Rail Delivery Group

Contractual and Regulatory Reform Workstream

Review of Charges Phase 2b: Assessment of the current charges and incentives regime

May 2015

Rail Delivery Group

Registered office: 2nd Floor, 200 Aldersgate Street, London, EC1A 4HD
020 7841 8000
www.raildeliverygroup.com
Registered in England and Wales No. 08176197

Acknowledgements

The Rail Delivery Group would like to thank all of the industry representatives that participated in the workshops and that provided written comments to support the development of this report

The Rail Delivery Group would also like to thank Andrew Allum, Owen Hazell, and Patrick Breen from L.E.K. Consulting (International) Limited for their facilitation of Phase 2b and development of this report

Table of contents

1 Executive summary

1.1 Purpose

The purpose of this report is to set out the Rail Delivery Group's (RDG's) assessment of how well the current charges and incentives regime for the use of Network Rail's infrastructure ('the regime') delivers the RDG vision for the charges and incentives regime in the long run[1] ('the RDG Vision').

This report presents the findings from Phase 2b of RDG's Review of Charges work programme, which considers how the regime should operate in the future. This report seeks to provide clarity on areas where the industry has shared views and also where there are legitimate differences of views.

The findings presented in this report will inform the next phase of RDG's Review of Charges work programme, which will consider options for a new and / or updated regime.

1.2 Summary of findings

This project has highlighted significant elements of the current regime that work well. RDG is keen to retain these. However, there are also considerable opportunities to improve the regime. We should not lose the opportunity of the industry's early engagement to highlight what are some significant weaknesses.

The findings of this phase of work are explained in the rest of the report. However, there are some key points that cut across all aspects of the regime:

- The industry should have a broader and clearer understanding of the purpose and aim of the regime;
- The industry should be realistic about the limits of what the regime can achieve and how closely it can be aligned with the ideal regime;
- The regime should align with: other parts of the industry's regulatory and contractual framework; public transport policies; and the needs of customers (passenger and freight users);
- The regime needs to provide stability to allow for business planning and industry investments;
- Whilst the industry identified a number of gaps between the RDG Vision and the current regime, there were aspects of the current regime that the industry thought should be retained. For example, marginal wear and tear charges and aspects of the performance regime (e.g., liquidated sums) were considered to be broadly aligned with the RDG Vision; and
- When proposing changes to the regime:
  - Consider which parts of the regime are switched off by other industry arrangements (e.g., franchise agreements) and reflect this in the regime, i.e. do not assume that changes impacts all parties in the same way.

[1] RDG's vision for charges and incentives in the long run is available at: http://www.raildeliverygroup.com/wp-content/uploads/2014/12/RDG-Review-of-Charges-Phase-1-vision-Dec-2014.pdf.

However, we should still recognise that there may be informational benefits of making changes, even if other industry arrangements weaken incentive properties;

- Take into account those parts of the industry that compete with other modes (e.g., road and air); and
- Align any additional charges and incentives with the rest of the regime, i.e. avoid 'bolt-ons' to the regime.

To help inform the focus of the next phase of RDG's Review of Charges, this report also identifies areas of the regime where there are the largest gaps between the ideal regime, as set out in this report, and the current regime. For example, the Capacity Charge, aspects of the Performance Regime (e.g., delay attribution) and aspects of the Possessions Regime (e.g., cost compensation) were considered as priorities for development. Whereas, the Variable Usage Charge and Electric Current for Traction received broad industry support, in their current form.

When RDG's Review of Charges work programme was initiated, it was clear that it should consider the industry's views on long-term charges and incentives arrangements, i.e. over the next 15 years. The next phase of work should consider both the long term 'direction of travel' for the regime, and also those improvements that can be made more quickly, which will help to contribute to the industry's longer-term aims.

1.3 Background

RDG's Contractual and Regulatory Reform workstream is carrying out a review of the charges and incentives regime. This project began in spring 2014 and is expected to be completed by the end of 2015.

Once completed, RDG's review should allow the industry to constructively inform the Office of Rail and Road's ('ORR's') next periodic review process (the 2018 Periodic Review ('PR18')), and future reviews, by presenting the industry's own views on the regime.

By setting out the industry's views before the start of PR18, RDG can provide ORR with information that can help inform ORR's decisions, and potentially allow it to prioritise work in certain areas.

ORR is supportive of RDG's work and considers it to be a positive example of the industry working together.

The RDG Vision was published in December 2014 and was one of the outputs from Phase 1 of RDG's Review of Charges work programme. This report uses the RDG Vision as a starting point for articulating the features of the ideal regime.

1.4 Scope

This report considers the regulated charges and incentives for use of Network Rail's infrastructure (i.e., those that are set as part of ORR's periodic review process). Therefore, this report it is not just focused on the track access charges that are paid by operators to Network Rail, but it also includes Network Grant and incentive mechanisms, such as the Possessions Regime and Volume Incentive.

Whilst many of the findings in this report may be relevant for non-regulated charges and connections charges, this phase of work has not explicitly considered these charges.

1.5 Methodology

The findings in this report have been developed, primarily, through a series of industry workshops, facilitated by L.E.K. Consulting (International) Limited, between January and March 2015. In addition, information has also been gathered through written comments from industry representatives.

Each of the workshops covered a specific area of the regime. The structure of this report largely follows the scope and order of the workshops. The scope of each workshop is set out below:

A. ***Running costs:*** How the regime recovers the costs of supporting, operating, maintaining and renewing the GB rail infrastructure to keep it in its current (or 'as-is') state;

B. ***Customer experience:*** How the regime can improve the end-user experience;

C. ***Possessions:*** How the regime incentivises and / or enables efficient use of planned possessions;

D. ***Performance:*** How the regime measures, incentivises and compensates for improved / poor performance;

E. ***Capacity (existing and new):*** How the regime can support the efficient allocation and use of existing network capacity, and provide signals for, and recover the costs of, creating new capacity; and

F. ***Coherence of the regime and alignment of incentives:*** How each part of the regime 'hangs together' for each type of user and how the regime can align the incentives of passenger operators, freight operators, and Network Rail.

Throughout this phase of work, RDG has sought to answer a number of key questions, namely:

- Building on the RDG Vision, what are the features of an ideal regime?
- What are the main gaps between the ideal regime and the current regime?
- What are the legitimate differences of views, within the industry, on the features and gaps associated with the ideal regime?

In the context of this report a 'feature' is defined as something tangible that the regime does (e.g., whether it should facilitate the efficient use of possessions or align with other industry processes and contractual arrangements). Whereas, a 'gap' is defined as the difference between a feature of the ideal regime and the current regime.

The facilitated workshops were well attended, with 68 individual industry representatives taking part; many attended multiple workshops. In addition, over 130 written comments were received, which provided feedback on workshop issues and draft sections of this report. The information gathered from the facilitated workshops and written comments has been synthesised into this report.

1.6 Features of the ideal regime

A key output of this work has been to set out the features of the ideal regime that build on the RDG Vision. This report identifies the features that the industry agrees on and also where there are legitimate differences of views.

However, it may not be practical to develop a regime that delivers every one of the features of the ideal regime that is set out in this report (i.e., trade-offs or compromises may need to be made). For example, it may not be possible to create a regime that is stable over a long period of time, whilst also being flexible enough to reflect changes in industry / market conditions. Where conflicts between features exist, these should be considered during the next phase of RDG's Review of Charges work programme.

The features of the ideal regime provide a framework against which options for a new and / or updated regime can be developed in the next phase of RDG's work. The features provide additional detail and depth to the RDG Vision.

Some of the features that have been identified are specific to a particular part of the regime (e.g., use of capacity, possessions, or running costs). However, a number of the features are 'overarching' and relate to the regime as a whole. These features are presented separately in this report. The 'overarching features' have been grouped into two categories:

- Those that build directly on the RDG Vision[2] (i.e., they expand upon concepts already present in the RDG Vision); and
- Those that complement the RDG Vision (i.e., they add new concepts that align with the RDG Vision).

Sections 4 to 9 of this report set out the agreed features that describe the ideal regime (i.e., where a consensus was reached during this process), and also the features that did not produce a consensus. A summary of the agreed features of the ideal regime is shown below.

The ideal regime should:

Overarching features (building on RDG Vision)

- Recognise that some rail services compete with other modes in the same market;
- Not prevent competition between operators;
- Provide confidence that the regime will be stable over a long time period;
- Be straightforward, transparent, and readily understandable at the point of use by all parts of the industry and broader stakeholders;
- Reflect the underlying costs they are based on and should be non-arbitrary in nature;
- Facilitate funders' investment in the industry in-line with their transport policies; and

[2] The RDG Vision from Phase 1 is shown in Figure 4.1 on page 25.

- Facilitate investment by third parties in the industry.

Overarching features (complementing the RDG Vision)

- Be clear about the purpose of each element of the regime, and the regime as a whole;
- First do no harm (i.e., be clear about how any changes will improve the current situation for the industry as a whole);
- Take into account the links between the regime and its impacts on end-users;
- Align with other industry processes, policies, and contractual arrangements;
- Be realistic about the limitations of charges and incentives;
- Facilitate all parties within the industry to 'do the right thing' and work together;
- Align any additional charges and incentives with the rest of the regime (i.e., avoid 'bolt-ons' to the regime);
- Support transparent policy decisions that set the balance of funding between end-users and funders / taxpayers;
- Work in both expanding and shrinking markets;
- Maintain an up-to-date and accurate view of cost drivers and end-user needs;
- Facilitate a collaborative approach to the development of charges and incentives;
- Not be overly sensitive to relatively small changes in industry outputs;
- Be sufficiently flexible to support technology improvements and innovation within the industry;
- Facilitate the delivery of industry outputs and aims over both the short and long term;
- Allow each party's individual incentives to work for them and also contribute to whole industry aims; and
- Support operators in the planning and delivery of their businesses.

Running costs

- Support the understanding of the drivers of network costs at a granular level;
- Use evidence for running costs charges and incentives that is based on up-to-date and robust data;
- Ensure operators (passenger and freight) bear at least the efficient costs directly incurred when running a service;
- Enable Network Rail to be able to recover its full running costs;
- Incentivise the industry to minimise whole-life, whole-industry costs; and
- Enable Network Rail's running costs to be attributed / allocated to those in the best position to influence and incentivise industry behaviours.

Customer experience

- Reflect what end-users actually want, rather than what is assumed by industry and funders;
- Facilitate trade-offs between different end-user requirements;
- Facilitate the industry to meet the needs of end-users;
- Incentivise the industry to work together in the best interests of end-users;
- Facilitate the presentation of a coherent face to end-users even if multiple parties are involved;

- Support end-user facing investments (e.g., stations), where there is a net benefit to the industry; and
- Facilitate stations investment across franchise lives.

Possessions

- Compensate operators for the financial impacts of a planned possessions;
- Be a liquidated sums regime, except for long possessions;
- Be financially neutral if possession activity is carried out efficiently;
- Incentivise the industry to minimise the impact of possessions on end-users;
- Facilitate the efficient use of possessions by all parties;
- Incentivise operators to provide Network Rail with the access it requires to deliver engineering works;
- Take account of the financial impact on all industry parties in taking possessions; and
- Be sufficiently flexible to respond to unexpected end-user demand.

Performance

- Be coherent and aligned at every stage from end-users to funders;
- Reflect end-user needs;
- Encourage joint industry working to optimise whole-industry performance;
- Facilitate trade-offs between performance, traffic volumes, and cost;
- Facilitate accurate and efficient attribution of the root causes of delays and cancellations;
- Be the sole remedy;
- Take account of the increased likelihood of delay of running an additional train on the network;
- Be effective at all levels of performance; and
- Be a liquidated sums compensation regime.

Use of capacity

- Facilitate trade-offs between the use of existing capacity and providing additional capacity;
- Not price-off beneficial traffic from the network;
- Provide Network Rail with a net financial benefit from accommodating beneficial traffic on the network;
- Not prevent the efficient use of capacity;
- Facilitate beneficial investments in capacity improvements;
- Reflect the relative importance that end-users place on frequency, journey time and punctuality / reliability; and
- Facilitate joint industry working to optimise use of capacity.

1.7 Gaps between the current regime and ideal regime

In addition to identifying the features of the ideal regime, the workshops also explored the industry’s views on the gaps between the current and ideal regimes.

These gaps are set-out in Section 10 of this report. They are also presented in context, with their associated feature, in Sections 4 to 9 of this report. A summary of the gaps is shown below.

The current regime does not:

Overarching features

- Provide sufficient clarity on its purpose and so it is not well understood by industry, funders and broader stakeholders. In addition, decisions made about the regime during the Periodic Review process are not sufficiently transparent (e.g., what compromises are made and how is the decision reached);
- Enable the delivery of most industry outputs and aims;
- Always incentivise industry parties to work together;
- Provide stability for operators;
- Sufficiently reflect end-user needs. It was first developed during the rail privatisation and has not been adequately updated to take account of changes in end-user needs;
- Support changes away from the current 'as-is' state of infrastructure and is not sufficiently flexible to take account of improvements and innovation; and
- Align well with the wider industry framework.

Running costs

- Enable sufficient industry understanding of Network Rail's cost drivers;
- Have payments and incentive rates that are always underpinned by up-to-date data; and
- Always hold Network Rail, at a minimum, neutral to the cost of running an additional service.

Customer experience

- Fully reflect the needs of end-users; and
- Support the industry in meeting the needs of end-users.

Possessions

- Compensate operators fully, through Schedule 4 payments, for the costs they incur when Network Rail takes a possession;
- Enable the industry to understand the impact of one possession strategy over another, in terms of costs and the impact on end-users. In addition, this impact is not considered at a sufficiently early stage of planning projects; and
- Place sufficient incentives on Network Rail to consider the costs of other industry parties when undertaking possessions.

Performance

- Align with other industry metrics used to measure performance;
- Measure the full impact of delay on a passenger's end-to-end journey (e.g., which may include an interchange), since the performance regime uses the impact of delays and cancellations on specific services to measure lateness, and not on end-user journeys.
- Encourage joint working due to the set-up of delay attribution mechanisms; and
- Enable sufficient industry understanding of the trade-offs between performance, traffic volumes, and costs.

Use of capacity

- Provide sufficient incentives on operators to adjust their services to align with other operators to increase overall path capacity;

- Encourage operators to run new services on the network. The Capacity Charge has impacted the business cases of some additional rail services to the extent that they are not provided; and
- Place sufficient incentives on Network Rail to accommodate additional traffic.

1.8 Elements of the regime to be retained

Whilst the industry identified a number of gaps between the RDG Vision and the current regime, there are many aspects of the current regime that the industry thinks should be retained. Some of these are quite detailed, and no attempt is made to captures those in this report. However, the main, high-level, features of the current regime that the industry thinks should be retained are summarised below.

Further explanation of these aspects is set out in Section 11.

The current regime:

Overarching features

- Does not put the safety of the network at risk; and
- Supports investment in the industry from funders and third parties. Whilst other industry frameworks were considered to act as barriers to investments in the industry, it was agreed that the regime has created an environment that has supported investments by governments and third parties.

Running costs

- Recovers the costs of wear and tear to infrastructure in a way that is understood by the industry;
- Allows Network Rail to recover its running costs; and
- Provides incentives on Network Rail to deliver cost efficiencies.

Customer experience

- Incentivises industry wide performance improvements though a focus across the regime on performance and punctuality.

Possessions

- Operates as a liquidated sums regime for calculating compensation for lost revenue, with bespoke arrangements for larger possessions; and
- Provides reasonable compensation to operators for the loss of revenue associated with possessions.

Performance

- Operates as a liquidated sums regime for calculating compensation payments for unplanned disruption; and
- Includes the Star Model as the core of the Performance Regime.

Use of capacity

- Facilitates growth in freight and passenger services.

1.9 Observations

RDG's work on charges and incentives is a positive example of the industry working together. It is the first attempt by the industry to set out, proactively, its own views on key elements of the regulatory framework, ahead of ORR formally commencing a periodic review. Industry representatives have engaged well in this phase of work.

Throughout this process, there has been a clear ambition to improve the current charges and incentives regime.

As part of this phase of work, the industry highlighted some aspects of the current regime that align strongly with the features of the ideal regime and these features should be retained. Other aspects of the regime may, however, require a significant review / recalibration.

The scope of this report does not include the development of options for a new and / or updated regime. Options will be considered in the next phase of RDG's Review of Charges. However, this section of the report sets out observations about the regime that could help to inform the scope of future work in this area.

The approach taken to the facilitated workshops could be considered to be a 'bottom-up' review, i.e. it was based on an assessment of the current regime. However, in developing the scope of future work, it may be appropriate to also consider a 'top-down' review, i.e. to consider significantly different approaches to the entire regime, so that RDG's conclusions are not restricted to the existing regime.

The next phase of RDG's Review of Charges should not avoid discussions on contentious issues. For example, whilst there are clearly a range of industry views on the way that network capacity could be charged for, and allocated, it is important that the industry continues to address these difficult topics. If it does not, then the conclusions of RDG's review may be too narrowly focused on the existing regime.

To inform the next phase of the work programme, this section highlights the elements of the regime where future work could be focused. However, in carrying out the next phase of work, it will be important to consider whether the regime, as a whole, aligns with the RDG Vision, i.e. whether the industry needs to consider options that are fundamentally different from the current regime to enable the RDG Vision to be delivered.

***Prioritise for development**:* Capacity charge | Possessions regime | Performance regime

Whilst this work highlighted some positive aspects about the Performance and Possessions Regime (e.g., liquidated sums approach), the Capacity Charge was not considered to align well with the RDG Vision. These elements of the regime are linked, through Schedule 8 payment rates and so any review should consider these elements together.

***Improve transparency and information**:* Fixed Track Access Charge | Network Grant

There is a lack of transparency about what FTAC and Network Grant pay for. Additionally, there was recognition that, unless there are significant changes to industry structure, the underlying money flows of FTAC and Network Grant are unlikely to change (i.e. FTAC is likely to remain, ultimately, underwritten by funders, and open access and freight markets are unlikely to be able to bear significant contributions to Network Rail's fixed costs). However, there may be benefits in reviewing how FTAC and Network Grant are attributed / allocated to improve information available to industry decision makers. To support improved transparency of FTAC and Network Grant a better understanding of Network Rail's cost drivers is required.

Potential for development: Volume incentive | REBS

The industry did not consider these incentives to be sufficiently effective. They are not necessarily considered to be a priority for change but should be considered if there are sufficient resources to review them.

Consider as part of other RDG workstreams*:* Freight Specific Charge | Freight Only Line Charge | Coal Spillage Charge | Station Long Term Charge

Freight and passenger operators have suggested that there are aspects of these charges that could be improved. However, these charges cover relatively discreet parts of the regime and account for a small proportion of the regime's overall revenue. Therefore, whilst recognising that individual charges should not be considered in isolation from the rest of the regime, it may be beneficial to work collaboratively with other RDG groups to develop options for these charges. The RDG Freight Group may be best placed to support the review of this group of freight charges. Similarly, the RDG Stations Strategy Group may be used to support a review of the Station Long Term Charge. In doing so, it will be important to maintain a holistic approach to RDG's Review of Charges.

Retain*:* Variable Usage Charge | Electric Current for Traction Charge | Electrification Asset Usage Charge

The industry was broadly supportive of these elements of the current regime, suggesting that these are not priority areas for review. However, if it is considered that there should be significant changes to other elements of the regime the impact on this group of charges will need to be assessed.

Introduce

Options for a new and/or updated regime should not be limited to modifications of existing charges and incentives. Therefore, the next phase of RDG's work may consider new charges and / or incentives to align the regime with the features of the ideal regime. For example, considering how network capacity is funded.

2 Introduction

2.1 Purpose

The purpose of this report is to set out the Rail Delivery Group's (RDG's) assessment of how well the current charges and incentives regime for the use of Network Rail's infrastructure ('the regime') delivers the RDG vision for the charges and incentives regime in the long run[3] ('the RDG Vision').

This report presents the findings from Phase 2b of RDG's Review of Charges work programme, which considers how the regime should operate in the future. This report seeks to provide clarity on areas where the industry has shared views and also where there are legitimate differences of views.

The findings presented in this report will inform the next phase of the RDG's Review of Charges work programme, which will consider options for a new and / or updated regime.

2.2 Background

What is RDG's Review of Charges?

The level and structure of Network Rail's charges and incentives are set as part of the Periodic Review process conducted by The Office of Rail and Road (ORR). In the past, work on determining the appropriate structure of Network Rail's charges and incentives has been squeezed during the Periodic Review processes, due to the volume of work that is required to deliver a price control, and the limited time available.

In its 2013 Periodic Review (PR13) final determination, ORR committed to work with the industry to conduct a review of the structure of charges in the early stages of the Control Period 5 (CP5, which runs from 1 April 2014 to 31 March 2019)[4].

To inform ORR's structure of charges review, the industry, facilitated by RDG, is working together to set out its own views on the appropriate structure of charges and incentives. RDG's Review of Charges is planned to complete by the end of 2015, which is before ORR formally commences its 2018 Periodic Review (PR18). The timing of RDG's Review of Charges should allow the industry to constructively inform ORR's PR18 policy development and potentially help its prioritisation of work for PR18.

In a letter to RDG in December 2014[5], ORR explained that it is "… *essential that [ORR's] review incorporates industry and funders views, including the outputs of RDG's work* …" and, "… *where possible to work in tandem with RDG*". ORR has been supportive of RDG's work and considers it to be "… *a positive example of the industry working together to improve incentives and value for money*". We understand that ORR plans to issue its first consultation on the structure of charges at the end of 2015. RDG hopes that this report will be another useful piece of information to inform that consultation.

[3] RDG's vision for charges and incentives in the long run is available at: http://www.raildeliverygroup.com/wp-content/uploads/2014/12/RDG-Review-of-Charges-Phase-1-vision-Dec-2014.pdf.

[4] Source: Periodic Review 2013, final determination, October 2013, paragraph 16.27

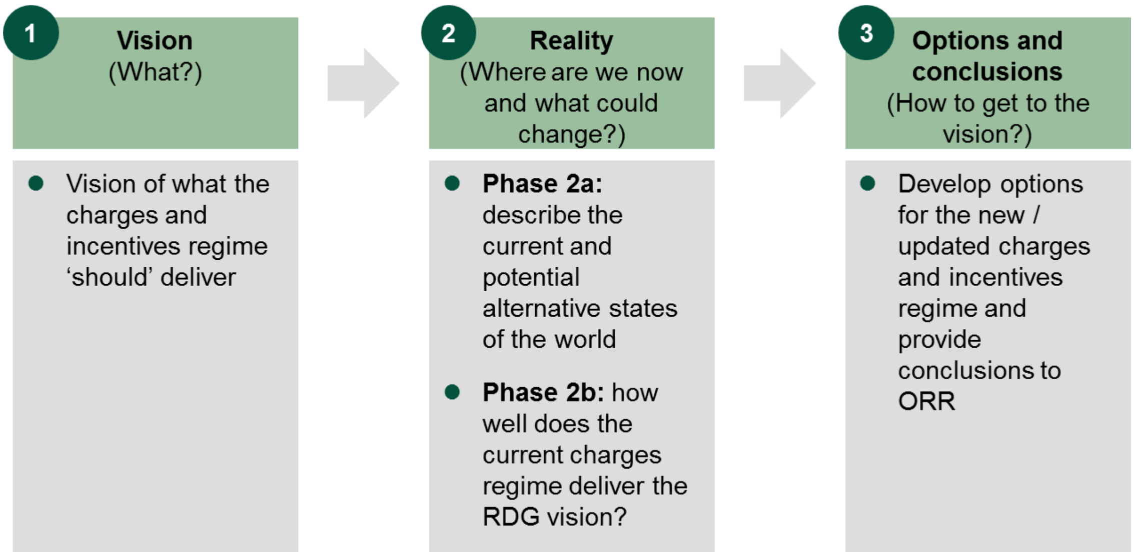
[5] ORR's letter is available at: http://orr.gov.uk/__data/assets/pdf_file/0003/15375/rdg-structure-of-charges-letter-2014-12-05.pdf.

The objectives of RDG's Review of Charges are:

- To understand the strengths and weaknesses of the current charges and incentives regime;
- To define RDG's long term vision for the Network Rail charges and incentives regime, being mindful of the views of funders and other stakeholders – what outcomes the regime 'should' deliver;
- To identify a full range of options for the charges and incentives regime in the long term;
- To recommend to ORR and funders the appropriate long term structure of charges and incentives – how the regime 'should do it';
- To recommend to ORR and funders the appropriate transitional arrangements (including 'pilot' schemes) to the recommended long term structure to mitigate resulting impacts of change and enhance opportunities – how we 'should get there';
- To engage extensively with all levels of the industry, and promote widespread industry understanding and support for RDG recommendations; and
- To recognise the diversity of markets and promote sustainability in the long term.

RDG's Review of Charges will consist of three phases, as shown in Figure 2.1 below. This report covers Phase 2b (How well does the current charges regime deliver the RDG Vision?).

Figure 2.1: Phases of RDG's Review of Charges



Phase 1: The RDG Vision

In December 2014, RDG published its vision for the charges and incentives regime in the long run ('The RDG Vision'). The majority of the work for Phase 1 was completed between April and September 2014 and was the product a number of workshops that synthesised views from a wide range of industry stakeholders.

The RDG Vision articulates what the regime should deliver in the long run and provides the framework against which various options can be assessed later in the review. The RDG Vision presents the shared view of the RDG members of what the regime should achieve in the long run[6]:

- The pre-requisites the regime should abide by (axioms);
- The objectives that the regime should pursue (objectives);
- The fundamental criteria that should be followed when selecting charges and incentive mechanisms (judgement criteria); and
- The industry outputs that the RDG Vision should result in (outputs).

One of the key achievements of Phase 1 was that it brought together different industry stakeholders in a way that was able to develop a vision that all RDG members bought into.

Phase 2a: States of the World

Phase 2a was primarily informed by two industry workshops and several one-to-one meetings with industry representatives. The work was carried out by internal RDG resources, towards the end of 2014.

The aims of the first part of Phase 2 (Phase 2a) were to:

- Describe the main features of the current 'state of the world'[7] in which the charges and incentives regime operates; and
- Agree a set of alternative states of the world, against which we can test options for the charges and incentives regime.

The agreed alternative states will be used in the next phase of RDG's Review of Charges work programme to test options for a new and / or updated regime.

The Phase 2a report is published alongside this report on RDG's website[8].

2.3 Aim of Phase 2b

The aim of Phase 2b is to assess how well the current charges and incentives regime delivers the RDG Vision. To support this aim, Phase 2b has built upon the RDG Vision (Phase 1) and States of the World (Phase 2a) to help develop RDG's assessment.

The key outputs from this assessment are:

- The agreed features of the ideal regime;
- The main gaps between the current regime and ideal regime; and
- The areas of legitimate difference of views, within the industry, on the features and gaps of the ideal regime.

[6] For RDG's Review of Charges, 'long run' means the end of Control period 7 (CP7), which is expected to be 2029, assuming five-year control periods.
[7] A 'State of the World' is the environment that the regime operates within. It represents elements of the GB rail industry that are not part of the regime.
[8] This is available at: http://www.raildeliverygroup.com/what-we-do/our-areas-of-work/reviewofcharges/.

To support these outputs, the key terms of 'feature' and 'gap' have been defined, in the context of this report, as:

- A feature is defined as something tangible that the regime does, (e.g., whether it should facilitate the efficient use of possessions or align with other industry processes and contractual arrangements); and
- A gap is defined as the difference between a feature of the ideal regime and the current regime.

In articulating the ideal regime, the industry recognised that it may not be practical to develop a regime that delivers every one of the features of the ideal regime (i.e., trade-offs or compromises may need to be made). For example, it may not be possible to create a regime that is stable over a long period of time, whilst also being flexible enough to reflect changes in industry / market conditions. Where conflicts between features exist, these should be considered during the next phase of RDG's Review of Charges work programme.

2.4 Scope

This report considers the regulated charges and incentives for use of Network Rail's infrastructure (i.e., those that are set as part of ORR's periodic review process). Therefore, this report it is not just focused on the track access charges that are paid by operators to Network Rail, but it also includes Network Grant and incentives, such as the Possessions Regime and Volume Incentive.

This report builds on the RDG Vision by setting out RDG's view on the features of the ideal regime. It also considers how well the current regime aligns with the agreed features, detailing any gaps between the ideal regime and current regime. However, we have not considered the relative importance of the features of the ideal regime.

Whilst many of the findings in this report may be relevant for non-regulated charges and connections charges, this phase of work has not explicitly considered these charges.

Phase 2b has not considered options for a new and / or updated regime, since these will be considered in the next phase of RDG's Review of Charges work programme.

2.5 Assumptions

This report has primarily assessed how well the regime delivers the RDG Vision in the current 'State of the World' (i.e., in the current environment that the regime operates within). This means that RDG has considered the regime operating in an environment with, for example, the current degree of competition between passenger services and the current approach to regional decision making.

However, where the agreed features of the ideal regime, or the assessment of the gaps within the current regime, may be impacted by a change in the State of the World[7], this was considered during discussions, and is noted in this report.

2.6 Overview of current charges and incentives regime

Access charges are set at levels which ORR determines are sufficient to fund the expenditure that it considered is required for Network Rail to operate, maintain and renew the network, and meet a set of agreed output targets. ORR approves charges for the whole of the control period, normally a five-year period, as part of the periodic review. There is limited scope to make within-control period changes to charges. The current structure of charges for CP5 consists of fixed and variable elements.

The regime also includes financial incentive mechanisms that aim to promote various 'desirable' outcomes for the industry. These include the Schedule 4 Possessions Regime, Schedule 8 Performance Regime, Volume Incentive and Route-level Efficiency Benefit Sharing (REBS) mechanism.

Table 2.1, below, summarises the charges and incentives that are within the scope of this report. It sets out the purpose of each charge and incentive, and the income that Network Rail is expected to receive through each element of the regime. Further information is available in RDG's Charges and Incentives User Guide[9].

Table 2.1: Summary of CP5 charges and incentives

Charge/incentive *CP5 forecast income in 2012-13 prices*[10]	**Purpose**
Variable Usage Charge *£1,137m*	Recover the 'wear and tear' costs of accommodating an 'additional' train on the network. The charge should, from a 'wear and tear' perspective, make Network Rail content to accommodate additional network traffic.
Electric Current For Traction Charge *£1,744m*	Pass-through of costs associated with traction electricity supplied by Network Rail to train operators who utilise electric vehicles.
Electrification Asset Usage Charge *£77m*	Recover the costs associated with maintaining and renewing the electrification assets that vary with traffic.
Capacity Charge *£2,379m*	Neutralise the increased Schedule 8 liability on Network Rail of accommodating additional network traffic. It also provides incentives and price signals to train operators and funders to make efficient use of network capacity. The charge should, from a Schedule 8 perspective, make Network Rail content to accommodate additional network traffic.
Freight Specific Charge *£14m*	Recover the costs that would be avoided by Network Rail if the network was solely used by passenger trains (i.e., the fixed costs of having a mixed use network).
Freight Only Line Charge *£20m*	Recover the fixed costs, which do not vary with traffic, associated with lines used solely by freight operators (e.g., branch lines to ports).
Coal Spillage Charge *£15m*	Recover costs associated with coal spillage on the network (e.g., clean-up costs) from those operators who transport coal.

[9] This is available at: http://www.raildeliverygroup.com/wp-content/uploads/file/Charges%20and%20incentives%20user%20guide(1).pdf.
[10] Source: Periodic Review 2013, final determination, October 2013.

Charge/incentive *CP5 forecast income in 2012-13 prices*[10]	**Purpose**
Fixed Track Access Charge *£2,379m*	Recover revenue requirement after considering Network Rail's income from variable track access charges, station charges, other single till income, and Network Grant.
Network Grant *£19,586m*	Recover remaining revenue requirement after considering Network Rail's income from track access charges, station charges, and other single till income.
Schedule 8: Performance Regime *£(20)m*	Compensate operators for the long term financial impact of service disruption attributable to Network Rail or other train operators. The regime also helps align financial incentives of the industry by ensuring that the party that caused the disruption incurs the costs associated with it.
Schedule 4: Possessions Regime *£(62)m*	Compensate train operators for the financial impact of planned service disruption or possessions due to Network Rail restricting access to the network.
Volume Incentive	Encourage Network Rail to grow passenger and freight traffic over the control period. It should incentivise Network Rail to accommodate additional network traffic.
Route-level Efficiency Benefit Sharing (REBS)	Align incentives between Network Rail and operators to encourage them to work together and reduce infrastructure costs at the route-level.

3 Methodology

Phase 2b has built upon the RDG Vision (Phase 1) to develop the key features of the ideal regime, as implied by the RDG Vision, and the gaps between the current regime and the ideal regime.

3.1 Phase 2b process

The findings in this report have been developed, primarily, through a series of industry workshops, facilitated by L.E.K. Consulting (International) Limited, between January and March 2015. The facilitated workshops were well attended, with 68 individual industry representatives taking part; many attended multiple workshops. In addition, over 130 written comments were received, which provided feedback on workshop issues and draft sections of this report.

A broad range of organisations participated in this phase of work, including representatives from:

- Franchised passenger operators;
- Open Access operators;
- Freight operators;
- Network Rail;
- Funders / policy makers; and
- ORR.

The full list of organisations that participated in the facilitated workshops, and / or provided responses to questionnaires and pre-read materials is provided in Appendix 14.1.

Each of the workshops covered a specific area of the regime. The structure of this report largely follows the scope and order of the workshops. The scope of each workshop is set out below:

A. ***Running costs:*** How the regime recovers the costs of supporting, operating, maintaining and renewing the GB rail infrastructure to keep it in its current (or 'as-is') state;

B. ***Customer experience:*** How the regime can improve the end-user experience;

C. ***Possessions:*** How the regime incentivises and / or enables efficient use of planned possessions;

D. ***Performance:*** How the regime measures, incentivises and compensates for improved / poor performance;

E. ***Capacity (existing and new):*** How the regime can support the efficient allocation and use of existing network capacity, and provide signals for, and recover the costs of, creating new capacity; and

F. ***Coherence of the regime and alignment of incentives:*** How each part of the regime 'hangs together' for each type of user and how the regime can align the incentives of passenger operators, freight operators, and Network Rail.

The programme of activity for Phase 2b was designed to answer a number of key questions, namely:

- Building on the RDG Vision, what are the features of an ideal regime?
- What are the main gaps between the ideal regime and the current regime?
- What are the legitimate differences of views, within the industry, on the features and gaps associated with the ideal regime?

The workshops consisted of two round-table discussions. The first discussion considered the features of the ideal regime. The second discussion then considered the gaps between the features of the ideal regime and the current regime, with a focus on the agreed features. However, the final workshop, on Coherence of the Regime and Alignment of Incentives, also discussed the overarching features of the ideal regime that had been identified during the previous five workshops, and considered where there were the most significant gaps between the ideal regime and current regime.

Written comments have been encouraged through the use of questions in pre-read materials distributed prior to each workshop and questionnaires distributed during each workshop, which were also re-sent by e-mail after the workshop for additional comments. Workshop write-ups were circulated to the workshop participants to ensure that they accurately captured the views of the participants.

To ensure the free and frank exchange of views during Phase 2b, all comments from participants have been anonymised and grouped together to provide views at an industry group level (e.g., freight operators).

The workshop discussions and written comments have been synthesised into sections 4 - 9 of this report.

3.2 Colour-coding of features and gaps

The industry represents a wide range of interests and so it is not expected that all industry representatives would agree on each proposed feature of the ideal regime. Therefore, this report seeks to provide clarity on areas where the industry has shared views and also where there are legitimate differences of views.

The features and gaps identified in this report have been colour-coded to identify the level of consensus that was achieved on each point. The colour-coding is explained in Table 3.1 below.

Table 3.1: Key to colour coding of features

Colour	Definition
	A general consensus of views across all industry groups was achieved.
	While general consensus was not achieved, due to legitimate differences of views, there was at least a small majority and / or specific industry group(s) in favour of the feature. Where possible, the views of different industry groups have been recorded.
	While there was a discussion of the feature, there was no clear majority and / or specific industry group in favour of this feature.

4 Overarching features

4.1 Introduction

Throughout Phase 2b, the industry has identified a number of features of the ideal regime, and gaps between the current regime and ideal regime, that were not related to one specific part of the regime (e.g., running costs), but were related to the regime as a whole (i.e., they were 'overarching'). In this report, these features and gaps are referred to as 'overarching features' and 'overarching gaps' respectively.

This section of the report groups these overarching features and gaps into two categories:

- Those that build directly on the RDG Vision (i.e., they expand upon concepts already present in the RDG Vision); and
- Those that complement the RDG Vision (i.e., they add new concepts that align with the RDG Vision).

These two categories of features and gaps are presented separately in Sections 4.2 and 4.4 respectively.

4.2 Summary of overarching features that build directly on the RDG Vision

The overarching features that build directly on the RDG Vision have been incorporated as sub-points into the RDG Vision. These are shown in bold in Figure 4.1 below, along with the summary of the RDG Vision from Phase 1. It should be noted that these features do not replace or reduce the importance of the RDG Vision, but are instead intended to expand upon the RDG Vision.

Figure 4.1: Overarching features that build directly on the RDG Vision

RDG Vision (Phase 1 output)

Axioms

- System safety
- Consistency with law
- Funding of Network Rail efficient costs
- Allowance for market conditions
- A single approach for the network as a whole

Objectives

- Service costs recovery
- Efficient whole-system whole-life industry net costs (balance of benefits and costs)
- Efficient long run investment decisions
- Efficient performance management
- Efficient use of network capacity

Here, 'efficient' means that the greatest net benefits for the whole system are delivered

Judgement criteria

- Predictability
- Simplicity
- Transparency
- Low transaction costs

Outputs

The **optimal charges and incentives mechanism will depend on the state of the world**, but will result in:

- Network Rail accountability
- Non-arbitrary allocation of costs
- Optimal traffic growth
- Aligning industry incentives
- Value for money for funders, taxpayers and users

RDG Vision expanded as part of Phase 2b

Axioms

- System safety
- Consistency with law
- Funding of Network Rail efficient costs
- Allowance for market conditions
  - **Recognise that some rail services compete with other modes in the same market**
  - **Not prevent competition between operators**
- A single approach for the network as a whole

Objectives

- Service costs recovery
- Efficient whole-system whole-life industry net costs (balance of benefits and costs)
- Efficient long run investment decisions
- Efficient performance management
- Efficient use of network capacity

Here, 'efficient' means that the greatest net benefits for the whole system are delivered

Judgement criteria

- Predictability
  - **Provide confidence that the regime will be stable over a long time period**
- Simplicity
  - **Be straightforward, transparent, and readily understandable at the point of use by all parts of the industry and broader stakeholders**
- Transparency
- Low transaction costs

Outputs

The optimal charges and incentives mechanism will depend on the state of the world, but will result in:

- Network Rail accountability
- Non-arbitrary allocation of costs
  - **Reflect the underlying costs they are based on and should be non-arbitrary in nature**
- Optimal traffic growth
- Aligning industry incentives
- Value for money for funders, taxpayers and users
  - **Facilitate funders' investment in the industry in-line with their transport policies**
  - **Facilitate investment by third parties in the industry**

4.3 Overarching features and gaps that build directly on the RDG Vision

There was general consensus on a number of key overarching features of the ideal regime that directly build on the RDG Vision. There was also general consensus on a number of gaps between the current regime and the ideal regime.

The agreed features and gaps are presented below. The regime should:

Feature 4.1	Recognise that some rail services compete with other modes in the same market
Explanation	In most rail markets, end-users have a range of potential transport modes (e.g., road or air) to choose from. The regime should recognise that some rail services compete against these modal choices, which may not face the same constraints as rail (e.g., have more flexibility and less complex charging structures), and as such cannot be considered in isolation.
Related gaps in current regime	The current regime does not take sufficient account of the way that users of alternative transport modes are charged for access (e.g., road users do not face a performance regime).

Feature 4.2	Not prevent competition between operators
Explanation	Where competition between train operators delivers benefits for end-users and funders, the regime should not act as a barrier to competition or to potential new entrants.
Related gaps in current regime	No gaps identified.

Feature 4.3	Provide confidence that the regime will be stable over a long time period
Explanation	The regime, as a whole, should provide the industry and funders with confidence that its structure and calculation mechanisms will be stable over a long time period (more than one Control Period). Therefore, changes to charging rates should be predictable because they will be based on changes to underlying cost drivers. This is seen as a key feature to providing a stable regulatory environment, which can help the industry to develop business cases for the wider use of rail and for new investment in the industry.
Related gaps in current regime	The regime is not currently perceived to be stable, with charges and incentives subject to significant changes in payment rates and recovery levels that are not considered to be based on changes in underlying cost drivers (e.g., introduction of the Freight Specific Charge in CP5)

Feature 4.4	Be straightforward, transparent, and readily understandable at the point of use by all parts of the industry and broader stakeholders
Explanation	The regime should provide clear incentives on industry parties (i.e., where the impact of a decision is well understood). A straightforward regime can include complex modelling of key variables, provided these lead to a straightforward and easy-to-use framework (e.g., price lists) and the underlying modelling methodology is sufficiently transparent. A regime that is understandable to broader stakeholders should minimise circumstances where the industry is misrepresented (e.g., a lack of understanding about the difference between passenger compensation and compensation to train operators for disruption).
Related gaps in current regime	The current regime is considered by many industry parties to be too complex, weakening some of its incentive properties (e.g., Volume Incentive). There is a poor understanding of the intent of Schedule 8 throughout the broader stakeholder community. The current regime is not seen to be sufficiently straightforward, especially by freight operators, meaning that it is challenging to provide an accurate estimate of the cost of running a service.

Feature 4.5	Reflect the underlying costs they are based on and should be non-arbitrary in nature
Explanation	Charges and incentives should be based on clear cost drivers to support the transparency and predictability of the regime. This should also allow end-users, funders / taxpayers, and operators to understand what they are paying for.
Related gaps in current regime	The Network Grant and Fixed Track Access Charge are both arbitrary balancing figures, which form part of ORR's Final Determination and are not considered to be sufficiently cost reflective. Some parts of the industry are not confident that the current cost allocations are sufficiently transparent.

Feature 4.6	Facilitate funders' investment in the industry in-line with their transport policies
Explanation	It is important that the regime does not prevent funders from investing in the industry. As such, the regime should facilitate these investments through the provision of a suitable framework that supports funders' transport policies.
Related gaps in current regime	No gaps identified.

Feature 4.7	Facilitate investment by third parties in the industry
Explanation	Third parties / private investors are an important source of capital for the industry. The regime should, at a minimum, not prevent these investors from investing in the industry.
Related gaps in current regime	Freight operators noted that the changes in charges from CP4 to CP5 had reduced the willingness of third parties to invest in infrastructure and rolling stock, since the risk premium, associated with changes in charging rates, was too high to make the investments economically feasible. In addition, these changes also reduced third parties' confidence that support for rail freight will continue.

4.4 Summary of overarching features that complement the RDG Vision

The overarching features that complement the RDG Vision have been grouped together into four categories:

- **Regulatory:** features that impact the regulatory environment of the regime;
- **Alignment:** features that impact the alignment of the regime both within the regime and with the wider industry framework and structure;
- **Methodological:** features that have methodological implications for the charges and incentives; and
- **Operational:** features that impact the day-to-day use of the regime as a whole.

The grouping of the features is shown in Figure 4.2 below. These features provide additional information that should help to inform the development of options for a new and / or updated regime.

Figure 4.2: Overarching features that complement the RDG Vision

Regulatory

- Be clear about the purpose of each element of the regime, and the regime as a whole
- First do no harm (i.e., be clear about how any changes will improve the current situation for the industry as a whole)

Methodological

- Work in both expanding and shrinking markets
- Maintain an up-to-date and accurate view of cost drivers and end-user needs
- Facilitate a collaborative approach to the development of charges and incentives
- Not be overly sensitive to relatively small changes in industry outputs

Alignment

- Take into account the links between the regime and its impacts on end-users
- Align with other industry processes, policies, and contractual arrangements
- Be realistic about the limitations of charges and incentives
- Facilitate all parties within the industry to ‘do the right thing’ and work together
- Align any additional charges and incentives with the rest of the regime (i.e., avoid ‘bolt-ons’ to the regime)
- Support transparent policy decisions that set the balance of funding between end-users and funders / taxpayers

Operational

- Be sufficiently flexible to support technology improvements and innovation within the industry
- Facilitate the delivery of industry outputs and aims over both the short and long term
- Allow each party’s individual incentives to work for them and also contribute to whole industry aims
- Support operators in the planning and delivery of their businesses

4.5 Overarching features and gaps that complement the RDG Vision

There was general consensus on a number of key overarching features of the ideal regime that complement the RDG Vision. There was also general consensus on a number of gaps between the current regime and the ideal regime.

The agreed features and gaps are presented below. The ideal regime should:

Feature 4.8	Be clear about the purpose of each element of the regime, and the regime as a whole
Explanation	This should enable the industry, funders and broader stakeholders to understand what the regime is trying to achieve, and what it is not. The purpose should be considered each time the structure of charges and incentives is subject to change. It is particularly important that the regime provides clarity on the elements of the regime that are primarily focused on cost recovery and those that are intended to contain mechanisms to incentivise behaviours.
Related gaps in current regime	The purpose of the current regime is not sufficiently clear and so it is not well understood by industry, funders and broader stakeholders.

Feature 4.9	First do no harm (i.e., be clear about how any changes will improve the current situation for the industry as a whole)
Explanation	Any changes made to the regime should improve the current situation for the industry as a whole. This does not preclude changes resulting in some industry parties being disadvantaged. However, to the greatest extent possible, these instances should be minimised.
Related gaps in current regime	Historical changes to the regime are perceived to have resulted in a more complex regime (in terms of number of charges and complexity of calculation) without generating improvements in the whole industry outcomes.

Feature 4.10	Take into account the links between the regime and its impacts on end-users
Explanation	The decisions and behaviours that are incentivised through the regime may have an impact on end-users (e.g., incentives to reduce the weight of trains). There should be an understanding of how the regime can impact end-users.
Related gaps in current regime	The impact of the regime on end-users is not well understood, and the potential impact is not necessarily assessed when making changes to the regime. This can result in adverse end-user outcomes. For example, higher capacity charge rates in CP5 may have reduced the potential for additional beneficial passenger and freight traffic on the network.

Feature 4.11	Align with other industry processes, policies, and contractual arrangements
Explanation	The regime is only one part of the wider industry framework. The regime should align with all other industry processes, policies, and contractual arrangements to support the delivery of whole-industry aims. The regime should, at a minimum, not work against other elements of the industry framework. In addition, it should not incentivise behaviours which are already required by other contractual mechanisms (e.g., to provide advance notice of possessions).
Related gaps in current regime	The current regime is not considered to be well aligned with the wider industry framework. One example given was franchised passenger operators making franchise commitments, which Network Rail is then unable to deliver due to the impact on performance.

Feature 4.12	Be realistic about the limitations of charges and incentives
Explanation	The regime should not seek to address every issue that the industry faces. When developing the regime there should be an awareness of how much can be achieved through charges and incentives, particularly where parts of the industry are not exposed to their full impact (e.g., recognising that existing franchised operators are held harmless to changes in most regulated charges at a periodic review).
Related gaps in current regime	There is a perception across the industry that too much reliance is placed on the regime to deliver solutions to issues that it is not in a position to deliver (e.g., improving performance or creating aligned incentives between parties).

Feature 4.13	Facilitate all parties within the industry to 'do the right thing' and work together
Explanation	The regime should not act as barrier to the industry 'doing the right thing' for its end-users and should allow parties to work together to deliver improved outcomes for end-users.
Related gaps in current regime	Schedule 8 does not encourage joint working, since operators who help out another operator to recover their service are penalised by the regime, since they in-turn incur their own delay despite doing the right thing for end-users. As a result of discounts for booking possessions early, Network Rail can be disincentivised from making changes to its possessions plans once it has notified operators, even though this may be the right thing to do. For example, a slightly longer possession than originally planned may minimise whole industry costs, but the Schedule 4 may not encourage this.

Feature 4.14	Align any additional charges and incentives with the rest of the regime (i.e., avoid 'bolt-ons' to the regime)
Explanation	It is important that any new charges and incentives are aligned with the rest of the regime and not 'bolted-on'. As part of this process, the impact on the rest of the regime should be reviewed. This should minimise the likelihood of creating conflicting incentives within the regime.
Related gaps in current regime	The industry considered that, during recent periodic reviews, individual charges and incentives have been introduced without sufficient consideration of the impact on, and alignment with, the rest of the regime. One example given of such a 'bolt-on' was the Freight Specific Charge.

Feature 4.15	Support transparent policy decisions that set the balance of funding between end-users and funders / taxpayers
Explanation	When policy decisions are being considered, the regime should provide support and clarity as to how the policy decision will impact the balance of funding between end-users and funders / taxpayers.
Related gaps in current regime	Currently there is perceived to be limited clarity on how policy decisions impact Network Rail's cost base and hence the balance of funding that Network Rail receives from end-users and funders / taxpayers.

Feature 4.16	Work in both expanding and shrinking markets
Explanation	The incentives contained within the regime should work in the way intended regardless of if parts of the industry are expanding or shrinking.
Related gaps in current regime	The current regime is not considered to work well in areas of the network where demand for services is contracting, since the charges are not deemed to be sufficiently cost reflective to allow the savings to operators / funders to accrue in-line with the reduced cost base.

Feature 4.17	Maintain an up-to-date and accurate view of cost drivers and end-user needs
Explanation	The regime should be based on a robust, accurate, and up-to-date evidence base of infrastructure cost drivers and end-user needs. This should provide a regime that is predictable, linked to underlying costs drivers, and aligned to end-user needs.
Related gaps in current regime	The current regime is not perceived to sufficiently reflect end-user needs, since it was first developed during the privatisation of the industry and has not been subsequently updated to take account of any changes in end-user needs.

Feature 4.18	Facilitate a collaborative approach to the development of charges and incentives
Explanation	Operators, Network Rail, ORR and funders should work in a collaborative manner to develop the regime to generate 'buy-in' and understanding of the regime.
Related gaps in current regime	Previous periodic reviews have been driven by ORR and Network Rail with mixed levels of engagement from across other stakeholder groups.

Feature 4.19	Not be overly sensitive to relatively small changes in industry outputs
Explanation	It is not favourable to have a regime that is highly geared (i.e., results in significant differences in financial payments from small changes in industry outcomes). For example, a small change in train performance should not lead to significant changes to payments between Network Rail and train operators.
Related gaps in current regime	Schedule 8 is perceived to be fairly sensitive to small changes in industry performance, potentially resulting in net payments to operators or Network Rail that could have significant financial implications for services that are marginal in nature (i.e., have small profit margins).

Feature 4.20	Be sufficiently flexible to support technology improvements and innovation within the rail industry
Explanation	Whilst the regime needs to be sufficiently stable and predictable, it also needs to retain an element of flexibility to support technological improvements and innovation by the industry.
Related gaps in current regime	The regime is perceived to primarily support the current ‘as-is’ state of the railway and is not sufficiently flexible to take account of technology improvements and innovation.

Feature 4.21	Facilitate the delivery of industry outputs and aims over both the short and long term
Explanation	The regime should, at a minimum, not prevent the delivery of the industry’s short term and long term outputs and aims. Whilst parts of the regime may be more focused on the long term outputs (e.g., funding enhancement projects), this should not prevent the delivery of day-to-day outputs (e.g., punctuality of existing rail services).
Related gaps in current regime	The regime is often considered to frustrate the delivery of industry outputs and aims (e.g., Schedule 8 payments from Network Rail to operators in some parts of the network were not considered to incentivise Network Rail to improve performance in that area).

Feature 4.22	Allow each party’s individual incentives should work for them and also contribute to whole industry aims
Explanation	It is important that the regime incentivises each individual to deliver their role efficiently. At the same time, this should also contribute to the delivery of the whole industry’s aims.
Related gaps in current regime	There are examples in the current performance and possession regimes that may incentivise individuals to make certain decisions (e.g., run a train to avoid Schedule 8 payments), which may not be in the best interests of the industry (e.g., if the connecting train is delayed).

Feature 4.23	Support operators in the planning and delivery of their businesses
Explanation	The regime should support operators to undertake business planning with reasonable degree of certainty. As part of this, the regime should avoid shocks (e.g., large changes in payment rates or changes in underlying calculations) as far as is reasonable practicable.
Related gaps in current regime	There were significant increases in the levels of some charges and payment rates (e.g., Capacity Charge) from CP4 to CP5, which impacted on some operators business planning. For example, freight operators stated that the step change in charges caused some of their customers to change modes to road and reduce future levels of third party investment in the industry (e.g., investment in freight terminals).

5 Running costs

> **Scope:** How the regime recovers the costs of supporting, operating, maintaining and renewing the GB rail infrastructure to keep it in its current (or 'as-is') state.

5.1 Overview

Network Rail's running costs totalled £6.3bn in 2013-14[11]. This represents more than 50% of Network Rail's annual expenditure. Therefore, the recovery of these costs is a significant issue for the regime. These costs include:

- Support costs: incurred by activities that support Network Rail's business (e.g., asset management services);
- Operations costs: incurred by activities that allow trains to run on the network (e.g., signalling and timetabling);
- Maintenance costs: incurred by activities required to keep the network performance in a safe manner (e.g., track inspections); and
- Renewal costs: incurred by activities required to manage and replace assets at the end of their useful lives (e.g., track replacements).

In CP5, these costs are recovered by Network Rail through a number of variable track access charges (most significant are Variable Usage Charges and Electric Current For Traction Charge), the Fixed Track Access Charge, Network Grant, and Network Rail's commercial property income.

Network Rail's support, operations and maintenance costs are recovered from current users of the network. Whereas, renewals costs are recovered from both current and futures users via the regulatory asset base[12].

In general, short run marginal costs (e.g. Electricity for Traction) are recovered via variable charges, while other costs are recovered through a mixture of specific charges (e.g. Station Long Term Charge) and non-specific charges (e.g. Fixed Track Access Charge).

[11] Source: Network Rail's 2013-14 regulatory financial statements. Total of support, operations, maintenance and renewals costs in 2013-14 prices.

[12] The Regulatory Asset Base includes all of Network Rail's railway infrastructure assets, which are fairly valued using an income approach to assess the discounted future cash flows of the assets

5.2 Charges and incentives related to running costs

Highlighted below are the charges and incentives within the current regime that are related to this topic:

Variable Usage Charge	**Capacity Charge**	**Electric Current For Traction Charge**	**Electrification Asset Usage Charge**
Station Long Term Charge	**Freight Specific Charge**	**Freight Only Line Charge**	**Coal Spillage Charge**
Schedule 4 Possessions Regime	Schedule 8 Performance Regime	**REBS**	**Volume Incentive**
Fixed Track Access Charge (including Network Grant)			

5.3 Agreed features and gaps

There was general consensus on a number of key features of the ideal regime with respect to running costs. There was also general consensus on a number of gaps between the current regime and ideal regime.

The agreed features and gaps are presented below. The regime should:

Feature 5.1	Support the understanding of the drivers of network costs at a granular level
Explanation	An understanding of cost drivers underpins a number of features of the ideal regime. The cost drivers should be as uncontroversial as possible, for the industry and funders, and should be clearly reflected in the structure of the charges. An understanding of cost drivers should enable Network Rail to be able to explain to decision makers the whole-life cost implications of different options for network capabilities and / or infrastructure.
Related gaps in current regime	Currently, the understanding of Network Rail's cost drivers is not considered to be sufficient. As a result, some elements of the current regime do not necessarily reflect Network Rail's true cost drivers (e.g., Fixed Track Access Charge).

Feature 5.2	Use evidence for running costs charges and incentives that is based on up-to-date and robust data
Explanation	It is important that the underlying data supporting the regime is robust and kept-up-to-date. If the regime is not based on robust and up-to-date data then it may over / under recover Network Rail's costs or it may incentivise behaviours that are to the detriment of end-users.
Related gaps in current regime	PR13 made progress with this. However, prior to PR13 some of the data underpinning the charges had not been updated for a number of years (e.g., Schedule 8 rates for passenger operators).

Feature 5.3	Ensure operators (passenger and freight) bear at least the efficient costs directly incurred when running a service
Explanation	At a minimum, train operators (passenger and freight), should bear the costs that are directly incurred by Network Rail from running a service, such that Network Rail is cost neutral to the running of an ‘additional’ service. There should be a separation of charges associated with short-run costs and charges associated with long-run costs in the ideal regime. This separation is consistent with current EU legislation that states that mark-ups over costs directly incurred should be based on the ability of operators to bear them.
Related gaps in current regime	Network Rail is not always held neutral to the cost of running an additional service, due to the potential difference between costs recovered through the Capacity Charge and increased Schedule 8 liabilities on busy sections of the network, creating an incentive on Network Rail to reduce the number of services on these sections.

Feature 5.4	Enable Network Rail to be able to recover its full running costs
Explanation	As a business, Network Rail needs to ‘pay its bills’ as they fall due. Therefore, the regime needs to allow Network Rail to recover its full running costs, while taking account of the ability of individual operators and services to bear these costs. This feature should not preclude Network Rail from being incentivised to operate efficiently.
Related gaps in current regime	No gaps identified.

Feature 5.5	Incentivise the industry to minimise whole-life, whole-industry costs
Explanation	There should be incentives for the industry as a whole to minimise whole-life, whole-industry costs in a safe and sustainable manner. To achieve this, the regime should not create incentives to deliver short-term efficiency savings at the expense of higher industry costs in the future.
Related gaps in current regime	The network is currently maintained in an ‘as-is’ state (i.e., to retain all existing capability). There are limited incentives, and some active disincentives (e.g., political), for any party to rationalise network capacity, or consider alternative levels of service provision (e.g., light rail). Some parts of the current regime also incentivise the maintenance of the ‘as-is’ state, since they encourage like-for-like replacements, when they may not be required (e.g., Station Long Term Charge).

Feature 5.6	Enable Network Rail's running costs to be attributed / allocated to those in the best position to influence and incentivise industry behaviours
Explanation	To support industry in making efficient use of available funds, it is important that there is a transparent and understandable approach to allocating / attributing running costs to those in the best position to influence and incentivise industry behaviours. It is important to note that the approach to the attribution / allocation of Network Rail's costs should not necessarily reflect the way in which the regime recovers those costs.
Related gaps in current regime	Currently, a significant proportion of public funding is provided to Network Rail via the Network Grant (c. £4bn per year) and this is not accurately attributed / allocated to users of the network. This reduces the transparency of industry funding and also reduces the incentive on Network Rail to act in the best interests of its direct customers (i.e., the operators).

5.4 Proposed features and gaps that did not produce a consensus amongst RDG members

The industry represents a wide range of interests and so it is not expected that all industry representatives would agree on each proposed feature of the ideal regime.

This section of the report sets out features of the ideal regime, which were proposed during the facilitated workshops, but where there was no consensus amongst industry representatives that it is a feature of an ideal regime.

Feature 5.7	**Enable all operators to pay an appropriate share of Network Rail's fixed costs**
Explanation	Network Rail considers that there could be merit in attributing its fixed costs more equitably between operators, instead of recovering the residual funding requirement from franchised passenger operators. This should help to minimise any perceptions of a two tier network between franchised passenger operators and all other operators (i.e., freight and open-access).
Related gaps in current regime	Network Rail's residual funding requirement, after levying of other charges, flows through franchised train operators via the Fixed Track Access Charge.

Feature 5.8	**Allow the provision of capability to be paid for by governments with all train operators treated as marginal operators**
Explanation	There was a discussion as to whether or not all operators should be considered marginal operators (i.e., only pay short-run marginal costs) due to the complexities of disentangling network operating costs from those who cause them to be incurred. However, there was no consensus reached on this topic amongst RDG representatives.
Related gaps in current regime	The current regime could be considered to conflate the monies raised through franchise competitions and payments towards Network Rail's fixed costs.

6 Customer experience

Scope: How the regime can improve the end-user experience.

6.1 Overview

The industry has a broad range of end-users, which include passengers, station users, and freight users. Providing a positive customer experience to each group of end-users is important for driving continued industry growth. The regime can influence industry behaviours. Therefore it should be aligned to the needs of the different end-users.

As of autumn 2014, overall customer satisfaction for passengers was 81%[13], down from 83%[13] in autumn 2013. Satisfaction with the rail freight industry overall was 58%[14] in 2012.

The regime can impact the end-user experience because it can incentivise certain decisions or behaviours within the rail industry, which may subsequently impact end-users. For example, the performance and possessions regimes can influence the approach that the industry takes to managing planned and unplanned disruption, whilst variable charges can influence rolling stock design and business cases for marginal rail services.

6.2 Charges and incentives related to customer experience

Highlighted below are the charges and incentives within the current regime that are related to this topic:

Variable usage charge	**Capacity charge**	Electric Current For Traction Charge	Electrification asset usage charge
Station long term charge	Freight specific charge	Freight only Line charge	Coal spillage charge
Schedule 4 possessions regime	**Schedule 8 performance regime**	REBS	Volume incentive
Fixed track access charge (including network grant)			

[13] Source: National Passenger Survey autumn 2014 Main Report
[14] Source: ORR Freight Consumer Survey 2012 – those replying quite satisfied or very satisfied

6.3 Agreed features and gaps

There was general consensus on a number of key features of the ideal regime with respect to customer experience. There was also general consensus on a number of gaps between the current regime and the ideal regime.

The agreed features and gaps are presented below. The regime should:

Feature 6.1	Reflect what end-users actually want, rather than what we assume they want
Explanation	There should be a clear link between the design of the regime and the needs of end-users. The understanding of end-user needs should be based on up-to-date and robust information, which reflects engagement with end-users and their representative bodies. Data on end-user requirements should be used consistently throughout the industry. Whilst it may not be possible for the industry to meet all end-users requirements, the regime should facilitate an understanding of the cost implications of delivering those requirements.
Related gaps in current regime	The needs of end-users are not well reflected in the current regime, which can result in poor outcomes for end-users. For example, the current structure of the possessions regime may, in extreme weather, discourage Network Rail or operators from being the first to declare the need for an emergency timetable. This is because that party then suffers the financial loss (Network Rail would be liable for Schedule 4 payments, and the operator would be fully exposed to the revenue loss).

Feature 6.2	Facilitate trade-offs between different end-user requirements
Explanation	The regime should help to facilitate trade-offs between the different requirements of groups of end-users (e.g., between traffic levels, performance, and costs). Costs, benefits, and funding / recovery mechanisms should be sufficiently transparent to inform trade-offs made by the industry and by funders.
Related gaps in current regime	There is a limited understanding of the trade-offs between additional traffic levels, performance, and costs. While the current regime has tried to address this in some areas (i.e., Schedule 8 and Capacity Charge), a deeper understanding of trade-offs would improve information available to decision-makers.

Feature 6.3	Facilitate the industry to meet the needs of end-users
Explanation	The ideal regime should facilitate both the industry, as a whole, and specific parties, to meet the needs of end-users. This is illustrated by situations in which disruption to services occurs. In these situations, the regime should allow the industry to focus on the needs of the end-user, rather than internal industry monetary flows.
Related gaps in current regime	The regime is not always aligned with 'doing the right thing' for the end-user. For example, when station staff hold connecting services due to the late running of another train, this can result in additional Schedule 8 payments. This, however, may be the right thing to do for the end-users, particularly if it is the last service of the day. Similarly, in the freight sector, freight trains may need to be held at their origin to be loaded, due to late deliveries of cargo, but may incur Schedule 8 payments when held, even if they do not impact any other rail services.

Feature 6.4	Incentivise the industry to work together in the best interests of end-users
Explanation	The regime should support the industry to work together in the best interests of end-users. However, it should also be sufficiently flexible to allow bespoke arrangements that can further improve the alignment of incentives between operators and Network Rail. The regime should incentivise industry parties to execute their individual responsibilities, whilst also contributing to whole-industry aims. For example, individual parties should take account of the whole-industry costs when making their own business decisions.
Related gaps in current regime	The regime does not always incentivise parties to work together. However, to improve the alignment of incentives, a number of industry structures have been created to work-around this issue (e.g., alliancing). Elements of the current regime mean that some industry parties are not affected by changes in costs of other parties (e.g., Schedule 4 payments for alternative service provision). As a result, some parties may take actions, which increase the costs of other impacted parties, and increase whole industry costs, unnecessarily.

Feature 6.5	Facilitate the presentation of a coherent face to end-users, even if multiple parties are involved
Explanation	The whole industry should present a coherent 'face' to end-users, even when multiple parties are involved in delivering a particular service, e.g. an end-user's station experience. This is particularly important for stations and disruption when multiple parties are involved. The ideal regime should be sufficiently flexible to allow for bespoke arrangements between parties, to support joint working.
Related gaps in current regime	Often, more than one party is involved in the operation and management of a station. This may lead to gaps in the provision of services at stations, where responsibilities aren't sufficiently well defined.

Feature 6.6	Support end-user facing investments (e.g., stations), where there is a net benefit to the industry
Explanation	When there is a net benefit to the industry from investing in end-user facing assets (e.g., stations), the regime should support that investment.
Related gaps in current regime	The regime was not considered to support investment in stations, with investments largely relying on capex funding from other industry schemes (e.g., National Stations Improvement Programme (NSIP)) or franchise capex commitments.

Feature 6.7	Facilitate stations investment across franchise lives
Explanation	The regime should facilitate investment in stations, even when a station operator would, otherwise, have a limited period of time to recover the costs of the investment (e.g., an operator coming to the end of its franchise agreement).
Related gaps in current regime	Investments in stations may not take place if a franchised operator is near the end of its franchise contract. This is because the return on that investment for the remainder of the franchise may be too low, despite the investment producing a net benefit to the industry over a longer time period (e.g., 10 years). However, Facility Charges are one mechanism that is currently used to help address this issue.

6.4 Proposed features and gaps that did not produce a consensus amongst RDG members

The industry represents a wide range of interests and so it is not expected that all industry representatives would agree on each proposed feature of the ideal regime.

This section of the report sets out features of the ideal regime, which were proposed during the facilitated workshops, but where there was no consensus amongst industry representatives that it is a feature of an ideal regime.

Feature 6.8	Take account of end-user needs when undertaking renewals / upgrades of stations
Explanation	The regime should encourage the industry to take into account the overall customer experience at stations when renewing or upgrading stations (i.e., end-users value station facilities (e.g., toilets), 'softer' features (e.g., aesthetics), and the selection of retail outlets). Therefore, the regime should reflect that stations should not necessarily be managed in the same way as track-based assets. Furthermore, some participants considered that the regime should reflect that end-user needs may vary significantly, between stations (e.g., rural village station versus station in a large city). It should also reflect that a like-for-like station renewal may not be appropriate. However, some attendees thought that this feature was outside of the scope of the regime.
Related gaps in current regime	Currently, most railway assets are subject to similar maintenance, repair, and replacement cycles, based on obsolescence. These cycles do not necessarily reflect the usage of the assets or the potential to carry out other maintenance activities at the same time (e.g., replacing a station roof at the end of its useful life, but not carrying out work on the walls of the station as they are not yet at the correct point in their maintenance cycle).

Feature 6.9	Recognise the impact on end-users when the rail industry does not deliver its targets
Explanation	A number of passenger operators, Network Rail, and funders held the view that the regime should recognise the impact on end-users when the industry does not deliver its targets, for example, in relation to delays and cancellations. Some participants expressed support for historic arrangements where passenger regulated fare increases were linked to operational performance levels. However, freight operators and some passenger operators opposed this approach, stating that they are in the best position to manage their relationships with their end-users and are already incentivised to ensure high levels of end-user satisfaction. They do not think that the regime should add an additional incentive on them to ensure that they always act in the best manner for their end-users.
Related gaps in current regime	No gaps identified.

Feature 6.10	Should not influence behaviours that impact end-users
Explanation	A small minority of passenger operators held the view that the regime does not influence behaviours that impact end-users because charges and incentives are simply internal mechanisms and not end-user facing. However, the majority of passenger operators, freight operators, Network Rail, and funders did not support this view point and they thought that the regime can impact end-users.
Related gaps in current regime	The current regime may influence behaviours which could adversely impact end-users (e.g., under extreme weather conditions Network Rail and operators are discouraged from being the first to declare the need for an emergency timetable, since this party then suffers the financial loss).

Feature 6.11	Include mechanisms to pass through costs associated with end-user compensation
Explanation	There was a discussion about whether the ideal regime should include an end-user compensation mechanism. However, there was no consensus on this proposed feature. Proponents of the idea thought that, if implemented, this could run in parallel with a performance regime to ensure that the operators are not left ‘out-of-pocket’ for end-user compensation, when they did not necessarily cause the delay. This may, in part, help address the confusion over the purpose of Schedule 8 within the wider stakeholder community and the media.
Related gaps in current regime	End-user compensation is not linked to the regime, resulting in the operators potentially being left ‘out-of-pocket’ for end-user compensation mechanisms (e.g., Delay Repay) in some situations. It should be noted that Schedule 8 is perceived by some stakeholders as providing compensation that operators should pay out to end-users for delays and cancellations, while the actual purpose of Schedule 8 is to compensate operators for long-run revenue losses caused by poor performance and so it does not take into account any end-user compensation arrangements.

7 Possessions

Scope: How the regime incentivises and / or enables efficient use of planned possessions.

7.1 Overview

Possessions cover the planned removal of access rights from operators by Network Rail on a section of the network. Possessions are a necessary feature of the industry to allow Network Rail to undertake engineering works including maintenance, renewals, and upgrades. Possessions are typically carried out at times when the network has reduced traffic and they can span a range of time-scales (e.g., from overnight possessions to those lasting for several years for significant infrastructure upgrades).

The Schedule 4 ('possessions') regime compensates train operators for the financial impact of planned possessions, which derives its payment rates from the Schedule 8 ('performance') regime. In addition, should a possession overrun, the works will also incur a Schedule 8 charge, which happened for 2% of possessions in 2013-14[15]. Network Rail has typically not used the entirety of the Access Charge Supplement to pay for Schedule 4 costs, except in 2013-14, as shown in Table 7.1 below.

Table 7.1: Schedule 4 payments by Network Rail[16]

Schedule 4 payments from Network Rail (£m)	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Schedule 4 payment	151	128	92	122	167
Access Charge Supplement	(188)	(167)	(178)	(149)	(146)
Net Schedule 4 payment	(37)	(39)	(86)	(27)	21

7.2 Charges and incentives related to possessions

Highlighted below are the charges and incentives within the current regime that are related to this topic:

Variable usage charge	Capacity charge	Electric Current For Traction Charge	Electrification asset usage charge
Station long term charge	Freight specific charge	Freight only Line charge	Coal spillage charge
Schedule 4 possessions regime	**Schedule 8 performance regime**	REBS	Volume incentive
Fixed track access charge (including network grant)			

15 Source: Network Rail's 2013-14 Annual Report
16 Source: Network Rail's Regulatory Accounts 2010-14

7.3 Agreed features and gaps

There was general consensus on a number of key features of the ideal regime in respect of possessions. There was also general consensus on a number of gaps between the current regime and ideal regime.

The agreed features and gaps are presented below. The regime should:

Feature 7.1	Compensate operators for the financial impacts of a planned possessions
Explanation	When operators cannot access the network because of planned Network Rail engineering works, operators should be compensated, based on the financial impact of a possession. Compensation should cover the loss of business on the day of the possession, alternative service provision, and the long-run impact on their businesses.
Related gaps in current regime	Schedule 4 may not always compensate operators for the costs they incur when Network Rail takes a possession. Attendees provided examples where Schedule 4 compensation to operators is not sufficient to cover the costs of all the replacement buses they need to ensure that all passengers on the service can still travel. However, this may be due to the averaging effect of the calculation of bus costs, issues with the calibration of payment rates, and / or the impact of Network Rail's early booking discounts.

Feature 7.2	Be a liquidated sums regime, except for long possessions
Explanation	A liquidated sums regime (i.e., a formulaic approach to calculating compensation) will help to minimise transaction costs associated with providing compensation as it should be relatively quick and straightforward to administer. However, where Network Rail takes long possessions, operators should be able to seek compensation based on a 'claims-based' or 'bespoke' approach, since liquidated sums may not sufficiently compensate parties for the financial impact of a possession This reflects that long possessions are less frequent and may have more variable impacts on operators. For these long possessions, compensation based on liquidated sums should act as a minimum level of compensation for operators.
Related gaps in current regime	No gaps identified.

Feature 7.3	Be financially neutral if possession activity is carried out efficiently
Explanation	Network Rail should not over- or under-recover the financial impact of planned disruption to operators, where possessions are undertaken in an efficient manner. Similarly, operators should not on average, over- or under-recover their costs through the possessions regime, provided they provide an efficient level of alternative service provision.
Related gaps in current regime	Network Rail has typically over-recovered its Schedule 4 costs through the Access Charge Supplement, suggesting that this part of the regime may not be working as well as intended.

Feature 7.4	Incentivise the industry to minimise the impact of possessions on end-users
Explanation	The regime should consider the impact on end-users. For example, it could consider: the notice period, length, and frequency of a possession; the number of end-users impacted, alternative service provision options (e.g., availability of diversionary routes); and timing of the possession (e.g., extended overnight access versus weekend work). The impact on end-users may be greater than the disruption of an individual service, since their end-to-end journey may use more than one rail service. It should be noted that the impact of possessions on end-users may vary, depending on their needs.
Related gaps in current regime	The regime considers only the impact of possessions on specific train services, and not on the end-user experience. For example, where a rail replacement bus is just one part of a longer journey, a passenger may face longer delays if they can no longer make their planned connecting train.

Feature 7.5	Facilitate the efficient use of possessions by all parties
Explanation	The regime should allow the industry to maximise the output from each possession, while taking account of the impact of the possession on different end-users.
Related gaps in current regime	There are examples of circumstances where the current regime incentivises Network Rail to utilise shorter possessions. However, in some cases, a blockade may be a more efficient possessions strategy.

Feature 7.6	Incentivise operators to provide Network Rail with the access it requires to deliver engineering works
Explanation	This should support Network Rail in delivering works in a timely manner and at minimum cost. However, where there would be significant adverse effects on end-users, Network Rail may agree with operators to take possessions at alternatives times which do not minimise ‘financial’ costs.
Related gaps in current regime	As a result of discounts for booking possessions early, Network Rail can be disincentivised from making changes to its possessions plans once it has notified operators, even though this may be the right thing to do. For example, a slightly longer possession than originally planned may minimise whole industry costs, but Schedule 4 does not encourage this.

Feature 7.7	Take account of the financial impact on all industry parties in taking possessions
Explanation	The regime should consider the financial impact of taking a possession on all industry parties by reflecting the costs and lost revenues that other parties bear. When taking account of the financial impact, it is important to consider the possessions strategy as a whole (e.g., blockade versus a number of short possessions). It should not just consider an individual possession, since knock-on impacts of the availability of alternative routes, equipment and / or engineers may increase costs, This should incentivise the industry to consider the lowest whole-industry financial impact approach to possessions.
Related gaps in current regime	The regime does not place sufficient incentives on Network Rail to consider the costs of other industry parties. This means that, whilst a particular possessions approach may minimise Network Rail's own costs, it could result in much higher industry costs than an alternative approach (e.g., disrupting a commuter service requires a significant level of alternative service provision).

Feature 7.8	Be sufficiently flexible to respond to unexpected end-user demand
Explanation	Possessions can be planned years in advance, while major events (e.g., sporting events), which can trigger unexpected end-user demand, typically have a shorter planning horizon (e.g., months). The possessions regime should be sufficiently flexible to allow the industry to respond to these situations. When taking these actions, no industry party should be unduly penalised due to these events which are outside of their control.
Related gaps in current regime	The regime does not have sufficient flexibility to allow Network Rail to move possessions, at short notice, without undue penalties (e.g., loss of the early booking discount), for example, when major sporting events occur at short notice (e.g., FA cup final). This can act as a disincentive on Network Rail to alter its possessions strategy, despite it being the right thing to do in terms of minimising end-user impacts.

7.4 Proposed features and gaps that did not produce a consensus amongst RDG members

The industry represents a wide range of interests and so it is not expected that all industry representatives would agree on each proposed feature of the ideal regime.

This section of the report sets out features of the ideal regime, which were proposed during the facilitated workshops, but where there was no consensus amongst industry representatives that it is a feature of an ideal regime.

Feature 7.9	Take account of the indirect impacts of possessions on local communities
Explanation	There was a discussion as whether the regime should take account of the indirect impact that possessions have on local communities. For example the impact on trade in communities or rural communities, which rely on the network, due to insufficient alternative services (e.g., buses). For the avoidance of doubt it was considered that this feature need not result in payments either to operators or local communities. A slight minority, across all types of organisation, thought that whilst the indirect impacts of possessions should be considered when making decisions, they should not explicitly be linked to the regime. This is because of the additional complexity that would need to be introduced to the regime.
Related gaps in current regime	The broader impacts of possession are not currently considered by the regime. However, operators do typically work with Network Rail to ensure that possessions do not impact local communities more than is necessary (e.g., closing lines during school holidays so that disruption is minimised).

Feature 7.10	Support the industry in explaining the consequences of taking possessions in a way that is not efficient
Explanation	The industry is sometimes required to take possessions in a manner which is not the most efficient option due to a number of factors, which may include availability of equipment / engineers, end-user needs (e.g., key commuter flow) and the impact on local communities (e.g., closure would disrupt the local economy). It should be noted that the consequences (i.e., whole industry cost) of not taking a possession in an efficient manner may be broader than that single possession / possession strategy, due to knock-on impacts (e.g., equipment / engineer availability). There was a discussion about whether the regime should support the industry in explaining to end-users, wider stakeholders, and industry parties the consequences of taking possessions in a way that is not efficient (i.e., to provide visibility of the true costs of these decisions). Whilst the industry considered that it was important to be able to explain the consequences of particular possessions strategies, some parties thought that this feature should be addressed outside of the regime (e.g., that this should be delivered through greater engagement at the possessions planning stage). One of the main reasons for not including this feature in the regime was the potential for it to lead to an overly complex regime.
Related gaps in current regime	The impact of one possession strategy over another is not well understood in terms of costs and the impact on end-users. It is particularly important to explain the financial impact of different approaches to possessions for infrastructure maintenance and renewals as end-users do not necessarily see a tangible benefit, as they do for enhancements.

8 Performance

Scope: How the regime measures, incentivises and compensates for improved / poor performance

8.1 Overview

Performance is defined as the ability of an end-user to reach their destination according to the planned schedule of services they intend to use. Performance is currently measured by service and communicated by the industry through a number of different measures:

- Average Minutes Late (AML): the average lateness of a passenger as they alight a specific train service - compared to their expected arrival time (2.5 minutes[17]);
- Public Performance Measure (PPM): the percentage of planned passenger trains that actually arrive at their destination less than 5 / 10 (London & South East and Regional / Long Distance) minutes late compared to the published scheduled arrival time having completed their entire journey and called at all booked stations (89.6%[18]);
- Right time performance (RT): the percentage of planned passenger trains that actually arrive at their destination less than 1 minute late compared to the published scheduled arrival time having completed their entire journey and called at all booked stations (64.8%[18]);
- Cancellations and significant lateness (CaSL): the percentage of passenger trains that either failed to run their full planned journey or arrived at their destination 30 or more minutes late compared to the published scheduled arrival time (3.0%[18]); and
- Freight Delivery Metric (FDM): the percentage of planned freight trains that either arrived at their destination less than 15 minutes late or experienced less than 15 minutes of delay caused by Network Rail or a passenger train company on their journey (94.3%[19]).

The industry framework includes a number of mechanisms to indicate what 'good' performance looks like (e.g., these include franchise contracts and regulatory targets for Network Rail). The current regime also incentivises 'good' performance through Schedule 8 payments for over / under performance against a benchmark. Should all industry participants reach their benchmark levels of performance, then net Schedule 8 payments by each party should be zero (excluding payments to freight operators for cancelled trains). The current regime also seeks to neutralise the increased Schedule 8 liability to Network Rail of accommodating additional traffic through the Capacity Charge.

[17] Source: Network Rail, Moving Annual Average of passenger services to end of P10 2014/15
[18] Source: Network Rail, Moving Annual Average to end of P10 2014/15
[19] Source: Network Rail, Period result for P11 2014/15

8.2 Charges and incentives related to performance

Highlighted below are the charges and incentives within the current regime that are related to this topic:

Variable Usage Charge	**Capacity Charge**	Electric Current For Traction Charge	Electrification Asset Usage Charge
Station Long Term Charge	Freight Specific Charge	Freight Only Line Charge	Coal Spillage Charge
Schedule 4 Possessions Regime	**Schedule 8 Performance Regime**	REBS	Volume Incentive
Fixed Track Access Charge (including Network Grant)			

8.3 Agreed features and gaps

There was general consensus on a number of key features of the ideal regime with respect to performance. There was also general consensus on a number of gaps between the current regime and ideal regime.

The agreed features and gaps are presented below. The regime should:

Feature 8.1	Be coherent and aligned at every stage from end-users to funders
Explanation	The ideal performance regime should be coherent and aligned at every stage from end-users to funders, across all contractual boundaries. Alignment should include, where possible, the metrics used to measure performance and performance targets. However, as the performance regime is only a small part of the wider contractual and regulatory framework of the industry, it is recognised that this may not be possible. Funders, in particular, felt that this was an important feature of the ideal performance regime.
Related gaps in current regime	The performance regime is not well aligned in terms of metrics used. The performance regime is based on lateness, but industry targets for passenger delays are based on PPM, while some passengers may relate more to other measures, such as, on-time arrivals and severe delays.

Feature 8.2	Reflect end-user needs
Explanation	The regime should take into account the impact of delays or cancellations on an end-user's entire rail journey. For example, their journey may be made up of more than one train service or just part of a train service's complete journey.
Related gaps in current regime	The current performance regime is focused on services and not end-users, so it measures the impact of delays and cancellations on specific services, but not on a passenger's end-to-end journey. For example, to avoid Schedule 8 payments, a branch line service may depart almost empty because the prior connecting mainline service is delayed. In this situation, end-users would have to wait for the next connection, which may delay their end-to-end journey further. In addition, the performance regime is linked to PPM, which is not considered to be sufficiently representative of end-users needs. This may result in perverse outcomes for end-users when services are disrupted.

Feature 8.3	Encourage joint industry working to optimise whole-industry performance
Explanation	The regime should incentivise parties to work together to improve performance. Joint working may include taking actions to reduce secondary delay and also maximise positive end-user outcomes (e.g., additional stops for one operator to help another recover their service). The regime should support business cases to improve performance, particularly, where one party's costs may increase but overall there is a net industry benefit.
Related gaps in current regime	The performance regime does not encourage joint working, since operators who help out another operator to recover their service are penalised, since they in-turn incur their own delay despite doing the right thing for end-users.

Feature 8.4	Facilitate trade-offs between performance, traffic volumes, and cost
Explanation	As traffic on the network increases, performance levels are likely to decrease because disruption will impact more train services. The regime should support the industry in making trade-offs between performance, traffic growth and higher expenditure.
Related gaps in current regime	The current trade-off between performance, traffic volumes, and costs is not well understood by the industry.

Feature 8.5	Facilitate accurate and efficient attribution of the root causes of delays and cancellations
Explanation	The regime should enable the industry to develop a robust data-set of the root causes of unplanned disruption, which can help identify, and then tackle, those issues. This data-set should distinguish between the causes of primary and secondary delay so that this information can inform business cases for addressing the causes of unplanned disruption.
Related gaps in current regime	The regime (Schedule 8), whilst encouraging parties to validate the attribution of delay minutes, can also encourage parties to dispute the cause of delays and cancellations to seek to minimise their Schedule 8 payments. There are examples where the causes of delays and cancellations are not appropriately attributed, once parties dispute the cause.

Feature 8.6	Be the sole remedy
Explanation	The regime should be the sole remedy for all industry parties (i.e., that the regime should be the default mechanism for providing compensation to Network Rail and all train operators for unplanned disruption). This should minimise transaction costs, since it will not require parties to draft bilateral agreements and / or allow bilateral litigation. However, the regime should provide flexibility for Network Rail and operators to agree bespoke performance regimes, when required.
Related gaps in current regime	No gaps identified.

Feature 8.7	Take account of the increased likelihood of delay of running an additional train on the network
Explanation	The regime should reflect that as the network gets busier, the impact of unplanned disruption is likely to increase.
Related gaps in current regime	The Capacity Charge is intended to address this is. However, it is not considered to accurately reflect the financial impact of additional delay. Additionally, the purpose of the Capacity Charge is not well understood across the industry, which reduces its incentive properties.

Feature 8.8	Be effective at all levels of performance
Explanation	Any incentive properties included within the regime should act on parties regardless of the level of performance.
Related gaps in current regime	No gaps identified.

Feature 8.9	Be a liquidated sums compensation regime
Explanation	The regime should use a formulaic approach (i.e., liquidated sums) to calculate the payments to industry parties, associated with performance, to minimise transactions costs.
Related gaps in current regime	No gap identified.

8.4 Proposed features and gaps that did not produce a consensus amongst RDG members

The industry represents a wide range of interests and so it is not expected that all industry representatives would agree on each proposed feature of the ideal regime.

This section of the report sets out features of the ideal regime, which were proposed during the facilitated workshops, but where there was no consensus amongst industry representatives that it is a feature of an ideal regime.

Feature 8.10	Be fully cost reflective with a high degree of granularity
Explanation	Some participants wanted a performance regime where compensation accurately reflects the impact of each instance of disruption (e.g., reflecting time of delay and impact of delay) with a high degree of granularity. However, the majority of participants wanted the regime to be as cost reflective as possible, while remaining sufficiently simple to understand (i.e., trading off granularity with simplicity). These differences of opinion are unlikely to be able to be reconciled by the ideal regime.
Related gaps in current regime	Schedule 8 is a liquidated sums regime, meaning that compensation for a particular incident may not precisely reflect impact of that service disruption. However, whilst mainly being a liquidated sums regime, it is not considered to be simple to understand by the industry.

Feature 8.11	Be affordable
Explanation	Whilst all operators wanted to be compensated for the delays and cancellation that they experience, some operators suggested that they should not pay the full costs of the delay they cause, since this may not be affordable and / or incur too much risk. There was no consensus on this issue.
Related gaps in current regime	Freight operators considered that it was not appropriate for them to bear the full cost of a serious delay that they might cause (e.g., if they cause major delays on a main line), since they may not be able to afford the cost of compensating other parties.

Feature 8.12	Recover end-user compensation and operators' long term revenue loss
Explanation	There was no clear consensus about the types of losses that should be captured in compensation payments. Some participants thought that the regime should only recover long-term revenue losses, while others considered that the regime should also recover short-term financial impacts of end-user compensation (e.g., Delay Repay).
Related gaps in current regime	Schedule 8 predominantly covers the long-term impact of the industry, where train performance is due to deterioration in performance level. Whilst it can include mechanisms to recover the short-term losses due to end-user compensation mechanisms (e.g., Delay Repay), these are not typically used as they are seen to be too complex by passenger operators.

Feature 8.13	Reflect the socioeconomic impacts of unplanned disruption
Explanation	Some participants considered that some of the non-financial impacts of delays and cancellations should be included in the regime (e.g., the impact on businesses). However, others considered that it would result in compensation payments to parties that were greater than the financial impact that they experience.
Related gaps in current regime	The regime does not include non-financial impacts.

Feature 8.14	Reflect the full financial impact of unplanned disruption on all parties
Explanation	Whist some participants considered that operators should receive the full financial impact of unplanned disruption. Other participants, particularly Network Rail, considered that compensation, which was less than the full financial impact, could incentivise all parties, to work together, to help to improve performance. In addition, some participants thought that other parts of the industry's contractual framework (e.g. licence conditions) were more suitable mechanisms to help incentivise improved performance rather than the regime, in general, and, in particular, via reduced payment rates.
Related gaps in current regime	Schedule 8 payment rates are currently set to hold train operators neutral to the effects of unplanned disruption.

9 Use of capacity

Scope: How the regime can support the efficient allocation and use of existing network capacity, and provide signals for, and recover the costs of, creating new capacity.

9.1 Overview

The GB rail network currently consists of c.20,000 miles of track[20] and c.2,500 stations[20]. The network is a mixed-use network with traffic from both freight and passenger operators. To maintain this existing capacity, Network Rail is expected to spend £12.1bn[21] on renewals and £5.2bn[21] on maintenance during CP5.

Network Rail is also expected to spend £12.4bn[21] on enhancements to the network during CP5, which include:

- Thameslink and Crossrail (£3.1bn)[21]
- Electrification schemes (£3.0bn)[21]
- HLOS capacity metric schemes (£0.7bn)[21]
- Edinburgh to Glasgow Improvements Programme (£0.5bn)[21]

The costs of these projects are recovered by a number of charges across the lifetime of the asset through an amortisation charge based on the Regulated Asset Base. The principle recovery mechanisms for the capital costs are Station Long Term Charge, Freight Only Line Charge, Freight Specific Charge, and Fixed Track Access Charge (including Network Grant). In addition 'wear and tear' costs are recovered through variable charges (e.g., Variable Usage Charge).

Capacity allocation is the process by which a train path is allocated to a train operator. Existing network capacity is primarily allocated through administrative mechanisms. The process is based on the track access rights set out in access agreements that are agreed between Network Rail and train operators, for a define time period. Access agreements are approved by ORR. Whilst track access charges apply when the rights are used, there are no charges for the access rights themselves.

The role of the current regime in these administrative mechanisms and with allocating and controlling capacity is limited to specific monetary incentives on Network Rail (e.g., Volume Incentive).

[20] Source: Network Rail Annual Report 2013-14
[21] Source: Final determination of Network Rail's outputs and funding for 2014-19

9.2 Charges and incentives related to capacity (existing and new)

Highlighted below are the charges and incentives within the current regime that are related to this topic:

Variable Usage Charge	**Capacity Charge**	Electric Current For Traction Charge	Electrification Asset Usage Charge
Station Long Term Charge	**Freight Specific Charge**	**Freight Only Line Charge**	Coal Spillage Charge
Schedule 4 Possessions Regime	**Schedule 8 Performance Regime**	REBS	**Volume Incentive**
Fixed Track Access Charge (including Network Grant)			

9.3 Agreed features and gaps

There was general consensus on a number of key features of the ideal regime with respect to network capacity. There was also general consensus on a number of gaps between the current regime and ideal regime.

It is important to note that the agreed features, below, do not indicate industry support for capacity or scarcity charges (i.e., they do not indicate support a charge paid by operators that reflects the opportunity cost of other operators not being able to access the network).

The agreed features, below, may be delivered without leading to a charge on train operators. Instead, these features could be delivered through incentive mechanisms. For example, the current Volume Incentive, which aims to incentivise Network Rail to grow passenger and freight traffic, is paid by funders.

The agreed features and gaps are presented below. The regime should:

Feature 9.1	Facilitate trade-offs between the use of existing capacity and providing additional capacity
Explanation	The regime should support the industry in making decisions about the use of existing capacity (i.e., traffic volumes versus performance) and carrying out enhancements to deliver new capacity (i.e., costs versus improved performance).
Related gaps in current regime	The regime does not currently facilitate these trade-offs, since it is focused on cost recovery and performance. Therefore, the regime provides limited incentives for an operator to adjust its own services to align with other users to increase overall capacity.

Feature 9.2	Not price-off beneficial traffic from the network
Explanation	Where there is sufficient capacity on the network, the regime should not act as a barrier to running additional train services that provide positive economic value (i.e., deliver financial and / or non-financial benefits).
Related gaps in current regime	Some operators have noted that the Capacity Charge in CP5 has been one of the main factors that stopped them from running new services on the network.

Feature 9.3	Provide Network Rail with a net financial benefit from accommodating beneficial traffic on the network
Explanation	The regime, as a whole, should incentivise Network Rail to accommodate, where possible, additional beneficial traffic onto the network by providing Network Rail with a net financial benefit for accommodating the additional train services. The net financial benefit does not necessarily need to be paid by operators as it could be provided by funders. When accommodating additional traffic, the benefit to Network Rail should be reasonably assured (i.e., the funds that it will receive should not be uncertain).
Related gaps in current regime	The Volume Incentive is intended to provide Network Rail with an incentive to increase traffic volumes on the network. However, train operators considered that there were still insufficient incentives on Network Rail to accommodate additional traffic. It was considered that this was due to the complexity of the Volume Incentive and the uncertainty of payments (Volume Incentive payments are only finalised at the end of the control period).

Feature 9.4	Not prevent the efficient use of capacity
Explanation	The regime should not prevent Network Rail and train operators from making efficient use of existing network capacity. This is particularly important on busy parts of the network (i.e., where demand for train paths is greater than supply). For example, the regime could facilitate train operators and Network Rail to minimise the use of capacity by underutilised trains (e.g., low number of carriages and low loading factors) and / or paths (e.g., where capacity reserved, but not used) on busy parts of the network.
Related gaps in current regime	The regime was not considered to facilitate the efficient use of capacity by all operators, partially due to franchise commitments, resulting in paths on key parts of the network being underutilised

Feature 9.5	Facilitate beneficial investments in capacity improvements
Explanation	The regime, as a whole, should facilitate investments in network capacity that target the parts of the network where they are most needed. The planning and delivery of capacity improvements should not be driven by the Control Period cycle and should take place when it is best to deliver them (i.e., seeking to minimise cost and / or disruption to end-users).
Related gaps in current regime	A significant proportion of investment by Network Rail is currently driven by the Control Period cycle. Whilst there are mechanisms that allow the industry to agree and fund capital projects outside of the periodic review process (e.g., the Investment Framework), these are not widely used and are often for smaller investments.

Feature 9.6	Reflect the relative importance that end-users place on frequency, journey time and punctuality / reliability
Explanation	The regime should enable the industry to use network capacity in a way that delivers the requirements of end-users. In doing so, it should recognise that different types of end-users may have different requirements. For example, commuters may place more value on frequency of service than long-distance, intercity passengers.
Related gaps in current regime	The industry is focused on delivering against punctuality / reliability targets and not necessarily on meeting end-user needs (e.g., frequency of service). However, it should be noted that the performance regime is not the only driver of the industry's focus on punctuality / reliability, since other industry frameworks (e.g., Network Rail and franchise punctuality targets) also incentivise the industry to prioritise punctuality over frequency and volume of traffic.

Feature 9.7	Facilitate joint industry working to optimise use of capacity
Explanation	The regime should enable industry parties to work together to make efficient use of existing capacity. These incentives should act on all industry parties (i.e., not just non-franchised operators).
Related gaps in current regime	Incentives on Network Rail and train operators are not currently aligned to encourage whole-industry decisions about the efficient use of network capacity.

9.4 Proposed features and gaps that did not produce a consensus amongst RDG members

The industry represents a wide range of interests and so it is not expected that all industry representatives would agree on each proposed feature of the ideal regime.

This section of the report sets out features of the ideal regime, which were proposed during the facilitated workshops, but where there was no consensus amongst industry representatives that it is a feature of an ideal regime.

Feature 9.8	**Incentivise the efficient use of scarce capacity**
Explanation	Whilst it was agreed that the regime could facilitate the efficient use of capacity, there was no consensus on whether the regime should actively incentivise the efficient use of scarce capacity on the network. 'Efficient use' was considered to take into account factors including the benefits derived from the service variations in geography, time of day, path speeds, and the impact of a service on the performance of the network. Participants generally thought that a regime that sought to incentivise efficient use of capacity would be too complex to be applied across the entirety of the network. However, a small majority of participants, from all types of organisation, thought that an incentivisation / charging regime could exist on specific parts of the network where capacity was most scarce.
Related gaps in current regime	The current regime is not designed to incentivise the 'efficient' use of capacity. Therefore, whilst this is a gap of the current regime, it is not necessarily a failing of the current regime.

Feature 9.9	**Recover the costs of constrained capacity**
Explanation	There was a discussion about whether the regime should only recover the infrastructure manager's wear and tear costs from accommodating additional train services, or whether it should also recover additional costs such as the value that other end-users may place on their use of this constrained capacity (i.e., the opportunity costs). There was no consensus reached on this issue, with some participants noting that compliance with EU legislation on mark-ups may make this feature difficult to implement across all operators. Some parties, in particular freight, thought that due to the localised nature of constrained capacity this may be better managed through other industry mechanisms outside of the regime. In addition, there was also concern that any capacity charge based on opportunity costs would be subjective.
Related gaps in current regime	The current regime typically only seeks to recover the efficient short-run marginal costs associated with using an unconstrained network and does not include the opportunity costs associated with using constrained capacity.

Feature 9.10	Include an appropriate level of aggregation to incentivise optimal usage of capacity
Explanation	There is no consensus about the level of aggregation at which any charges which incentivise the optimal usage of capacity should be applied (e.g., route specific vs. by junction). Should such a charge be introduced, freight operators preferred a more aggregated approach, while passenger operators thought that it would need to distinguish between different routes (e.g. mainline / branch lines) and time of day (e.g., midday vs. am peak usage).
Related gaps in current regime	The current regime does not distinguish by time of day and for some operators by route.

Feature 9.11	Help to identify areas of the network where new capacity is required
Explanation	There was a discussion on the ability of the regime to help identify areas of the network where new capacity is required. While some participants considered that this would be a valuable feature of the regime, it was generally thought that this would make the regime too complex. In addition, some participants thought that the identification of new capacity was best left to alternative industry mechanisms.
Related gaps in current regime	The current regime does not include any signals which could help to identify areas that require new capacity. This is not necessarily a failing of the current regime, since it was not intended to provide these signals.

10 Gaps in the current regime

10.1 Introduction

In addition to identifying the features of the ideal regime, Phase 2b also explored the industry's views on the gaps between the current and ideal regime as defined by the features of the ideal regime.

For the purposes of this report a 'gap' is defined as the difference between a feature of the ideal regime and the current regime.

This section summaries these gaps in one place to help the readers of this report. The gaps are also presented in context, with their associated feature, in Sections 4 to 9 of this report.

10.2 Summary of gaps relating to the overarching features

For ease of reference, the gaps between the current regime and the ideal regime, relating to the overarching features, that were identified are summarised in this section.

The current regime does not:

Axioms

- Take sufficient account of the way that users of alternative transport modes are charged.

Judgement criteria

- Provide stability for operators; and
- Provide confidence that it is straightforward and easy-to-use.

Outputs

- Provide confidence that the current cost allocations are sufficiently transparent; and
- Facilitate business planning by third parties. For example, changes in charges from CP4 to CP5 have reduced the willingness of third parties to invest in infrastructure and rolling stock.

Regulatory

- Provide sufficient clarity on its purpose and so it is not well understood by industry, funders and broader stakeholders. In addition, decisions made about the regime during the Periodic Review process are not sufficiently transparent (e.g., what compromises are made and how the decision is reached).

Alignment

- Align well with the wider industry framework;
- Take sufficient account of its constraints. There is a perception across the industry that too much reliance is placed on the regime to deliver solutions to issues that it is not in a position to deliver;
- Prevent new, unaligned, charges and incentives from being 'bolted-on' to the regime; and

- Provide clarity on how policy decisions impact Network Rail's cost base.

Methodological

- Work well in areas of the network where demand for services is contracting; and
- Sufficiently reflect end-user needs. It was first developed during the rail privatisation and has not been adequately updated to take account of changes in end-user needs.

Operational

- Support changes away from the current 'as-is' state of infrastructure and is not sufficiently flexible to take account of improvements and innovation; and
- Enable the delivery of most industry outputs and aims.

Further details of the gaps in relation to 'overarching features' can be found in Sections 4.3 and 4.5 of this report.

10.3 Summary of gaps relating to a specific area of the regime

For ease of reference, the gaps identified between the current regime and the ideal regime, which relate to specific areas of the regime, are summarised in this section.

The current regime does not:

Running costs

- Enable sufficient industry understanding of Network Rail's cost drivers;
- Have payments and incentive rates that are always underpinned by up-to-date data;
- Always hold Network Rail, at a minimum, neutral to the cost of running an additional service;
- Provide sufficient incentives, for any party to rationalise network capacity, or consider alternative levels of service provision; and
- Properly attributed / allocate the Network Grant to users of the network.

Further details of the gaps in relation to 'running costs' can be found in Section 5.3 of this report.

Customer experience

- Fully reflect the needs of end-users;
- Enable understanding of the trade-offs between additional traffic levels, performance, and costs;
- Support the industry in meeting the needs of end-users;
- Always incentivise parties to work together. For example, more than one party may be involved in the operation and management of a station which may lead to gaps in the provision of services at stations; and
- Enable sufficient investments in stations to occur if a franchised operator is near the end of their franchise contract.

Further details of the gaps in relation to 'customer experience' can be found in Section 6.3 of this report.

Possessions

- Compensate operators fully, through Schedule 4 payments, for the costs they incur when Network Rail takes a possession;
- On average, make Network Rail cost neutral to efficient possessions. Network Rail has typically over-recovered its Schedule 4 costs through the Access Charge Supplement, suggesting that this part of the regime may not be working;
- Consider the impact of possessions on the end-user experience, it only considers the impact on services;
- Always incentivise Network Rail to take the most appropriate possession. There are examples of circumstances where the current regime incentivises Network Rail to utilise shorter possessions. However, in some cases, a blockade may be a more efficient;
- Incentivise Network Rail to making sensible changes to its possessions plans due to the early booking discount;
- Enable the industry to understand the impact of one possessions strategy over another, in terms of costs and the impact on end-users. In addition, this impact is not considered at a sufficiently early stage of planning projects;
- Place sufficient incentives on Network Rail to consider the costs of other industry parties; and
- Have sufficient flexibility to allow Network Rail to move possessions, at short notice.

Further details of the gaps in relation to 'possessions' can be found in Section 7.3 of this report.

Performance

- Align with other industry metrics used to measure performance;
- Measure the full impact of delay on a passenger's end-to-end journey (e.g., which may include an interchange), since the performance regime uses the impact of delays and cancellations on specific services to measure lateness, and not on end-user journeys;
- Encourage joint working due to the set-up of delay attribution mechanisms;
- Enable sufficient industry understanding of the trade-offs between performance, traffic volumes, and costs;
- Prevent parties from minimising their Schedule 8 payments through disputing the cause of delays and cancellations; and
- Always reflect the actual financial impact of running an additional train on the network through the Capacity Charge.

Further details of the gaps in relation to ‘performance’ can be found in Section 8.3 of this report.

Use of capacity

- Provide sufficient incentives on operators to adjust their services to align with other operators to increase overall path capacity;
- Encourage operators to run new services on the network. The Capacity Charge has impacted the business cases of some additional rail services to the extent that they are not provided;
- Place sufficient incentives on Network Rail to accommodate additional traffic;
- Facilitate the efficient use of capacity by all operators;
- Encourage the use of mechanisms that allow the industry to agree and fund capital projects outside of the periodic review process;
- Focus the industry on meeting end-user needs (e.g., frequency of services), instead the industry is focused on delivering against punctuality / reliability targets; and
- Align incentives on Network Rail and operators to encourage whole-industry decisions about the efficient use of network capacity.

Further details of the gaps in relation to ‘capacity’ can be found in Section 9.3 of this report.

11 Elements of the regime to be retained

Whilst the industry identified a number of gaps between the RDG Vision and the current regime, there are many aspects of the current regime that the industry thinks should be retained. Some of these are quite detailed, and no attempt is made to captures those in this report. However, the main, high-level, features of the current regime that the industry thinks should be retained are summarised below.

The current regime:

Overarching features

- Does not put the safety of the network at risk;
- Is consistent with legislation;
- Supports investment in the industry from funders and third parties. Whilst other industry frameworks were considered to act as barriers to investments in the industry, it was agreed that the regime has created an environment that has supported investments by governments and third parties; and
- Does not prevent competition between operators.

Running costs

- Recovers the costs of wear and tear to infrastructure in a way that is understood by the industry;
- Allows Network Rail to recover its running costs; and
- Provides incentives on Network Rail to deliver cost efficiencies.

Customer experience

- Incentivises industry wide performance improvements though a focus across the regime on performance and punctuality; and
- Allows the industry to work together through alternative structures (e.g., Alliances) to deliver end-user needs.

Possessions

- Operates as a liquidated sums regime for calculating compensation for lost revenue, with bespoke arrangements for larger possessions;
- Provides reasonable compensation to operators for the loss of revenue associated with possessions;
- Facilitates the early notice of possessions; and
- Is secondary to possessions planning – it does not drive it.

Performance

- Operates as a liquidated sums regime for calculating compensation payments for unplanned disruption;
- Includes the Star Model as the core of the Performance Regime;
- Is the sole remedy;
- Is effective at all levels of performance; and
- Supports delay attribution.

Use of capacity

- Facilitates growth in freight and passenger services.

12 Summary of findings

This project has highlighted significant elements of the current regime that work well. RDG is keen to retain these. However, there are also considerable opportunities to improve the regime. We should not lose the opportunity of the industry's early engagement to highlight what are some significant weaknesses.

The findings of this phase of work are explained in the rest of the report. However, there are some key points that cut across all aspects of the regime:

- The industry should have a broader and clearer understanding of the purpose and aim of the regime;
- The industry should be realistic about the limits of what the regime can achieve and how closely it can be aligned with the ideal regime;
- The regime should align with: other parts of the industry's regulatory and contractual framework; public transport policies; and the needs of customers (passenger and freight users);
- The regime needs to provide stability to allow for business planning and industry investments;
- Whilst the industry identified a number of gaps between the RDG Vision and the current regime, there were aspects of the current regime that the industry thought should be retained. For example, marginal wear and tear charges and aspects of the performance regime (e.g., liquidated sums) were considered to be broadly aligned with the RDG Vision; and
- When proposing changes to the regime:
  - Consider which parts of the regime are switched off by other industry arrangements (e.g., franchise agreements) and reflect this in the regime, i.e. do not assume that changes impacts all parties in the same way. However, we should still recognise that there may be informational benefits of making changes, even if other industry arrangements weaken incentive properties;
  - Take into account those parts of the industry that compete with other modes (e.g., road and air); and
  - Align any additional charges and incentives with the rest of the regime, i.e. avoid 'bolt-ons' to the regime.

To help inform the focus of the next phase of RDG's Review of Charges work programme, this report also identifies areas of the regime where there are the largest gaps between the ideal regime, as set out in this report, and the current regime. These are detailed further in Section 7213 (Observations).

When RDG's Review of Charges work programme was initiated, it was clear that it should consider the industry's views on long-term charges and incentives arrangements, i.e. over the next 15 years. The next phase of work should consider both the long term 'direction of travel' for the regime, and also those improvements that can be made more quickly, which will help to contribute to the industry's longer-term aims.

13 Observations

RDG's work on charges and incentives is a positive example of the industry working together. It is the first attempt by the industry to set out, proactively, its own views on key elements of the regulatory framework, ahead of ORR formally commencing a periodic review. Industry representatives have engaged well in this phase of work. Throughout this process, there has been a clear ambition to improve the current charges and incentives regime.

As part of this phase of work, the industry highlighted some aspects of the current regime that align strongly with the features of the ideal regime and these features should be retained. Other aspects of the regime may, however, require a significant review / recalibration.

The scope of this report does not include the development of options for a new and / or updated regime. Options will be considered in the next phase of RDG's Review of Charges. However, this section of the report sets out observations about the regime that could help to inform the scope of future work in this area.

The approach taken to the facilitated workshops could be considered to be a 'bottom-up' review, i.e. it was based on an assessment of the current regime. However, in developing the scope of future work, it may be appropriate to also consider a 'top-down' review, i.e. to consider significantly different approaches to the entire regime, so that RDG's conclusions are not restricted to the existing regime.

Whilst the features identified as part of Phase 2b should be valid across all States of the World, their relative importance will change depending on the State of the World that the regime is being designed to operate under.

The next phase of RDG's Review of Charges should not avoid discussions on contentious issues. For example, whilst there are clearly a range of industry views on the way that network capacity could be charged for, and allocated, it is important that the industry continues to address these difficult topics. If it does not, then the conclusions of RDG's review may be too narrowly focused on the existing regime.

To inform the next phase of the work programme, the rest of this section highlights the elements of the regime where future work could be focused. However, in carrying out the next phase of work, it will be important to consider whether the regime, as a whole, aligns with the RDG Vision, i.e. whether the industry needs to consider options that are fundamentally different from the current regime to enable the RDG Vision to be delivered.

***Prioritise for development**:* Capacity charge | Possessions regime | Performance regime

Whilst this work highlighted some positive aspects about the Performance and Possessions Regime (e.g., liquidated sums approach), the Capacity Charge was not considered to align well with the RDG Vision. These elements of the regime are linked, through Schedule 8 payment rates and so any review should consider these elements together.

***Improve transparency and information**:* Fixed Track Access Charge | Network Grant

There is a lack of transparency about what FTAC and Network Grant pay for. Additionally, there was recognition that, unless there are significant changes to industry structure, the underlying money flows of FTAC and Network Grant are unlikely to change (i.e. FTAC is likely to remain, ultimately, underwritten by funders, and open access and freight markets are unlikely to be able to bear significant contributions to Network Rail's fixed costs). However, there may be benefits in reviewing how FTAC and Network Grant are attributed / allocated to improve information available to industry decision makers. To support improved transparency of FTAC and Network Grant a better understanding of Network Rail's cost drivers is required.

Potential for development: Volume incentive | REBS

The industry did not consider these incentives to be sufficiently effective. They are not necessarily considered to be a priority for change but should be considered if there are sufficient resources to review them.

Consider as part of other RDG workstreams*:* Freight Specific Charge | Freight Only Line Charge | Coal Spillage Charge | Station Long Term Charge

Freight and passenger operators have suggested that there are aspects of these charges that could be improved. However, these charges cover relatively discreet parts of the regime and account for a small proportion of the regime's overall revenue. Therefore, whilst recognising that individual charges should not be considered in isolation from the rest of the regime, it may be beneficial to work collaboratively with other RDG groups to develop options for these charges. The RDG Freight Group may be best placed to support the review of this group of freight charges. Similarly, the RDG Stations Strategy Group may be used to support a review of the Station Long Term Charge. In doing so, it will be important to maintain a holistic approach to RDG's Review of Charges.

Retain*:* Variable Usage Charge | Electric Current for Traction Charge | Electrification Asset Usage Charge

The industry was broadly supportive of these elements of the current regime, suggesting that these are not priority areas for review. However, if it is considered that there should be significant changes to other elements of the regime the impact on this group of charges will need to be assessed.

Introduce

Options for a new and / or updated regime should not be limited to modifications of existing charges and incentives. Therefore, the next phase of RDG's work may consider new charges and / or incentives to align the regime with the features of the ideal regime. For example, considering how network capacity is funded.

14 Appendices

14.1 Phase 2b participants

Phase 2b was supported by representatives of the following organisations

Organisation type	Organisation
Passenger Operators and Owning Groups	Abellio Greater Anglia
	Arriva
	c2c
	Directly Operated Railways
	East Coast (under Directly Operated Railways)
	East Midlands Trains
	First Group
	Go-Ahead
	GTR (Govia Thameslink Railway)
	Merseyrail
	National Express
	Northern Rail
	South West Trains
	Southeastern
	Southern
	Virgin Trains
	Virgin Trains East Coast
Freight Operators	DB Schenker
	Direct Rail Services
	Freightliner
	GB Rail Freight
Infrastructure Manager	Network Rail
Industry Bodies	Rail Delivery Group
	Rail Freight Group
Funders / policy makers and regulators	Department for Transport
	Office of Rail and Road
	Transport Scotland
	Welsh Government
Workshop facilitators	L.E.K. Consulting (International) Limited

14.2 Glossary of key terms and abbreviations

Control Period (CP)	A control period is the period to which an access charges review (i.e., a Periodic Review) applies
CP4	Control period 4 (1 April 2009 – 31 March 2014)
CP5	Control period 5 (1 April 2014 – 31 March 2019)
CP6	Control Period 6 (starts 1 April 2019)
Delay Repay	Delay Repay is a passenger compensation mechanism for unplanned disruption
DfT	Department for Transport
EAUC	Electrification Asset Usage Charge
EC4T	Electric current for traction
ECML	East Coast Main Line
End-users	End-users are customers of the operators who utilise railway services. These include passengers, station users, and freight users
FDM	Freight Delivery Metric
Features	An element of the ideal charges and incentives regime that has been identified by RDG representatives
FOC	Freight operating company
FOL	Freight only line
Franchise	Franchise operators are those who operate passenger services for a specific geographical area, with a set service level and have a contract with the franchising authority (e.g., Transport Scotland) to provide these services, which may not be run on a commercial basis
FSC	Freight specific charge
FTAC	Fixed track access charge
Funders	Funders are organisations that provide money to invest in the GB rail network, these are typically public sector bodies (e.g., Department for Transport)
Gap	The difference between a feature of the ideal regime and the current regime
GRIP	Governance of Railway Investment Projects
HLOS	High-level output specification
IIP	Initial industry plan
Network Rail	Network Rail is the infrastructure manager of the GB rail. Network Rail's customers are the operators
Open Access (OA)	Open Access operators are those who operate passenger services purely on a commercial basis (i.e., not under either a franchise or a concession agreement).
Operators	Operators are the companies that run services, both passenger and freight, on the Railway. Their customers are the end-users of the network
ORR	The Office of Rail and Road
OSTI	Other single till income
OTM	On-train metering (of traction electricity)

Owning group	Owning groups are the parent companies of franchised passenger operators and / or Open Access operators
PAYG	Pay-as-you-go
PPM	Public Performance Measure
PR08	The 2008 periodic review (relating to CP4)
PR13	The 2013 periodic review (relating to CP5)
PR18	The 2018 periodic review of Network Rail (relating to CP6)
RAB	Regulatory asset base; ORR's calculation of the value of Network Rail's assets
RDG	The Rail Delivery Group
RDG Vision	RDG vision for the charges and incentives regime in the long run
REBS	Route-level efficiency benefit sharing mechanism
Review of Charges	This report is a constituent part of RDG's Review of Charges
RFG	Rail Freight Group
ROSCO	Rolling stock leasing company
SBP	Network Rail's strategic business plan
SFN	Strategic Freight Network
SoFA	Statement of funds available
SPP	Sustained Poor Performance
TABS	Track Access Billing System
The regime	The charges and incentives regime for the use of Network Rail's infrastructure
TOC	Train operating company
VTISM	Vehicle Track Interaction Strategic Model
VUC	Variable Usage Charge
WCML	West Coast Main Line