two respondents considered that financial risk management from the centre should be allowed where appropriate, and one considered that a central reserve could help to reduce the need for financial transfers between routes.

Possible approaches to financial risk management

3.29 Network Rail will not have access to the equity reserves, credit facilities, and regulatory uncertainty mechanisms that are available to other regulated infrastructure businesses. There are therefore three broad approaches available for the management of financial risk by Network Rail in CP6:

(a) reservation of ‘headroom’ funding;

(b) full allocation of funding to routes with a requirement for them to include ‘cancellable’ activities in plans; and

(c) a hybrid of approaches (a) and (b).

3.30 Each of these approaches might need to be associated with changes to outputs, if expenditure is forecast to exceed the capacity of the chosen risk management approach.

Reservation of headroom funding

3.31 This approach involves the reservation of ‘headroom’ funding to cover financial risk that, to the extent that risks do not materialise, can be released for network investment schemes.

3.32 Network Rail has proposed the use of GPF arrangements (outlined above) to achieve this. The GPF would include:

- some headroom funding under the control of routes; and
- a centrally controlled fund component to manage bigger financial risk factors.

3.33 It would be important for decision processes under this approach to be transparent and well-reasoned. For example, if a route decided to use some reserve funding under its control to carry out additional renewals, it would need to:

- explain how it had taken account of any likely future requirements for risk funding; and
- explain the actions taken in its financial reporting.

3.34 Network Rail considers that:

- a GPF approach could be governed under its corporate business planning process, which would incorporate transparent reporting;
- routes could use funds under their control to deal with higher than forecast expenditure but would have to make a case to Network Rail's Executive if they wanted to:
  - release GPF funding they control for investment; or
  - access centrally held GPF funds to meet exceptional costs;
- a GPF approach should result in all CP6 funding being effectively used during CP6, either for investment or to deal with higher than expected efficient expenditure requirements; and
- there could be 'competitive bidding' by routes for the funding of investment projects, if centrally held GPF funds became available.

3.35 Under a reservation of headroom funding approach, it would still be open to routes to manage some financial risk by incorporating cancellable activities into their plans (over planning), where they considered this could be done efficiently.

Full allocation of funding to routes with cancellable activities

3.36 Under this approach, all available cash funding would be under route control and there would be no central or route-level reserves of headroom funding. Routes would be required to include activities in their plans that could be cancelled in the event that financial risk materialised:

- within the route; or
- elsewhere in the business, if the higher expenditure forecasts could not be handled locally.

3.37 The criteria for the activities concerned would be that they could be cancelled:

- at relatively short notice; and
- with limited impacts on performance and stakeholders.

3.38 This approach would, by nature, be a more reactive one and could carry a greater risk of introducing inefficiencies and have adverse effects on supply chain relationships.

Hybrid approach

3.39 A hybrid of the two approaches discussed above could also be considered to try to achieve the benefits of both approaches, whilst minimising the potential disadvantages. Under a hybrid approach, some headroom funding would be reserved at the centre and at routes, and some cancellable activities would be included in plans, but in each case at a relatively lower level.

Interaction with budgetary flexibility

3.40 There are important links between the approach to financial risk management for CP6 and the budgetary flexibility issues we address in chapter 1. For example, financial risks could materialise in a given year, even if longer run aggregate expenditure was in line with original forecasts. Our approach will need to take account of any budgetary flexibility restrictions.

3.41 In its SBP, Network Rail has assumed that budgetary flexibility will be allowed in CP6 and it has:

- designed its proposed GPF approach to reflect greater uncertainty associated with the later years of the control period; and
- allocated GPF funds between resource and capital expenditure categories.

Governance principles

3.42 It is important that Network Rail's approach to financial risk management does not undermine the integrity of route settlements and the benefits they are expected to bring.

3.43 Therefore, any approach will need to reflect the change control arrangements being developed with Network Rail under our overall framework project for PR18. We are consulting on these arrangements in a separate working paper on the overall framework for PR18 ('Managing change to the PR18 settlements'), which will be published shortly. The change control arrangements, whilst providing assurance on transparency and governance, will allow financial risk management mechanisms to work effectively. They will also allow appropriate financial transfers between routes to take place, for example when assets are transferred to optimise operations.

3.44 We consider that, in addition to having direct control of some funding, route directors should be closely involved in discussion of:

- any proposed use of centrally controlled funds; and
- fund transfers that would affect their route.

3.45 We would expect route directors to consider the views of their stakeholders in this process.

Our current position

3.46 We have commissioned a review of the reasonableness of Network Rail's approach to financial risk management and the assumptions it has used in arriving at expenditure spot rates and risk ranges. We also plan to carry out limited Monte Carlo analysis of our own. This work will inform our decisions on financial risk management.

3.47 In parallel with discussions on budgetary flexibility referred to in chapter 1, we are engaged in ongoing dialogue on the approach to financial risk management for CP6 with DfT, Transport Scotland, HM Treasury and Network Rail.

3.48 We will set out our position on financial risk management in our PR18 draft determination, having carefully considered the views of stakeholders.

Re-opener provisions

3.49 After considering responses to our first financial framework consultation, we are minded to retain the re-opener provisions[49] currently included in track access contracts that provide for a re-opener in two scenarios:

(a) A material change in the circumstances of Network Rail or in relevant financial markets.

Under this provision we would consider whether there were compelling reasons to initiate an access charges review, having regard to our duties under section 4 of the Railways Act 1993 (General duties of the Secretary of State and the Regulator)[50]. This re-opener applies to events in England & Wales and Scotland.

(b) If expenditure in Scotland is forecast to be more than 15% higher than our determination over a forward-looking three year period.

This provision applies to Scotland only.

3.50 These provisions remain an important mechanism that allow us to work with the governments, Network Rail and industry stakeholders to change the terms of our determination of track access charges if material unforeseen circumstances arose during CP6.

3.51 We will also refer to the potential use of re-opener provisions in our separate working paper on the overall framework for PR18 (see paragraph 3.43).

[49] A re-opener is a formal process to vary the terms of our regulatory determination using mechanisms that allow changes to the revenue requirement that Network Rail can recover through access charges.

[50] https://www.legislation.gov.uk/ukpga/1993/43/section/4

Consultation questions

- Do you think the risk management approaches referred to in this chapter could:
  - allow Network Rail's routes to efficiently manage risks and exploit opportunities?
  - be transparent?
  - help to preserve the integrity of route-level financial settlements?
  - comply with any government restrictions on budgetary flexibility and other government budgeting rules?
- What do you think of the reservation of 'headroom' funding approach, the approach that fully allocates funding to routes and the hybrid approach?
- Do you consider that Network Rail's proposal for a group portfolio fund is a necessary feature of risk management by Network Rail in CP6 at both a route and business wide level?
- Do you agree that we should retain the current re-opener provisions in track access contracts?

4. Next steps and current timetable

Responding to this consultation

4.1 This consultation closes on 24 April 2018. Please submit your responses, in electronic form, to our PR18 inbox: pr18@orr.gsi.gov.uk. You may find it useful to use this pro forma:

http://orr.gov.uk/__data/assets/word_doc/0017/27332/second-consultation-on-the-pr18-financial-framework-proforma-march-2018.docx

4.2 We plan to publish all responses to this consultation on our website. Accordingly, when sending documents to us, we would prefer that you send your correspondence to us in Microsoft Word format or Open Document Format. This allows us to apply web standards to content on our website. If you do email us a PDF document, where possible please:

- create it from an electronic word processed file rather than sending us a scanned copy of your response; and
- ensure that the PDF's security method is set to "no security" in the document properties.

4.3 Should you wish any information that you provide, including personal data, to be treated as confidential, please be aware that this may be subject to publication, or release to other parties or to disclosure, in accordance with the access to information regimes. These regimes are primarily the Freedom of Information Act 2000 (FOIA), the Data Protection Act 1998 (DPA) and the Environmental Information Regulations (2004). Under the FOIA, there is a statutory code of practice with which public authorities must comply and which deals, amongst other things, with obligations of confidence.

4.4 In view of this, if you are seeking confidentiality for information you are providing, please explain why. If we receive a request for disclosure of the information, we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on ORR.

4.5 If you are seeking to make a response in confidence, we would also be grateful if you would annex any confidential information, or provide a non-confidential summary, so that we can publish the non-confidential aspects of your response.

4.6 In the section below, we set out the current timetable for the remainder of PR18.

Current PR18 timetable

- June 2018 – ORR draft determination published for consultation.
- July 2018 – ORR consultation on approach to implementation drafting (changes to access contracts and licence conditions if necessary).
- October 2018 – ORR final determination published.
- December 2018 – ORR issues review notices setting out changes to access contracts and the network licence.
- Governments issue network grant documentation (if applicable).
- March 2019 – Network Rail delivery plans.
- April 2019 – CP6 commences.

Annex A – Associated documents

(1) ORR - Consultation on the financial framework for PR18

http://orr.gov.uk/consultations/open-consultations/consultation-on-the-financial-framework-for-pr18

(2) ORR - Update on the financial framework for PR18

http://orr.gov.uk/rail/consultations/pr18-consultations/financial-framework-for-pr18

(3) Network Rail strategic business plans

https://www.networkrail.co.uk/who-we-are/publications-resources/strategic-business-plan-2019-2024/

(4) ORR - Consultation on our approach for assessing Network Rail's efficiency and wider financial performance in CP6

http://orr.gov.uk/rail/consultations/open-consultations/our-approach-for-assessing-network-rails-efficiency-and-wider-financial-performance-in-control-period-6

(5) Europe Economics report for ORR on financial policy issues – 31 March 2017
http://orr.gov.uk/__data/assets/pdf_file/0016/27331/europe-economics-financial-policy-issues-at-pr18-advice-to-the-orr-2017-03-31.pdf

Annex B – Impact assessment of proposed change from RPI to CPI

Background

Access charge price lists and other payment rates in mechanisms[51] where we set the method of indexation, are set in real prices – constant 2017-18 prices for Control Period 6 (CP6). These are then indexed according to actual measured inflation (currently, inflation as measured by the Retail Prices Index, or RPI), according to a process set out in the model track access contracts, to determine the actual rates applicable in each year of the control period.

This impact assessment considers the impact on Network Rail and operators of switching to the Consumer Prices Index (CPI) as the measure of inflation in CP6 for indexing access charges and payment rates in other mechanisms where we set the method of indexation. It needs to be read in conjunction with the section in chapter 1 on indexation.

Since January 2005, the annual rate of inflation as measured by the RPI has exceeded that measured by the CPI by an average of 0.6 percentage points and RPI has been higher than CPI in 142 out of 158 months[52]. The Office for Budget Responsibility forecasts that annual RPI inflation will exceed CPI inflation by values ranging from 0.9 percentage points to 1.2 percentage points over the next four years[53].

Assessment framework

The 2018 Periodic Review (PR18) aims, amongst other things, to promote a network that is efficient, better used, reliable and available. The calibration of charges and incentives (including accurate indexation) helps deliver these outcomes by reflecting the costs or impacts of the relevant activity as closely as possible, which thereby ensures that Network Rail and operators are incentivised to act in an economically efficient manner.

Because of the role that indexation thus plays in promoting PR18 outcomes, this impact assessment considers how the proposed switch to CPI would perform with respect to PR18 objectives when compared to the current approach of using RPI indexation.

Additionally, we assess the impacts of switching from RPI to CPI against more general criteria, which follow from our statutory objectives. Of these general criteria, we have had particular regard to the following considerations:

[51] These include station charges, Schedule 4 and Schedule 8 payments.

[52] https://www.ons.gov.uk/economy/inflationandpriceindices/timeseries/dra2/mm23

[53] http://obr.uk/faq/where-can-i-find-your-latest-forecasts/

(a) The need to limit transitional impacts (i.e. the impact of change).

(b) The need to limit transaction costs (i.e. the cost of operating the new option).

The full range of objectives and criteria that we considered can be found in the assessment framework available on our website:

http://orr.gov.uk/__data/assets/pdf_file/0018/23463/annex_c_assessment_framework.pdf

Problems with RPI

We currently use RPI as the measure of inflation for the indexation of charges and payment rates in other mechanisms where we set the method of indexation.

RPI is now widely discredited as a measure of inflation. The United Kingdom Statistics Authority withdrew its status as a national statistic in 2013, and UK Consumer Price Statistics: A Review (published in January 2015) recommended that "government and regulators should work towards ending the use of the RPI as soon as practicable". Paragraph 1.56 also refers to other comments on the shortcomings of the RPI measure.

The main reason for questioning the use of RPI for indexation is that it has an upward bias[54]. Using a biased inflation measure means that charge and incentive payments do not reflect costs as well as they might, and consequently that the system of charges and incentives does not incentivise economically efficient behaviour.

Options

We have considered the following options.

Option	Description
Option 0: do nothing	Continue to use RPI to index charges and payment rates in other mechanisms where we set the method of indexation.
Option 1	Switch to using the CPI in place of the RPI.

The consumer prices index including owner-occupiers' housing costs (CPIH) is now the Office for National Statistics' (ONS) lead measure of inflation. CPIH is the same as CPI, except that it contains owner-occupiers' housing costs and council tax.

However, as far as we are aware, there are no well-established forecasts of CPIH inflation. We need forecasts of the inflation measure we use for indexation so that we can deflate projected nominal costs to calculate costs in real terms. Also, CPI is the measure of general inflation currently targeted by the Bank of England. These are the main reasons

[54] See references in: UK Consumer Price Statistics: A Review https://www.statisticsauthority.gov.uk/wp-content/uploads/2015/12/images-ukconsumerpricestatisticsarevie_tcm97-44345.pdf

why we presently consider that CPI is likely to be a more appropriate measure than CPIH for the indexation of access charges, and payment rates in other mechanisms where we set the method of indexation, so we will not consider the use of CPIH further in this assessment. However, we recognise that Ofwat are transitioning to CPIH, so we will keep this issue under review.

Assessment of option 1 compared to option 0

Benefits of option 1

A more accurate measure of inflation will better deliver on the PR18 aims of ensuring that the network is efficient, better used, reliable and available, by ensuring that the charges and incentives more accurately reflect the underlying costs and impacts.

Since CPI is a more accurate measure of inflation than RPI, it performs better against all of the relevant PR18 objectives.

Costs of option 1

There may be some transition costs associated with switching to CPI. These may include, for instance, the need for operators to renegotiate contract terms with their counterparties, and changes to billing systems. However, we consider that it is unlikely that these transition costs would be material compared to the costs that would be incurred as a result of other changes to the contracts resulting from PR18.

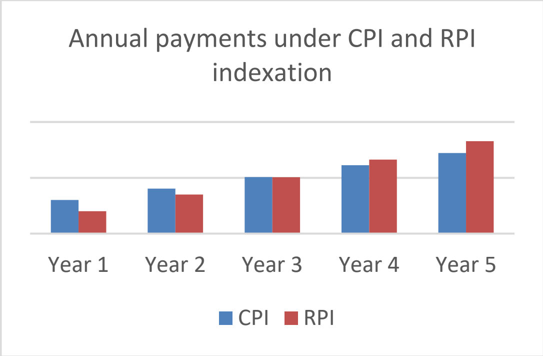
Paragraphs 1.57 and 1.58 explain the financial effect on operators and Network Rail, of a switch from using RPI to CPI to index access charges and payment rates in other mechanisms where we set the method of indexation.

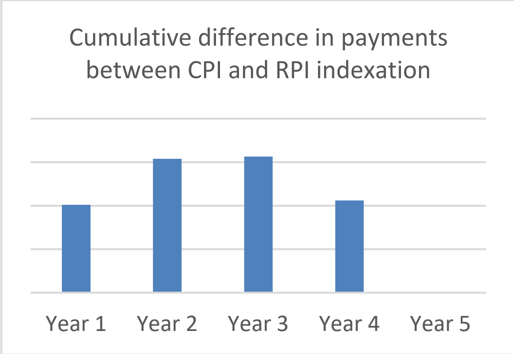
Impact of the switch on charge levels

If charge rates are calculated by first deflating nominal cost estimates for a control period using a forecast inflation rate, and then indexing them using actual measured inflation, then as long as the same inflation measure is used for both purposes, the choice of measure will not materially affect total nominal charge rates across the control period.

However, the profile of payments will change. Payments in the first year of a control period are likely to be higher under CPI than they would have been under RPI, but are then likely to increase at a lower rate in each subsequent year. This is because they are likely to be deflated by a lower rate of inflation and also then indexed at a lower rate.

The following charts, which are based on illustrative data and so only intended to suggest the profile of payments, show the way differences in annual charge payments under CPI may differ when compared to RPI in each year of the control period, and the cumulative difference at each point in the control period.





Recovery of Network Rail's costs

The process of deflating and indexing nominal charges described above is intended to mitigate the risk that outturn general inflation is different to the general inflation forecast used to project nominal costs. This is because the process removes the influence of forecast inflation on nominal payments during the control period and replaces it with actual inflation. This should (all else held equal) mean that Network Rail receives the charge income (in nominal terms) that it needs to cover its costs. In other words, this process separates the influence on Network Rail's costs of general inflation and input price inflation, and aims to insulate Network Rail from the former.

As CPI is a more accurate measure of general inflation than RPI, switching to CPI for indexation should increase the effectiveness of this process in mitigating the risk that Network Rail is exposed to as a result of general inflation.

Cost reflectivity of other contract payment rates

Payments are only due under Schedule 8 if the level of unplanned delays departs from the benchmark. Benchmarks are set so that the expected value of Schedule 8 payments will be zero. Changing the inflation measure used to index these payments will not affect this.

However, the choice of inflation measure will affect the scale of payments that are made if and when performance does depart from the benchmarks. If regulated train fares continue to be indexed by RPI inflation (which is for the governments to decide), then switching to CPI for the indexation of Schedule 8 payment rates may impose some financial risk on operators. However, as the expected net value of receipts and payments will be zero, this is unlikely to be significant.

Schedule 4 access charge supplement (ACS) costs are set in real terms for a control period based on actual costs during a part of the preceding control period. This is in contrast to charges where real rates are calculated by deflating projected nominal costs over the coming control period. Therefore, switching to CPI would mean that nominal payments would be lower in each year of the control period than they would have been using RPI.

Schedule 4 payment rates are set as a percentage of Schedule 8 rates. Therefore, as discussed with reference to Schedule 8, operators may face some financial risk if indexation of Schedule 8 payments is switched to CPI and indexation of regulated train fares is kept at RPI.

Under the Schedule 4 regime, the expectation is that ACS payments will offset Schedule 4 payments. As long as the same inflation measure continues to be used to index ACS costs and Schedule 4 payment rates, switching measures should not change this expectation.

Our proposal

Switching to CPI from RPI for the indexation of access charges, and payment rates in other mechanisms where we set the method of indexation, would improve the accuracy of the incentives placed on Network Rail and operators to act in an economically efficient manner, as it is more statistically robust. This is the principal reason for the proposal to switch to CPI indexation, set out in chapter 1 of this consultation.

Annex C – Summary of responses to our earlier publications on the financial framework for PR18

Responses to first consultation

Building block and route-level approach

A number of stakeholders supported a building block approach to determining the revenue requirement for Network Rail over a five-year CP6 control period. They considered, in particular, that this approach would support a stable charges regime. One respondent considered that an even longer control period would be preferable. Somebody commented that having certainty for a whole control period should allow progress to be made in efficiency and innovation.

Most of those who referred to route-level regulation in their responses were in favour, provided that it actually empowers local stakeholders and is part of a joined up national approach. One stakeholder, however, said that there was a risk of additional bureaucracy and cost and another suggested that Network Rail should update its long-term plans more frequently than at present, to address tensions with local needs. Several parties mentioned the need for effective financial arrangements for the system operator and the freight and national passenger operator under a route-level approach.

Several respondents made the point that sufficient funding should be provided for CP6 in the context of previously deferred asset renewals, but that this needed to be in conjunction with improved financial efficiency from Network Rail. One stakeholder mentioned efficiency improvements in the road transport sector.

Some respondents reminded us that we should keep railway safety and the needs of customers and passengers at the heart of financial policy development.

One group welcomed the reclassification of Network Rail as an arm's length public sector body.

Comments in relation to an early start mechanism were that it could be valid, as long as associated costs were efficient, but that there appeared little financial scope for its use in the run up to PR18.

Enhancements

Most stakeholders who commented on enhancements endorsed the idea of a pipeline approach and there was also support for grant funding of these enhancements, separately from access charge/network grant revenues. However, one respondent felt that enhancements should remain within the periodic review process to allow certainty.

Other points made by respondents were that:

- development of the strategic freight network (SFN) should continue in CP6;
- consequential requirements relating to enhancement decisions should be fully considered, such as the need for new passing loops;
- enhancements commenced in CP5 should be completed;
- adequate attention should be paid to freight projects;
- particular concerns exist around electrification projects, especially in light of environmental factors; and
- there should be public funding for innovation initiatives.

Some stakeholders felt there should be clear funding, governance, and change control arrangements around enhancements to allow ORR to hold Network Rail to account for delivery.

There were differing views on the funding of cross-border enhancement projects. Whist some respondents agreed with the principle that costs and benefits should be aligned, others felt this to be an oversimplification and that all of the case-specific circumstances would need to be taken into account. Two respondents made the point that scheme outputs should be safeguarded in any case, especially in relation to freight operations. One respondent considered that cross border cost/benefit issues could be resolved through variation of access charges, but another felt that national charge rates should continue to apply. Somebody pointed out that for local authorities and local enterprise partnerships, cost/benefit issues could arise in relation to sub-national boundaries.

Two respondents said that there should be a clear strategy to support ‘second tier’ enhancements (such as those undertaken in conjunction with renewals projects). Another highlighted the importance of the supply chain for Network Rail in relation to enhancements.

Financial settlements

A number of stakeholders stated that Network Rail would need to provide good quality historical expenditure data and business plan forecasts to allow a robust overall determination and effective route-level settlements for CP6. There were also respondents asking for more local and disaggregated cost and outputs data to be provided to sub-national authorities and local stakeholders.

In relation to the design of a building block approach, other points made by respondents were that:

- we should consider the impacts of decisions, including the incentive effects, on Network Rail;
- operating/capital expenditure boundaries can create problems which should be addressed;
- additional cost benchmarking approaches should be considered;
- alternatives to the mainstream supply chain should be considered; and
- income from charges determined at a periodic review that is presently classified as OSTI, should instead be included in the net revenue requirement.

With respect to the cost of capital, individual responders made the following points:

- a full WACC/ring-fenced fund approach could help to reduce Network Rail's borrowing requirement;
- adequate borrowing headroom could allow Network Rail to manage enhancement project costs;
- Network Rail should be allowed to make a profit and have a healthy balance sheet to attract investors to the industry;
- amortisation allowances should continue to be based on long-run asset renewal costs; and
- amortisation allowances for Scotland should reflect costs for the Scotland route.

One respondent felt that the current Schedule 4 regime could distort decision making by Network Rail.

Facilitating investment

Several respondents felt that there would need to be an improved offering to attract new investment in the railway during CP6 including:

- policy certainty;
- better information from Network Rail (including disaggregated cost data) to support investment partners including local authorities and local enterprise partnerships;
- a review of the Investment Framework; and
- clarity on the revenue streams associated with investments.

One party felt that Network Rail should take a greater share of scheme financial risks and another commented that better schemes, selected through competition, should have lower financial risk levels. Several respondents commented that there should be better policies and mechanisms for risk sharing, and somebody suggested the possibility of benchmarking scheme outcomes as part of our financial performance assessment. Two respondents said that consideration should be given to making Network Rail's financial performance in relation to third party promoted schemes a scorecard item.

One respondent noted that Network Rail might be able to factor land around its operating premises into investment/development opportunities. Someone suggested that there should be appropriate mechanisms to allow freight operators to participate in investment opportunities, possibly with Network Rail taking a coordinating role.

One respondent pointed out that any changes to the funding structure for Network Rail in CP6 could affect investment possibilities for local authorities and other stakeholders, and somebody commented that constraints on local authority budgets could be a significant factor. Two respondents considered that more government funding could be routed via local authorities and one respondent noted that government funding can be a catalyst for others to invest. Two stakeholders referred to investment alignment with train operator franchises, with one respondent commenting that there should be effective arrangements to address the residual value of assets invested in by train operators at the end of franchise periods.

Inflation and tax

There were mixed views on the inflation index we should use for indexing charges. Two respondents said that we should move to using the CPI index, with one noting that it could be more consistent with the indexation applicable to road freight charges. Three respondents thought that we should keep using RPI, although one of those respondents commented that we should consider a transition to CPI.

One party sought assurance that we had not meant to suggest that saving on PAYE costs should be a driver for outsourcing decisions by Network Rail. Another made the point that Network Rail should be given adequate allowances to meet the tax liabilities it is liable to pay.

Industry costs

One respondent expressed a view that, because Network Rail has no control over costs incurred by the British Transport Police and the Rail Safety and Standards Board, it should be fully reimbursed for these costs. This point was also made by someone else in respect of business rates and independent reporter costs. However, one respondent felt that the existing treatment of industry costs should be retained.

Financial risk management

Two respondents commented that, notwithstanding route-level regulation, Network Rail should be able to manage risks, where appropriate, from the centre and one mentioned the possibility of 'insurance premiums' being collected from routes. Respondents also referred to the possibility of a strategic central reserve, which might reduce the need for intra-route budget transfers.

One respondent considered that Network Rail's debt should be restructured and pointed out that, in the absence of a hedging capability, it could be exposed to significant interest rate risk. That respondent also considered that if fewer enhancement projects were debt funded, Network Rail should nonetheless be allowed adequate borrowing headroom to manage cost risks.

One stakeholder considered expenditure risk modelling to be an important requirement and another said that we should consider possible uncertainty mechanisms for PR18. One person said it would be important for Network Rail to explain the basis for any switch from asset renewal to life extension in response to financial constraints during CP6.

Two respondents referred to the need for Network Rail to have flexibility to move resources between routes during CP6. However, several respondents said that this should not be allowed to undermine the route settlement approach.

In relation to asset disposals by Network Rail in CP6:

- Two stakeholders expressed a view that asset disposals by Network Rail should be approached with caution and one pointed out that disposals in Scotland would be subject to different considerations.
- Some stakeholders said that freight related freeholds were a particular concern and one said that proceeds from freight related asset disposals should be ring-fenced for the support of freight operations.
- Two respondents thought that asset disposals should be taken account of in Network Rail's RAB balance; one considered that RAB adjustments should only apply in respect of 'core' asset disposals; and one felt that all asset disposal proceeds should be deducted from Network Rail's gross revenue requirement as OSTI.

Other points made by stakeholders in the context of financial risk were that:

- Schedule 8 costs could be driven higher by intensive network use; and
- financial surpluses from outperformance should be reinvested in the railway.

Financial performance assessment and incentives

Several respondents expressed a view that there would be little value in setting output requirements in relation to financial performance, although some people did think it would be a good idea. One respondent said that poor performance at route-level should be challenged as early as possible and there was a suggestion that our annual efficiency and financial assessment (AEFA) should be presented primarily at route-level.

One respondent expressed support for the principles we set out in our consultation and somebody said that we should make the assessment regime more straightforward. Several people said that effective 'spend to save' arrangements should be supported and that there could be instances where overspending was warranted.

Three people felt it would be helpful to update efficiency benchmarks for Network Rail as CP6 progressed. Two respondents commented that this should not amount to a relaxation of requirements (in respect of efficiency and outputs) and one person said that there should be no impact on charges. One party commented that the focus should be on controllable costs with adjustments for change in the scope of work programmes.

One respondent made the following points in relation to financial performance assessment:

- financial performance should be considered against a wider outputs backdrop and centre on scorecard outcomes;
- the most relevant comparison baselines are those from updated delivery plans;
- customers should have a primary role in holding Network Rail to account with ORR taking a risk-based approach;
- outperformance should be reflected in route-level incentive arrangements; and
- data requirements and regulatory burden should be minimised (especially duplication at central and route-levels).

Two respondents commented that any link between incentive arrangements and scorecard outcomes should be clear, and related to improved scorecard metrics. One respondent thought that incentive arrangements should cover enhancement projects and another made the point that we should guard against perverse incentives.

Several respondents queried the rational for continuing with the RAB rolling incentive in CP6, and one party did not consider it should be maintained.

Network Rail's licence

One respondent suggested that we should:

- keep the debt to RAB ratio limits;
- retain the existing re-opener provisions; and

- expand the definition of ‘permitted business’.

The only other comment made by one respondent, in relation to the financial conditions in the licence, was that no changes are required.

Responses to update letter

One respondent pointed out that Network Rail’s ongoing programme to dispose of non-core property assets would lead to a reduction in future other single till income and that this could result in increased track access charges.

Three parties said that it was important for Network Rail to retain budgetary flexibility (across years and between operating and capital expenditure) in particular to:

- support output delivery through steady work programmes; and
- mitigate asset renewal deferrals, which could lead to increased costs.

One respondent made the point that whilst budget transfers between routes should be possible, these should be subject to appropriate controls.

Three respondents argued that Network Rail should receive adequate funding for risk and uncertainty in CP6 in order to deal with cost shocks and avoid disruptive re-planning.

Two respondents said that efficiency assumptions included in Network Rail’s business plans and the determination of its revenue requirement need to be credible.

Two respondents said that, given the proposed grant funding approach to enhancements in CP6, there should be assurances that income under Network Rail’s revenue requirement would not be diverted to enhancement projects.

One respondent commented that the concept of ‘renewal plus’ should be encouraged in CP6 and not frustrated by artificial distinctions between renewals and enhancements.

Two respondents said that new sources of investment in the railway should be facilitated with clarity on mechanisms that would allow investors to achieve appropriate returns.

Network Rail’s response

In its response to our update letter, Network Rail made the following points:

- Budgetary flexibility should be retained in CP6.
- It should receive adequate funding for business risks, in particular because it will be unable borrow going forward.

- Improved transparency on business planning and through reporting should avoid the need for undue change controls.
- Clarity should be provided on:
  - funding mechanisms for pipeline enhancement projects (including on ORR's role);
  - costs funded separately from the revenue requirement determination; and
  - the regulatory treatment of asset disposals in CP6.
- The potential impact of pipeline/third party promoted enhancements decisions on other costs and on train performance should be acknowledged.
- Income from charges determined at a periodic review that is presently classified as OSTI, should instead be included in the net revenue requirement.
- Approaches should be identified to provide an appropriate return to risk taking third party investors in the railway, and ORR's involvement through the Investment Framework should be made clear.
- Inflation is a significant risk factor, especially since network grants will not be indexed in CP6 – RPI indexation of track access charges is preferred to CPI as it more closely reflects the effect of inflation on Network Rail.

Annex D – Cross border enhancement considerations

The most significant issues are likely to arise in respect of infrastructure projects that have implications across the border between England & Wales and Scotland because of the wider funding settlements between the UK and Scottish Governments and the separate provisions in our revenue requirement determinations. However, it is also relevant to consider projects whose impacts cross geographical route boundaries, especially with the prospect of closer business links between Network Rail's routes and train operators.

It is relevant to note that, because of the separate determination provisions and funding settlement for Scotland, transfers of budget and, where relevant, network assets cannot be made in the same way as might be possible between geographical routes in England & Wales.

Factors to consider

There are two key factors, which have to date, tended to limit application of the cost/benefit alignment principle:

- A presumption that infrastructure should be paid for out of the settlement for the geographical location in which it is to be situated.
- There will be variances between the revenue requirement we determine for a particular geographical route and the track access charges paid by operators using that route because:
  - route revenue requirements are based on route expenditure requirements; but
  - track access charges are not calculated on a route basis; and
  - track access charges are allocated to geographical routes based on a separate Great Britain wide allocation methodology, i.e. variable charges included in geographical route settlements are not based on route expenditure but an allocation of expenditure in Great Britain.

It is also relevant to note that there can be many kinds of 'benefit' to take into account including:

- improved journey times and/or capacity with associated higher revenues;
- knock-on operating benefits remote from the site of the enhancement;
- secondary economic benefits from improved transport infrastructure;
- environmental and road congestion benefits;
- future maintenance and renewals savings; and

- facilitation of additional enhancements at a later time.

There might also be disbenefits arising from a project as well as the short to medium term disruption caused by enhancement works.

Annex E – Glossary

AEFA	ORR's Annual efficiency and finance assessment of Network Rail.
Building block approach	A term used to describe, in general terms, the approach used by economic regulators to determine revenue requirements for regulated network businesses.
Capex	Capital expenditure.
Constant prices	Financial values all expressed in the price base of a specified year, even if those values are attributable to a range of years and which therefore may need to be inflated or deflated for other purposes.
CP5	The control period for Network Rail, that runs from 1 April 2014 to 31 March 2019 under a settlement resulting from the PR13 process.
CP6	The control period for Network Rail, that is expected to run from 1 April 2019 to 31 March 2024 under a settlement resulting from the PR18 process.
CPI	Consumer Price Index – a measure of changes in the prices of a basket of consumer goods and services.
DfT	The Department for Transport.
Enhancement	Construction or works that improve the capacity, capability or amenity of the rail network, including for the connection of new key infrastructure (such as Crossrail or HS2) to the existing rail network. Enhancements are classed as capex.
Facility charge	A charge set to recover the costs of an enhancement and paid by the promoter of a scheme.
FNPO (route)	Freight and National Passenger Operators route
Gearing	A ratio showing the level of debt financing in a business often expressed as a percentage of total financing (from debt and equity).
GPF	Group portfolio fund – a fund, referred to by Network Rail in its strategic business plans for CP6, that is intended to pay for investments in the railway, but also to allow financial risk to be managed during CP6. Network Rail is proposing

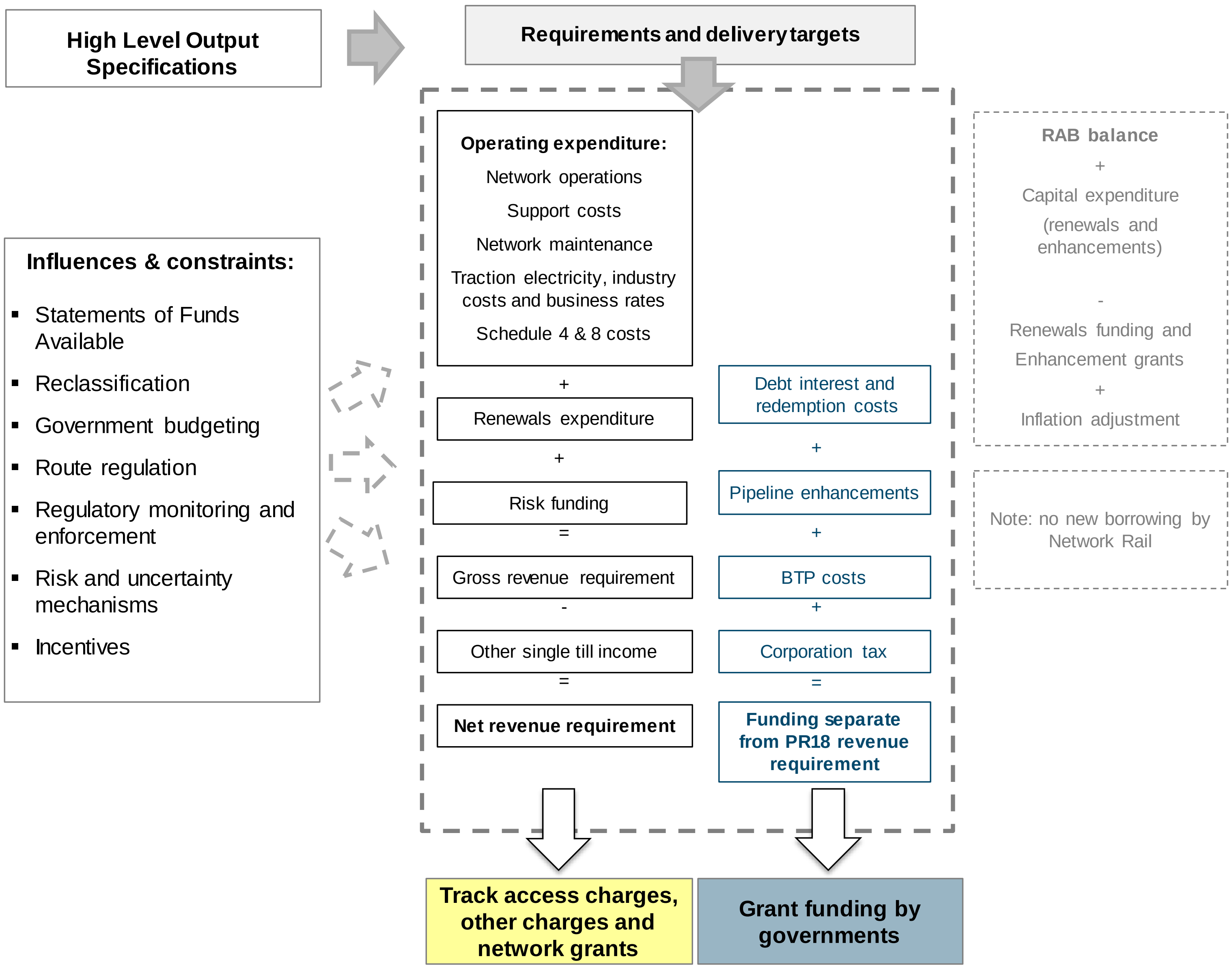
	that each route has direct control of some GPF funding, and contributes an additional amount to a centrally controlled 'portfolio' fund.
Independent reporter	Independent reporters provide us with professional advice on Network Rail's activities. They are appointed by Network Rail with our approval.
Investment framework	A framework under which investments in the railway can be initiated/taken forward during a control period.
Logging up	An approach under which adjustments that need to considered in respect of Network Rail's revenue requirement or RAB have been deferred until our PR18 review. The opex memorandum account (see separate entry) is the primary mechanism for logging-up.
Monte Carlo analysis	A probability simulation technique that can help to understand the effects of risks and uncertainty in financial forecasting.
Opex	Operating expenditure.
Opex Memorandum Account	An account, maintained by Network Rail during CP5, of adjustments expected to be applied by us in the determination of the revenue requirement for CP6.
ORR	Office of Rail and Road – in this document, we say ORR, "we" or "us" depending on the context.
OSTI	Other single till income.
PR13	ORR's last periodic review of Network Rail, which resulted in the determination for CP5.
PR18	ORR's periodic review of Network Rail, which will culminate in a final determination in October 2018.
RAB	Regulatory asset base. A regulatory value representing investment in Network Rail's business.
RAGs	Regulatory accounting guidelines.
Renewal	The replacement, of an asset that has deteriorated to the extent that it can no longer be maintained, but where the replacement does not result in an enhancement. Renewals are classed as capex and expenditure is added to the RAB.

Renewal plus	In this document, an asset renewal where the opportunity is taken to improve, rather than just replace the existing asset. It is therefore a hybrid renewal/enhancement. A renewal plus scheme might include improved infrastructure, system operation capabilities, or a combination of both. The expression 'enhanced renewal' is sometimes used and it has the same meaning as renewal plus.
Route	Any of the eight geographical sub-divisions of the Network Rail business plus the Freight and National Passenger Operators (FNPO) route and, in this document, the System Operator (SO).
RPI	Retail Prices Index – a measure of changes in the prices of a representative sample of retail goods and services.
Single till	A regulatory approach where all of the costs and revenues of a regulated business are considered together, under a single economic settlement. We use this term in relation to Network Rail because we consider its income from network grants, track access charges, and commercial income (for example from property) together when determining its revenue requirements.
SBP	Strategic business plans produced by Network Rail. Each route will also produce a route strategic plan for consideration in the PR18 review.
Schedule 4	The schedule included in track access contracts between Network Rail and train operators that sets out the arrangements for compensation paid to operators when Network Rail takes temporary possession of the network (e.g. for engineering purposes).
Schedule 8	The schedule included in track access contracts between Network Rail and train operators that sets out the arrangements for compensating train operators for unplanned service disruption caused by Network Rail and other train operators.
SO	The System Operator (SO) is the business unit within Network Rail responsible for planning the railway network and controlling access to it by train service providers

	through the allocation of capacity. The system operator also plans extensions to the railway network to ensure that future needs are addressed. The system operator function can be distinguished from 'system operation' which relates to real time operation of the network; this is carried out within the routes. In our first consultation, we called the SO, the National System Operator.
SoFAs	Statements of funds available – set out the public funds that are, or are likely to be, available to secure delivery of the high-level output specifications (HLOSs) by the Department for Transport and Transport Scotland. The HLOSs set out what the governments want the rail industry to deliver during the review period.
WACC	Weighted average cost of capital. We refer to a 'real vanilla' weighted average cost of capital, when talking about the WACC approach. When we are talking about the investment framework, we refer to a pre-tax WACC. The term 'vanilla' reflects, for Network Rail, the separate funding of corporation tax costs referred to in chapter 1 that means that we only have to factor in: (a) a pre-tax cost of debt – i.e. the percentage charge that could be levied by lenders; and (b) a post-tax cost of equity – i.e. the percentage return equity investors might expect to actually receive, weighted according to our notional gearing assumption. The term 'real' indicates that this form of WACC is presented as a lower percentage than a nominal WACC (when inflation is positive) because inflation is not included in the percentage value. The only difference between the 'real vanilla' weighted average cost of capital and the pre-tax WACC is the treatment of corporation tax. For the pre-tax WACC, the post-tax cost of equity is grossed up for corporation tax. This is because in the investment framework, corporation

	tax is not funded separately by the UK Government, so it needs to be included in the charge.

Annex F – CP6 building blocks diagram (updated)



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