Rail Delivery Group

Review of Charges: Summary Report

November 2015

Contents

Foreword

The railway matters. It delivers more than 1.6 billion passenger journeys and over 24 million tonnes of freight each year. Whilst it faces significant challenges, the industry is focused on providing a safe railway, great customer experience, and better value for money.

Each rail journey is made possible by train operators and Network Rail working together. Train operators rely on Network Rail's infrastructure to run their services. Train operators and Network Rail see each other as partners in making journeys work well for users. There are also significant money flows between them.

Train operators pay to use Network Rail's infrastructure. Train operators and Network Rail also exchange money in recognition of good or poor train punctuality. These money flows allow Network Rail to pay for the activities it is responsible for, and allow train operators to manage their business risk. They make sure train operators and Network Rail work hard to deliver punctual services. They also encourage train operators and Network Rail to make best use of network capacity.

Every five years, the Office of Rail and Road (ORR) resets the industry's money flows through a large programme of work called the periodic review. The next periodic review is due to start in 2016.

It is crucial that the next periodic review is focused on making sure that there is clarity about the purpose and principles of each money flow. These principles should be applied consistently across the rail network. This is important because the inconsistencies and lack of clarity of purpose in current arrangements can create tensions and misalignment of interests between train operators, Network Rail and funders.

At ORR's last periodic review, the industry waited for ORR to set out its views before responding. This time, the industry, through the **Rail Delivery Group** (RDG), has taken the time to carefully set out its own views before ORR starts its review.

RDG's Review of Charges was set-up in early 2014 and this report sets out the findings from nearly two years of engagement. It has involved around 100 stakeholders from across the industry and has put the industry in a strong position to work with ORR during its next review.

I want to thank our members and other stakeholders who have contributed to the RDG review.

We hope that ORR gives high regard to industry's views and that it builds upon RDG's work. In particular, we hope that ORR takes careful note of the areas of the charges and incentives regime where we have identified the most significant issues, and focuses its resources in these areas.

Paul Plummer

CEO, Rail Delivery Group and Association of Train Operating Companies

Chair of RDG's Contractual and Regulatory Reform Working Group

The **Rail Delivery Group** was established to offer a new way for the industry to work more collaboratively, by bringing together Network Rail and passenger and freight operators. Key to RDG's work is identifying and helping implement ways for the railway to become more cost efficient, thereby giving the Government options of holding down fares, reducing subsidy levels and increasing investment. RDG is also committed to bringing the industry together to deliver better services for passengers and other rail users.

1. Executive Summary

1.1. Purpose and background

The purpose of this report is to set out the findings of the Rail Delivery Group's (RDG's) Review of Charges – a work programme, carried out over almost two years, to set out the industry's views on the charges and incentives regime for the use of Network Rail's infrastructure.

RDG's work is set out in a number of detailed reports that were published on RDG's website[1] and shared with the Office of Rail and Road (ORR) as each phase of work concluded. However, we have summarised the findings of our review in this report to help readers access the different parts of our work.

It is the first attempt by the industry to set out its own views on key elements of the regulatory framework, ahead of ORR formally commencing a periodic review. We have sought to capture where members agree on issues and also to articulate the diversity of views, where there is not a shared position. Where we have considered options for change, this should not be taken as RDG recommending that any, or all, should be implemented. Instead our work is intended to inform industry debate on reform.

We have published this report shortly before ORR issues its consultation on the structure of charges. However, most of the outputs from RDG's work have been published well in advance of this. As ORR has been involved throughout RDG's review, we are confident that it has had the opportunity to consider the findings of our work in developing its consultation.

ORR determines the structure of Network Rail's charges and incentives through its periodic review process – ORR's next review will start in 2016. It will set the charging arrangements for a five-year period from April 2019.

The current structure of charges is made up of fixed and variable elements and is primarily cost-based. A number of financial incentive mechanisms also exist that are intended to promote various 'desirable' outcomes. These include the: Possessions Regime (Schedule 4); Performance Regime (Schedule 8); Volume Incentive; and Route-level Efficiency Benefit Sharing (REBS) mechanism.

1.2. How RDG's work should be used

We hope that ORR gives high regard to industry's views and that it builds upon RDG's work. In particular, we hope that ORR takes careful note of the areas of the charges and incentives regime where we have identified the most significant issues, and focuses its resources in these areas.

RDG is keen to continue to engage constructively with ORR during the next periodic review, with the aim of improving the charges and incentives regime.

1.3. Key findings

We have set out, below, the overarching findings from our review. More detailed observations and recommendations, for each phase of the project, are presented in the rest of this report.

<u>RDG members agreed a vision for charges and incentives</u>

- The RDG Vision for Charges and Incentives ('*RDG Vision')* formed the **basis for our work** on charges and incentives. It provided the framework against which options for change could be assessed.
- The 'ideal' regime depends on the environment that charges and incentives operate within. However, it should result in: Network Rail **accountability**; **non-arbitrary** allocation of costs; **optimal traffic** growth; the **alignment** of industry incentives; and **value for money** for funders, taxpayers and users. We encourage ORR to draw on RDG's Vision as it develops its charges and incentives policy.

<u>The purpose of each element of the charges and incentives regime should be clear</u>

- ORR should work with the industry to create a broader and clearer understanding of the **purpose** of each element of the charges and incentives regime.

[1] RDG's Review of Charges webpage can be accessed at: http://raildeliverygroup.com/what-we-do/our-work-programme/contractual-regulatory-reform/review-of-charges.html.

- Decisions made about the regime during the periodic review process should be more **transparent** so that stakeholders have a better understanding of how decisions have been reached.
- Additional charges and incentives should be **aligned** with the overall purpose of the regime, i.e. avoid 'bolt-ons' to the regime.

The charges and incentives regime should reflect the reality of the GB rail industry and we should not assume that changes impact all parties in the same way

- ORR should be **realistic** about what the charges and incentives regime can achieve.
- Explicit consideration should be given to the **parts of the regime that are switched off** by other industry arrangements (e.g. franchise agreements) and this should be reflected in ORR's review.
- The regime needs to provide **stability** to allow for business planning and industry investments, recognising that asset lives in the rail industry are often 30 years or more.
- Charges and incentives should reflect the **wider benefits that the GB railway provides** to the UK economy (economic and societal), e.g. making the economy more productive by up to £11.3bn[2], and be mindful that it is a mixed-use railway.
- The charges and incentives regime should take a **single approach** to the network as a whole, i.e. the principles for calculating charges and incentives should be the same across the network.
- Currently, few industry participants are able to fully respond to price signals, e.g. many franchised operators have very limited choice as to what services they are required to offer. Therefore, without wider changes to industry arrangements, the **impact of making changes to charges and incentives is limited.**

The charges and incentives regime should align with other industry arrangements

- The regime should **align** with: other parts of the industry's regulatory and contractual framework, e.g. franchise agreements; public transport policies; economic policy (productivity and growth); and the needs of customers (passenger and freight users).

The next periodic review (PR18) should prioritise areas of the regime that are most in need of reform

- There should be a relatively **high hurdle for making changes** to the charges and incentives regime, i.e. there should be a demonstrable benefit that clearly outweighs the costs involved in making changes to the regime. ORR should recognise this in its PR18 impact assessments.
- There were aspects of the current regime that the industry thought should be **retained**. For example, marginal wear and tear charges and the fundamental architecture of the performance and possessions regime (e.g., liquidated sums) were considered to be broadly aligned with the RDG Vision.
- RDG identified a **number of gaps** between the RDG Vision and the current regime. For example, the industry highlighted significant issues with the capacity charge, and considered that the regime did not enable sufficient industry understanding of Network Rail's cost drivers. ORR should focus its periodic review work on the parts of the regime that RDG has highlighted as being most in need of reform.
- ORR should identify **early in PR18** the likelihood of change, and exclude those options that, in reality, are unlikely to be deliverable, e.g. where data is unavailable or where changes would not lead to improvements in industry outcomes.

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[2] Source: Oxera, "What is the contribution of rail to the UK economy?" 2015. This is available at: http://www.raildeliverygroup.com/files/Publications/2015-09_contribution_of_rail_to_UK_economy-1.pdf.

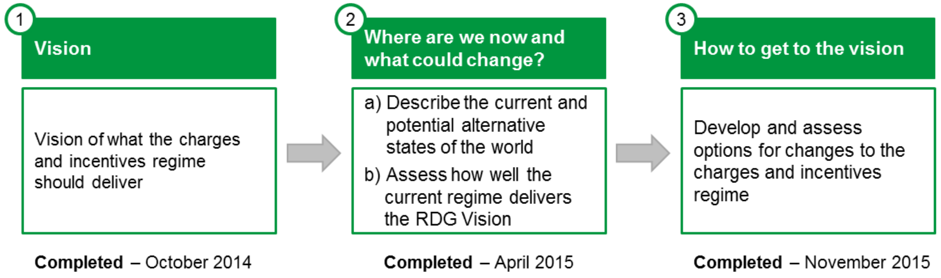
<u>ORR should recognise the potential impact of changes to charges and incentives on industry stakeholders</u>

- ORR should consider the **impact** of changes to charges and incentives on promoting safe working within the GB rail industry.
- Any options that are proposed by ORR should be fully **assessed**, both individually, and in combination with the rest of the regime, before implementation, to determine the likely impact on both individual stakeholders and each market segment.
- ORR should recognise that seemingly small changes to the regime can have significant **financial consequences** for some operators, particularly freight and open access passenger operators. This can also have detrimental consequences on the willingness to invest in the industry (particularly where non-rail alternatives exist).
- ORR should recognise that there is a clear **distinction between cost allocation and charging**. Where there are benefits from having better information on costs, this information does not necessarily have to be used in charges.
- Consideration should be given to the ability of market segments served by operators to **bear changes** to the charges and incentives regime. In particular, ORR should take into account those parts of the industry that compete with other modes (e.g. road and air) by taking an holistic view of GB transport.
- ORR should recognise the **burden** that periodic reviews place on organisations within the GB rail industry.

1.4. Approach to the review

RDG's Review of Charges was made up of three phases of work and represents nearly two years of engagement with stakeholders from across the GB rail industry. It started in early 2014 and concluded in November 2015.

Figure 1: High level plan for RDG Review of Charges



The findings of RDG's Review of Charges are intended to reflect the views of RDG's membership, i.e. passenger operators, freight operators and Network Rail. However, our work has also been informed by governments (Department for Transport (DfT), Transport Scotland and Welsh Government). ORR has also been involved in this project, as an observer.

To develop our findings, we have worked with around 100 industry stakeholders and three different independent consultancies. The consultants have supported our work and also provided helpful external challenge. Industry representatives have engaged fully with the project and there has been a clear ambition to improve the current charges and incentives regime.

We are grateful for the many contributions that have informed this work.

The work carried out, and the findings from each of the three phases of the project, is set out in detail in separate reports that are available on RDG's website. The rest of this report seeks to summarise the findings of those reports. Links to each detailed report are provided in the relevant sections of this document.

2. Introduction and background

Summary

- This chapter sets out the purpose of this report and the background to RDG's Review of Charges.
- This report draws together the findings from all three phases of RDG's Review of Charges.
- Our review focussed on the charges and incentives regime for use of Network Rail's infrastructure.
- RDG's work seeks to constructively inform ORR's next periodic review process (PR18), and future reviews, by presenting the industry's own conclusions on the charges and incentives regime.
- This work is part of RDG's Contractual and Regulatory Reform Working Group (CRRWG).

2.1. Purpose of this report

The purpose of this report is to set out the findings of RDG's Review of Charges – a work programme, carried out over almost two years, to consider the industry views on the charges and incentives regime for the use of Network Rail's infrastructure.

The work carried out, and the findings from each of the three phases of the project, is set out in detail in separate reports that are available on RDG's website. The rest of this report seeks to summarise the findings of those reports. Links to each detailed report are provided in the relevant sections of this document.

2.2. Structure of this report

This report draws together the findings of RDG's Review of Charges and sets out:

- the scope, purpose and background of the review;
- the current charges and incentives regime;
- the approach to the review; and
- the main findings from the review.

2.3. Rail Delivery Group

The RDG seeks to improve services for rail users and deliver better value for money for taxpayers. It was set up in 2011 to bring together the owners of Britain's passenger train operating companies, freight operators and Network Rail to provide leadership to Britain's rail industry

RDG's mission is to promote greater co-operation between train operators and Network Rail through leadership in the industry and by working together with governments, the supply chain and stakeholders. RDG is committed to the long-term health of the railway but also recognises the need to see improvements in the shorter term.

RDG's current work programme covers a wide range of industry issues and is delivered by a number of 'Working Groups' or Workstreams'.

RDG's role in this project was to provide a framework, for the organisations it represents, to set out their views on various aspects of the charges and incentives regime. RDG, in this report, and other Review of Charges reports, is used as 'shorthand' for referring to the views of its member organisations.

2.4. What is RDG's Review of Charges?

RDG's Review of Charges is an industry-led review of the charges and incentives regime, for use of Network Rail's infrastructure. It considers how charges and incentives might operate under several alternative 'States of the World' (or industry scenarios). This work forms part of RDG's Contractual and Regulatory Reform Working Group (CRRWG).

This project has provided an opportunity for train operators (passenger and freight) and Network Rail to work together to clearly set out their own views on the appropriate structure of charges and incentives, prior to ORR communicating its own work for PR18 at the end of 2015.

Additionally, this project sought to improve the understanding of charges and incentives across the industry and to provide sufficient time to consider charging and incentives issues for the next control period.

The time horizon for our review was 2029, i.e. the end of Control Period 7. However, we have given particular focus to the next Control Period (CP6).

2.5. Scope of RDG's review

The scope of RDG's Review of Charges includes 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. Our review was not just focused on the track access charges that are paid by operators to Network Rail, but it also considered Network Grant and incentive mechanisms, which include the Possessions Regime, Performance Regime, Route-level Efficiency Benefit Sharing (REBS) mechanism and the Volume Incentive.

2.6. Why has RDG carried out this work?

Charges and incentives are important because:

- charges account for over £1.6bn of Network Rail's income every year (£5.5bn including Network Grant) and allow Network Rail to recover the costs of providing rail infrastructure on a proportionate basis;
- they provide price signals to users, and policy makers for the efficient use of infrastructure – they can affect the way that Network Rail and train operators work together to deliver the service that customers expect;
- they help train operators to manage business risk;
- they define rail's 'pricing' compared with alternative transport sectors;
- they facilitate private sector investment; and
- they allow the costs of the railway to be spread across the life of assets.

In 2013, The Brown Review of the Rail Franchising Programme[3] recommended that a full review of the track access charging regime was undertaken in advance of Control Period 6 (CP6), i.e. before 1 April 2019.

At the beginning of 2014, RDG set up its Review of Charges project.

RDG wanted to inform ORR's next periodic review (PR18), and future periodic reviews, by setting out the industry's own views on the charges and incentives regime. By doing this before the start of PR18, we hope to allow ORR to focus its resources on those areas where the industry has identified the most significant issues. This should help to reduce industry time and effort spent discussing non-priority issues during PR18.

The volume of work required to be completed during previous periodic reviews has meant that some work on charges and incentives has been 'timed out'. Therefore, we wanted to carry out this project to give sufficient time to these issues before the formal start of PR18.

Penny Boys' Independent Study into ORR's Consultation with Stakeholders during PR13[4] suggested that ORR could improve its next periodic review, i.e. PR18, by taking steps, which included, simplifying and prioritising the process of engagement with stakeholders and by considering the use of more collaborative approaches for developing policy. We consider that RDG's Review of Charges is a positive example of industry collaboration, which should help ORR to engage with industry stakeholders during PR18.

2.7. Industry context

At the time of writing this report, there are a number of industry reviews taking place. This includes the Shaw Report on Network Rail's financing and the CMA consultation on competition in passenger rail services. These

[3] The Brown Review of the Rail Franchising Programme is available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/49453/cm-8526.pdf.

[4] An Independent Study into the Office of Rail Regulation's Consultation with Stakeholders during PR13 is available at: http://orr.gov.uk/__data/assets/pdf_file/0020/17624/pr13-independent-review-report-by-penny-boys.pdf.

reviews may lead to significant changes in the structure of the industry. To ensure that the findings of RDG's review are robust to changes in industry structure, we have tested them, against a set of potential alternative industry scenarios (or 'States of the World').

Also, in July 2015, the Summer Budget announced that "… the government will change the way it channels public money through the industry, directing it through the train operating companies, so that Network Rail focuses firmly on the needs of train operators, and, through them, passengers[5]." We have factored this announcement into our review, specifically by assuming that the majority of Network Rail's income flows through regulated charges, paid by train operators, in future control periods.

2.8. How should this work be used?

Without fettering ORR's discretion, we hope that ORR builds on the work that RDG has done, particularly reflecting on the areas of the regime where RDG has identified the most significant issues.

RDG is keen to continue to engage constructively with ORR during PR18 to improve the charges and incentives regime. We would like to work closely with ORR during PR18 and this would be assisted by greater transparency in the way that ORR communicates its emerging thinking and its direction of travel.

[5] Summer Budget 2015 available at: https://www.gov.uk/government/publications/summer-budget-2015/summer-budget-2015.

3. Current charges and incentives regime

Summary

- This chapter explains the approach to setting the structure of charges and incentives and what that structure looks like in CP5.
- ORR determines the structure of Network Rail's charges and incentives through its periodic review process.
- Charges are primarily cost-based.
- Only 20% of Network Rail's income varies with traffic. The rest is received from fixed charges, government grants and commercial income such as Network Rail's property rent.

3.1. Setting charges

ORR carries out a periodic review for a five-year control period, where it determines:

- the outputs that Network Rail needs to deliver (regulatory outputs);
- the level of income (or revenue requirement) that Network Rail can recover to fund its activities, and how that income is made up through charges and other sources; and
- a range of incentive mechanisms to encourage Network Rail to deliver and outperform its determination on outputs and funding, and to provide incentives to other industry parties.

Network Rail's revenue requirement represents the income and charges that are consistent with the delivery of its regulatory outputs. It is set at a level which ORR determines to be sufficient to fund the efficient expenditure that it considers Network Rail needs to deliver its regulatory outputs.

The majority of Network Rail's income is received through access charges and government grants – this is the net revenue requirement:

- Track access charges – income from train operators in return for access to the rail infrastructure;
- Station access charges – income to maintain, renew and repair the stations that it owns; and
- Network grant - paid by governments to Network Rail in lieu of track access charges paid by franchised passenger operators.

The remainder of Network Rail's revenue requirement is recovered through other sources, such as income from Network Rail's property portfolio or from some enhancements undertaken by Network Rail, e.g. Crossrail.

ORR approves charges for the whole of the control period as part of the periodic review, and there is limited scope to change charges within a control period.

3.2. Current structure of charges and incentives

ORR's PR13 determination[6] stated that for Control Period 5 (CP5), i.e. from April 2014 to March 2019, track access charges provide:

- *Cost recovery*: A mechanism for Network Rail to recover the efficient costs it incurs in providing track and station infrastructure used by train operators;
- *Signals for efficiency of use*: Users make better use of services, including capacity, by responding to signals sent through prices based on cost. Charges provide signals to train operators, their suppliers and funders for the efficient use and development of vehicles and the infrastructure;
- *Signals for cost efficiency and allocation*: Charges allow costs to be allocated. Where charges allocate costs to those who have caused them to be incurred they provide an incentive to reduce those costs; and
- *Signals for efficient provision of goods and services*: Charges send signals to providers as to the goods and services they should provide. In this case, charges could provide an incentive to Network

[6] ORR's PR13 Final Determination is available at: http://orr.gov.uk/__data/assets/pdf_file/0011/452/pr13-final-determination.pdf.

Rail to respond to signals sent by users through prices and their consumption decisions about what they are willing to pay for and what Network Rail should therefore provide (as long as those charges cover the cost of provision).

The current structure of charges is made up of fixed and variable elements, and is primarily cost-based.

Figure 3.1: CP5 charging structure

'Variable costs' Generally apportioned and charged based on wear and tear	'Variable charges' are mainly based on costs that Network Rail incurs in the short-run, from accommodating 'an additional train' on the network, i.e. wear and tear costs and traction electricity costs (they assume a fixed network and do not take account of the economic value of network capacity). These charges account for approx. £1bn of Network Rail's annual income in CP5.
'Fixed costs' Apportioned and charged based on traffic metrics	Costs which do not vary in response to small changes in traffic are termed 'fixed costs'. These are recovered via: • Fixed Track Access Charge, paid by franchised passenger operators (approx. £0.5bn per year in CP5); • Freight Specific Charge and Freight-Only Line Charge, paid by freight operators, which recover some of the fixed costs related to freight (approx. £7m per year in CP5); and • Station Long Term Charge, which recovers the costs of the long term upkeep of station assets (approx. £150m per year in CP5). Network Rail also receives government grants, in lieu of fixed charges (approx. £4bn per year in CP5), and other income (approx. £0.8bn per year in CP5), e.g. from its property portfolio.

A number of financial incentive mechanisms also exist that are intended to promote various 'desirable' outcomes. These include the: Possessions Regime (Schedule 4), Performance Regime (Schedule 8), Volume Incentive and Route-level Efficiency Benefit Sharing (REBS) mechanism.

European legislation, and its transposition into UK law, provides guidance in respect to charges and incentives. It offers considerable flexibility for the structure of charges and incentives but does mandate certain aspects of the regime.

4. Approach to RDG's Review of Charges

Summary

- This chapter sets out the structured approach that we have taken to RDG's Review of Charges.
- The project was made up of three phases of work and represents nearly **two years of engagement** with stakeholders from across the GB rail industry.
- To develop our findings, we have worked with around **100 industry stakeholders** and three different independent consultancies.
- The **industry has come together and engaged collaboratively** on this issue. Our findings seek to reflect the views of the industry and provide clarity on issues where industry parties agree and also where they have a range of views.

4.1. Overview of approach

RDG's Review of Charges represents nearly two years of engagement with stakeholders.

The findings of RDG's Review of Charges are intended to reflect the views of representatives from across RDG's membership, i.e. passenger and freight operators and Network Rail. However, our work has also been informed by governments (DfT, Transport Scotland and Welsh Government). ORR has also been involved in this project, as an observer.

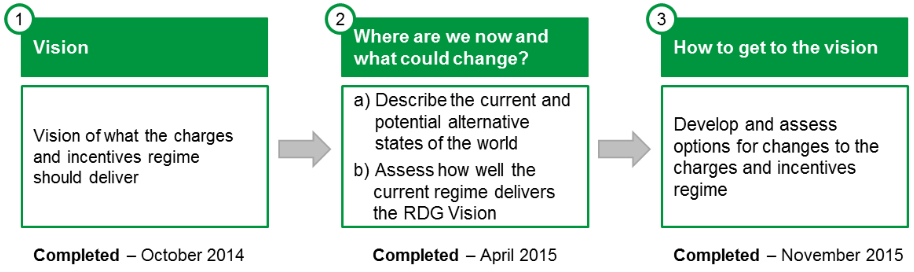
We are grateful for the many contributions that have informed this work.

We have sought to be transparent about the work we have undertaken and published the main reports from our work on RDG's dedicated Review of Charges webpage as the review has progressed[7].

The project was made up of three distinct, but related, phases of work, beginning in 2014 and concluding at the end of 2015.

[7] RDG's Review of Charges webpage is available at: http://raildeliverygroup.com/what-we-do/our-work-programme/contractual-regulatory-reform/review-of-charges.html.

Figure 4.1: High level plan for RDG Review of Charges



Phase 1: RDG Vision for Charges and Incentives in the Long Run

The RDG Vision sets out RDG members' views on what the charges and incentives regime should deliver in the long run. It provided the framework against which various options could be assessed later in the review.

The majority of the work for Phase 1 was completed between April and September 2014. It was the product of a number of workshops that brought together views from a wide range of industry stakeholders.

During Phase 1, RDG also produced a user guide which set out to provide an overview of the regulatory charges and incentives mechanisms that are in place in the GB rail industry in CP5.

Phase 2: Assessment of the current regime and States of the World

This phase was a stepping stone to developing options for changes to the charges and incentives regime in later stages of the review. It built on the RDG Vision, and was made up of two parts:

1. *<u>Current and potential alternative states of the world</u>:* we described the current environment in which charges and incentives operate within (the 'State of the World') and developed a number of alternative States of the World, in which we could test options for changes to the charges and incentives regime.
2. *<u>Assessment of the current charges and incentives regime</u>:* we assessed how well the current regime delivers RDG's Vision. This assessment set out the elements of the regime that work well and also those areas where there were gaps. The findings were developed, primarily, through

a series of industry workshops, facilitated by L.E.K. Consulting (International) Limited, between January and March 2015.

Phase 3: Assessment of options

The final phase of work sought to develop and assess options for changes to the charges and incentives regime. It was made up of three main elements:

1. *Factors that impact the form and/or the effectiveness of the regime*: we identified the main institutional, policy, economic and practical factors that should be considered by policymakers when proposing changes to the regime.
2. *Impact assessment*: informed by the previous phases of work, we selected 22 options for changes to the charges and incentives regime. For each option, we assessed how the option performs against the RDG Vision, in both the current, and alternative, States of the World. We then undertook further analysis of seven of the options, where we thought ORR was likely to consider the option in PR18 or because it performed well in the initial assessment. Where we have considered options for change, this should not be taken as RDG recommending that any, or all, should be implemented. Instead our work is intended to inform industry debate on reform.
3. Station charging: whilst station charges were not identified as a priority area for RDG's Review of Charges during Phase 2, industry representatives wanted to ensure that RDG's work provided sufficient coverage of stations charging. Therefore, we set up a series of dedicated meetings, with industry representatives, to consider potential improvements to this area of charging.

4.2. Engagement with RDG and wider industry

Whilst this was an RDG review, we wanted to make sure that we also worked with stakeholders outside of RDG's member organisations. Therefore, we have also drawn on expertise from the wider industry. In total, across the three phases of work, we have engaged with around 100 industry stakeholders.

Our findings have been developed through a series of workshops and one-to-one meetings with representatives from across the industry to gather the information we required to develop our findings.

The project was guided by a working group (The Review of Charges Executive Group), which included representatives from passenger operators, freight operators, Network Rail and governments (DfT, Transport Scotland and Welsh Government), with ORR attending as an observer.

We would like to thank all of the people, from across the industry that have given their time and expertise to support this project.

4.3. Use of expert advice

Because of the extensive nature of the review, each phase has been supported by specialist consultancies. These consultants have informed our work and provided an external perspective and challenge to the review.

Each phase has been different in the way that we have needed support from consultants.

The first two phases required consultants, primarily, to shape and reflect the views of members:

- in the case of Phase 1, FTI Consulting facilitated members to articulate the industry's vision for the charges and incentives framework; and
- similarly, Phase 2 required the consultants, L.E.K. Consulting (International) Limited (L.E.K. Consulting), to deliver a work programme that drew out industry views on the current charges and incentives regime.

Phase 3 required the consultants, Cambridge Economic Policy Associates (CEPA) to develop independent assessments of a number of potential options for change to the current charges and incentives regime. These assessments have had the benefit of significant input from RDG representatives and the wider rail industry e.g. in order to scope options which mitigate industry concerns or reservations about a particular form of charge or incentive. This input has allowed CEPA to ensure that the development of the options and the assessments of them are grounded in the reality of the range of business models currently in operation within the rail industry.

5. Phase 1: RDG Vision for Charges and Incentives in the Long Run

Summary

- This chapter summarises the approach to, and findings from, the first phase of the project.
- The RDG Vision articulates what the charges and incentives regime should deliver in the long run and provides the framework against which various options could be assessed later in the review.
- The vision should remain valid, even if external factors change the environment in which the charges and incentives regime would operate.
- This phase brought together different industry groups in a way that was able to deliver a vision that had the 'buy-in' of all RDG members.
- As part of this phase we also produced a charges and incentives user guide.

5.1. Approach

RDG's Vision was the product of a number of workshops that brought together views from a wide range of industry stakeholders. With support from FTI Consulting, we sought to develop a vision for charges and incentives that could provide the basis for the rest of the review.

***The RDG Vision articulates what the charges and incentives regime should deliver in the long run and provides the framework against which various options can be assessed later in the review*.**

RDG's vision should remain valid, even if external factors change the environment in which the charges and incentives regime would operate. Therefore, we tested the vision against a number of different 'States of the World' (or scenarios), in which the regime may operate, in the future. For example, where there are different degrees of flexibility in franchise specifications or greater on-rail competition. The States of the World were developed further in the next phase of the project.

In developing the RDG Vision, we also sought legal advice to confirm that RDG's vision was compliant with current legislation.

As part of this phase of work, we also produced the 'Charges and Incentives User Guide' to provide an overview of the regulatory charges and incentives that are in place in the GB rail industry in CP5. The guide is intended to:

- help inform and support discussion on charges and incentives; and
- provide a useful reference for industry colleagues and provide a sign-post for further detail and contacts.

5.2. Findings: What is the vision?

The RDG Vision presents the shared view of RDG members on what the charges and incentives regime should achieve in the long run:

- the pre-requisites the regime should follow (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 resulting outputs that should be delivered by the regime (outputs).

Figure 5.1 sets out the axioms, objectives and judgement criteria that are the building blocks of an ideal charges and incentives regime. These building blocks should deliver the outputs, which are also presented in Figure 5.1.

The RDG Vision does not specify a particular structure of charges and incentives. Instead, the 'ideal' regime depends on the environment that charges and incentives operate within.

Figure 5.1: Overview of RDG Vision for Charges and Incentives

Axioms	Objectives
• System safety • Consistency with law • Funding of Network Rail efficient costs • Allowance for market conditions • A single approach for the network as a whole	• Service costs recovery • Efficient whole-system whole -life industry net costs • Efficient long run investment decisions • Efficient performance management • Efficient use of network capacity
Outputs	**Judgement criteria**
• Network Rail accountability • Non-arbitrary allocation of costs • Optimal traffic growth • Aligning industry incentives • Value for money for funders, taxpayers and users	• Predictability • Simplicity • Transparency • Low transaction costs

5.3. How have we used the vision?

RDG's vision provided the basis for the rest of the review:

- Phase 2. It was used to assess the current charges and incentives regime to understand the gaps in the current regime; and
- Phase 3. When we assessing options for the charges and incentives regime, we used the axioms, objectives, judgement criteria and outputs as the main criteria against which to assess each option.

Whilst there are some differences, ORR's own objectives for charges and incentives for PR18 have also been informed by RDG's Vision.

5.4. Where to find more information

For more information, please download the following documents:

- RDG Vision for Charges and Incentives in the Long Run at: http://raildeliverygroup.com/files/Publications/2014-12_rdg_review_of_charges_phase_1_vision.pdf; and
- RDG's Charges and Incentives User Guide is available at: http://www.raildeliverygroup.com/files/Publications/2014-07_charges_and_incentives_user_guide.pdf.

6. Phase 2: Assessment of the current regime and States of the World

Summary

- This chapter summarises the approach to, and findings from, the second phase of the project.
- Phase 2 used the **RDG Vision as the basis of our assessment** of the current charges and incentives regime.
- RDG's assessment of the current regime was informed by a series of stakeholder workshops.
- RDG's assessment highlighted **significant elements of the current regime that work well** and RDG is keen to retain these benefits. However, there are also **opportunities for improvements**.
- To enable RDG to test options for changes to the charges and incentives regime, we also **developed seven alternative States of the World**, i.e. scenarios for the environment that charges and incentives could operate within.

6.1. Approach

Phase 2 was a stepping stone to developing options for changes to the charges and incentives regime in later stages of the review. It built on the work completed in Phase 1 and was separated into two main activities:

A. Current and potential alternative States of the World

RDG developed a number of alternative States of the World, in which it could test options for changes to the charges and incentives regime.

Informed primarily by two workshops with the Review of Charges Executive Group, we developed a description of the current State of the World and then identified seven alternative States of the World.

To develop the alternative States of the World, we considered the main drivers of change to the current State of the World and the effect of those drivers. We then determined the changes that were likely to have the most significant effect on charges and incentives and then grouped complementary changes together.

In developing the set of potential alternative states of the world, we have not made any judgements on the desirability of each alternative State of the World.

B. Assessment of the current charges and incentives regime

The assessment was developed, primarily, through a series of industry workshops, facilitated by L.E.K. Consulting.

Each workshop covered a specific aspect (or theme) of the charges and incentives regime: running costs; customer experience; possessions; performance; use of capacity (existing and new); and coherence of the regime and alignment of incentives.

For each part of the regime, RDG considered the following questions:

- Building on the RDG Vision, what are the features[8] of an ideal regime?
- What are the main gaps[9] 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 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 the assessment report.

6.2. Findings: Current and alternative States of the World

The current State of the World was summarised by setting out the main characteristics in relation to: infrastructure; train operations; and funders,

[8] A 'feature' is defined as something tangible that the regime does, e.g. whether it should facilitate the efficient use of possessions.

[9] A 'gap' is defined as the difference between a feature of the ideal regime and the current regime.

governments and regulation. The main characteristics are summarised in Figure 6.1.

Figure 6.1: Current State of the World

Infrastructure	Train operations	Funders, governments and regulation
• Monopoly provider • Mixed usage network • Product not fungible • Range of capabilities and technology across the network • High fixed costs, which are not easily allocated to users • Long planning horizons and long asset lives • Common charging methodology	• Highly specified franchises for provision of passenger services with some open access services • Open access provision of freight services • Limited exposure to changes in passenger access charges but exposure for freight • Conflicting user priorities	• Two main funders: DfT and Transport Scotland (TS) • Regional / third party funders have some involvement • DfT/TS regulate franchises. ORR regulates safety and infrastructure • Governments take majority of financial risk • EU legislation influences characteristics of the structure of charges

Figure 6.2 provides a summary of the seven alternative States of the World that were identified as part of this phase of work. It shows which 'Features' of the current State of the World change.

The first three alternative states of the world are focused on different approaches to passenger service delivery, e.g. different degrees of on-rail competition, franchise protection and franchise specification.

The remaining States of the World reflect specific changes to other parts of the industry, e.g. approach to capacity allocation or approach to industry funding, which can be considered separately, or in conjunction with, other States of the World.

In selecting the alternative states of the world, we considered the following:

- more than one state of the world can co-exist on the network, e.g. there could be more on-rail competition for intercity services but more heavily specified franchises for commuter/local services;
- we avoided 'cluttering' the alternative states of the world so that they were not overly specific;
- we considered changes that were complementary, e.g. more regional decision making is likely to require a different approach to funding; and
- we did not set out any views on which States of the World industry preferred.

Figure 6.2: Alternative States of the World

Feature	How will the current feature change?	Alternative states of the world						
		1. A more dynamic railway	2. On-rail comp. via flexible franchising	3. More highly specified franchises	4. Freight protection / subsidy	5. Beneficiary pays for capability	6. Change in approach to capacity allocation	7. More regional decision making
On-rail competition	Increase in on-rail competition	✓	✓					
Franchise protection	More / less protection	✓ (less)		✓ (more)				
Franchise flexibility	More / less flexibility	✓ (more)	✓ (more)	✓ (less)				
Freight protection	More protection and / or direct subsidy				✓			
Availability of network capacity	Increase in network capacity (HS2 or technology driven)						[✓]	
Approach to infrastructure funding	Beneficiary pays for new network capability	✓				✓		✓
Approach to allocating network capacity	More analytical approach to allocation, e.g. responsive to changes in demand	✓					✓	
Regional decision-making	Greater regional decision making							✓

Please note: the symbol [✓] reflects that we will consider Alternative State of the World 6 with, and without, increased network capacity

6.3. Findings: Assessment of the current regime

RDG's assessment highlighted significant elements of the current regime that work well and RDG is keen to retain these benefits. However, there are also opportunities for improvements. We should not lose the opportunity of the industry's early engagement to highlight what are some significant weaknesses.

The findings in relation to each aspects of the regime are set out in the main report. However, there are some key points that cut across all aspects of the regime, which we highlight below:

- 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 the review, at this stage, we also identified areas of the regime where there are the largest gaps between the ideal regime, as set out in our assessment, 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. discount structure) were considered as priorities for development. In contrast, the Variable Usage Charge and Electric Current for Traction received broad industry support, in their current form.

6.4. Where to find more information

For more information, please download the following documents:

- Current and alternatives States of the World at: http://raildeliverygroup.com/files/Publications/2015-05_rdg_roc_states_of_the_world.pdf; and
- Assessment of the current charges and incentives regime at: http://raildeliverygroup.com/files/Publications/2015-05_rdg_roc_assessment_of_current_regime.pdf.

7. Phase 3: Development and assessment of options

Summary

- This chapter summarises the approach to, and findings from, the third phase of the project.
- The 'Factors' report describes the main institutional, policy, economic and practical factors, which should be considered by policymakers when proposing changes to the regime – these factors were considered in our assessments of options.
- Our initial assessment, considered 22 different options for changes to the charges and incentives regime, which covered: network charges; station charges, performance regime; and possessions regime. We then considered seven of these options in further detail.
- The criteria used to assess each option were drawn from RDG's vision for charges and incentives.
- The options that we have assessed are not necessarily supported by RDG – the purpose of this phase was to set out the advantages and disadvantages of options and draw out industry views.
- Currently, few industry participants are able to fully respond to price signals, e.g. many operators have very limited choice as to what services they are required to offer. Therefore, without wider changes to industry arrangements, the impact of making changes to charges and incentives is limited.
- A greater understanding of the drivers of Network Rail's costs may improve industry decision making. However, this information does not necessarily need to be reflected in charges to drive changes in behaviour.
- Because changes impact operators differently, any options that are proposed by ORR should be fully impact assessed, both individually and in combination with the rest of the regime, before implementation, to determine the likely impact on both individual stakeholders and each market segment.

7.1. Approach

Phase 3 built on the previous two phases of work, using the:

- assessment of the current regime to inform the options that we selected to be assessed;
- RDG Vision as criteria against which to assess options; and
- alternative States of the World to test whether the assessment of an option differed if it was to operate in a different industry environment.

Phase 3 was made up of three main elements of work, described below:

1. Factors that impact the form and/or effectiveness of the regime

This report was the result of a combination of desk-based research by CEPA and discussions with a range of industry stakeholders. It describes the main institutional, policy, economic and practical factors, which impact the charges and incentives regime. The analysis focuses on the current State of the World. However, it does consider how the factors are affected by changes to the current State of the World. We think that this is the first time that all of these factors have been drawn together in a single document.

***2.* Impact assessment**

<u>Option selection</u>

The 22 options that were assessed as part of the initial assessment sought to address some of the main gaps in the regime that were identified in the previous phase of work. To ensure that the options were not just 'tweaks' to the existing regime we also considered more fundamental options for change during two workshops with the Review of Charges Executive Group in May and June 2015. Informed by further discussions with the group, we then finalised the list of 22 options in July. The options covered: network charges; station charges, performance regime; and possessions regime.

<u>Approach to assessment</u>

CEPA undertook a high-level assessment of each of the 22 options using a standardised template, agreed with the Review of Charges Executive Group. The criteria used in the assessments were drawn from RDG's Vision, i.e. the assessment considered how well an option helped to deliver the RDG Vision. The assessments also set out other information including those options that may conflict or complement the change being considered, and the implications for different groups of stakeholders.

Each option was assessed as to whether the option would be an improvement to the relevant part of the existing regime.

Given the qualitative nature of the assessments, each option was graded using a directional 'traffic light' system: Red (-), Amber (=), or Green (+). Each assessment includes an overall grading in each State of the World. That grading reflects an 'in the round' judgement – it is not a simple sum of the grades against each criterion.

Choosing options for further analysis

Informed by the findings of the initial assessments, and discussions with the Review of Charges Executive Group, we selected seven of the 22 options for further analysis. The seven options were selected either because:

- the option scored well in the initial assessment, and we wanted to explore the opportunities of the option further; or
- we thought that the option was likely to be considered in the next periodic review and we wanted to set out industry views, supported by evidence, to inform the debate in PR18.

It is important to note that the **seven options considered for further analysis do not necessarily represent a set of improvements to the current regime that are recommended by RDG**.

Detailed assessment

The more detailed analysis of the seven options built on the initial assessments, i.e. it used the same 19 criteria from RDG's Vision. However, it considered the impacts on different stakeholders in more detail, covering six stylised train operators (passenger and freight), Network Rail, funders, and passengers and freight users. The analysis was informed by high-level quantitative analysis on the impact of each option and it also reviewed potential implementation issues associated with each option.

To reflect the more detailed analysis, CEPA was able to provide a more granular grading mechanism by introducing two additional grades of '++' which represents a clear/strong positive impact on a given criterion and '- -' for a clear/strong negative impact.

CEPA's role in the assessments

The assessments reflect CEPA's independent assessment of the options. However, the assessments have also had the benefit of significant input from RDG representatives and the wider rail industry in order to scope options which mitigate industry concerns or reservations about a particular form of charge or incentive. This input allowed CEPA to check that the development of the options and our assessments of them are grounded in the reality of the range of business models currently in operation within the rail industry.

3. Stations charging

As part of RDG's Review of Charges, we set up a small working group of representatives from passenger operators, Network Rail, ORR to focus on station charges. These individuals were nominated by members of RDG's Stations Strategy Group.

Our review of stations charging took place alongside the other Phase 3 activities and we have maintained a clear link to the rest of the project.

The findings from the stations charging work have been developed, primarily, through a series of discussions with the working group between June and October 2015. However, the assessment of options for changes to station charges was supported by CEPA.

7.2. How to use the assessments

Both the initial (22) and detailed (seven) assessments provide a relatively comprehensive review of each option and, together, provide a significant body of evidence that can be used by RDG members and ORR to support discussions during PR18.

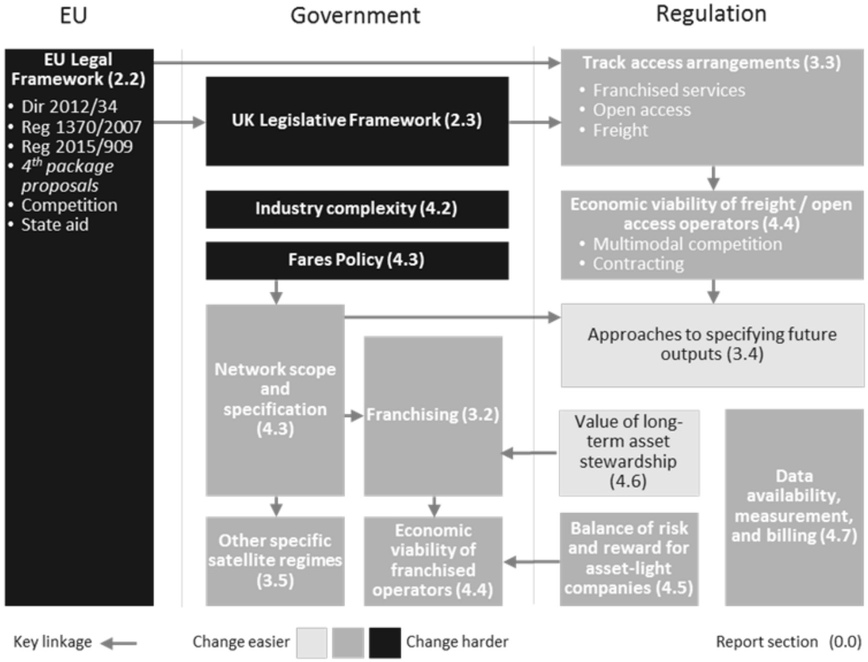
Whilst we have assessed a wide range of options, there may be some options that are discussed as part of PR18 that we have not covered. The design of the assessment templates provides a framework that should allow us to replicate the assessments for additional options relatively easily. Similarly, options that were only considered in the initial assessment can easily be expanded, should an option become relevant for PR18.

7.3. Findings: Factors that impact the form and/or the effectiveness of the regime

RDG has identified 14 main factors that impact on the form and/or effectiveness of the regime, i.e. that affect what the regime looks like and how well it delivers its stated objectives.

Figure 7.1 summarises these 14 factors. These include EU legislation, franchising and industry complexity. Figure 7.1 highlights the key areas where factors arise, the identity of the party that primarily controls the factor, the ease with which the factor can be changed and key relationships between them.

Figure 7.1: Factors that impact the form and/or the effectiveness of the regime



From the 14 factors, we have identified six 'themes' that are most important when considering changes to the charges and incentives regime (in no particular order):

- legal issues;
- data, measurement and billing;
- funding flows for the GB rail industry;
- industry complexity and alignment of incentives;
- the ability of franchised passenger train operators to accept and respond to additional risk and changes in the level of charges; and
- the ability of freight and open access operators to accept changes in the level of charges.

Further detail on each factor can be found in the main report at the section number indicated in brackets in Figure 7.1.

7.4. Findings: Impact Assessment

Initial assessment

Figure 7.2 maps the 22 options for changes to the charges and incentives regime, which were assessed, onto the 'themes' used in Phase 2. Many of the options relate to more than one theme, e.g. the avoidable cost approach (option 1) is shown in 'Running costs', but could also be included in 'Use of capacity'.

Whilst we have highlighted some of the key findings from the assessments in this section, we do not discuss the detailed findings for the assessment of each option in this report. These are set out in the main initial assessment report.

Figure 7.2: Options considered in impact assessment

Customer experience
- 12 Regulate station Qualifying Expenditure charge
- 13 Station-by-station Long Term Charge
- 18 Recover end-user compensation

Performance
- 15 Reset benchmarks more frequently
- 16 More granular capacity charge
- 17 Payments < or > 100% compensation

Running costs
- 1 Avoidable cost
- 2 Ability to pay mark-ups
- 6 Environmental charge
- 9 Geographically disaggregated VUC
- 10 Average cost charge

Possessions
- 19 More frequent ACS recalculation
- 20 Benchmarked regime
- 21 Payments < or > 100% compensation
- 22 Reform discounts

Use of capacity
- 3 Scarcity charge (LRMC)
- 4 Scarcity charge (administered)
- 5 Scarcity charge (auctions)
- 7 Reservation charge
- 8 Track occupancy charge

Coherence of the regime and alignment of incentives
- 11 Revenue sharing
- 14 Station revenue sharing

Note: Options highlighted in dark green were also considered in detailed assessment.

CEPA's initial assessments found that only a few options performed very poorly in the assessments - we did not explore these options further. Therefore, there were at least some potential benefits (or opportunities) from many of the options considered. Examples of options that did not perform well included:

- Auctions for scarce capacity (option 5), which were found to be impractical even on a very limited basis, in a complex industry such as rail;
- Environmental charge (option 6), which was considered to increase the cost of rail transport compared to less environmentally friendly modes such as roads; and
- Average cost charging (option 10) was not considered to align well with cost reflective charging and would not comply with legislation, unless charged as a mark-up.

Some options were not, in their own right, deemed to deliver sufficient improvements to the current charges and incentives regime. For example, 'ability to pay mark-ups (option 2) was not assessed in more detail on the basis that further consideration would be given to this option as a way of implementing the 'avoidable cost' approach (option 1). Similarly, geographically disaggregated variable usage charge (option 9) on its own, could provide perverse incentives around the use of heavily used parts of the network. It was not selected for further analysis on the basis that it was considered as part of the detailed assessment of the administered scarcity charge (option 4).

The assessments of options for station charges were not generally positive. Whilst CEPA considered that these options could provide some benefits, they were not thought to address some of the main issues at stations, which are around ownership, planning and accountabilities. These options were considered by the station charges working group.

The options that were considered for further analysis either performed relatively well in the initial assessment or they were options that RDG thought ORR may consider as part of PR18.

Therefore, seven options considered for further analysis do not necessarily represent a set of improvements to the current regime that are recommended by RDG.

Detailed assessment

The options considered for further analysis by CEPA are set out in Figure 7.3. Figure 7.3 represents a summary CEPA's assessment of each option for each of the States of the World that we have developed as part of this review. It summarises CEPA's assessments in a relatively simplistic way because it seeks to set out the overall industry impact of each option (with symbols).

Whilst this table is helpful in considering the holistic industry impact of each option, it cannot show the effect on different industry parties for each option.

These impacts can vary significantly across the industry, i.e. within each option there could be significant ‘winners’ and ‘losers’. Therefore, to fully understand the assessments of each option, it is important to refer to the detailed assessment report. The detailed report also includes industry commentary on each option (in ‘blue boxes’ at the end of each assessment).

Figure 7.3: Summary of CEPA’s detailed assessment gradings

State of the World / Option	1. Avoidable cost	4. Scarcity charge (administered)	7. Reservation charge	15. Reset benchmarks more frequently	18. Recover end-user compensation	19. More frequent ACS calc.	22. Reform discounts
Current State of the World	=	+	+	+	+	+	=
A more dynamic railway	++	++	+	+	++	++	=
On-rail competition via flexible franchising	+	++	+	+	++	+	=
More highly specified franchises	=	- -	+	+	+	+	=
Freight protection / subsidy	=	+	=	+	+	+	=
Beneficiary pays for capability	+	+	+	+	+	+	=
Change in approach to capacity allocation	+	++	+	+	+	+	=
More regional decision making	=	=	+	+	+	+	=

CEPA’s key observations from the detailed assessment were that:

- the overall gradings of the options are relatively positive. This reflects that each option was envisaged to deliver the greatest benefits possible;
- current industry arrangements, i.e. the current State of the World, places limits on the effectiveness of changes to the charges and incentives regime. However, there is still some scope for improvements to charges and incentives without wider industry reform;
- where industry participants have greater ability to respond to price signals, e.g. where there is more competition between operators in the market or an alternative approach to allocating network capacity, there is more scope for changes to charges and incentives to have significant impact on the use of the network and industry behaviours;
- changes to charges can increase the financial risk faced by operators. This may be more significant for some operators, such as freight and open access passenger operators;
- informational benefits may be delivered by using an avoidable cost approach to better understand Network Rail’s cost drivers in the current State of the World; and
- the assessments of options relating to the performance and possessions regimes are less sensitive to changes in States of the World than the charging options.

RDG’s comments on CEPA’s assessment

- RDG members have a range of views on these options, reflecting the differences of their businesses, with some options having potentially significant financial impacts on certain stakeholders.
- The options considered by CEPA sought to address some of the areas of the regime that are in most need of change.
- ORR should work with the industry if it decides to take forward any of these, or further, options.
- Whilst there was some consensus on the investigation of avoidable cost information as a way of improving understanding of Network Rail’s costs, there was only limited support for using such information in charges, particularly in the current State of the World.
- There was a general consensus that the option to reset performance regime benchmarks more frequently for changes in traffic should be explored further during PR18.

RDG's comments on CEPA's assessment (continued)

- Charges interact with each other so it is important that these options should not be considered in isolation but alongside the whole regime.

7.5. Findings: Stations charging

The findings of our work on station charges are explained in the stations charging report. However, our key messages are that:

- station charges matter because they affect the way that Network Rail and train operators work together to deliver the service that customers expect at stations;
- station charges currently recover the costs of maintaining stations in their existing state. They do not encourage challenge of what is there now and they are generally treated as uncontrollable costs. Charges should become a stimulus for challenging the current approach to stations and whether money is being used as well as it can be, for passengers;
- whilst improvements can be made to station charges, there are limits to what they can achieve. Reform of charges is not a substitute for industry leadership; and
- a robust and consistent station charging framework is increasingly important as ownership and management of stations becomes more diverse. Train operators need to be clear about who is accountable for each station, how they will be charged for using a station, and what they can expect in return.

7.6. Where to find more information

For more information, please download the following documents:

- Factors that impact the form and/or the effectiveness of the regime report available at: http://raildeliverygroup.com/files/Publications/2015-11_rdg_roc_review_of_factors.pdf;
- Initial assessment report available at: http://raildeliverygroup.com/files/Publications/2015-11_rdg_roc_initial_options_assessment.pdf;
- Detailed assessment report available at: http://raildeliverygroup.com/files/Publications/2015-11_rdg_roc_detailed_options_assessment.pdf; and
- Stations charging report available at: http://www.raildeliverygroup.com/files/Publications/2015-11_rdg_roc_stations_charging_report.pdf.

Annex A: Summary of 22 options assessed in Phase 3

The following table provides a summary of the options for charges and incentives that were assessed as part of Phase 3 of RDG's Review of Charges:

Option	Title	Description of option
1	Avoidable cost	Use Long Run Incremental Cost (LRIC) principles to establish a causal link and make the allocation of fixed costs more cost reflective than the current Fixed track Access Charge (FTAC)
2	Ability to pay mark-ups	Allocate FTAC in a more granular manner, more closely reflecting operators' ability to pay
3	Scarcity charge (Long Run Marginal Cost (LRMC))	Set a scarcity charge, supplementing the Variable Usage Charge at constrained locations/times, based on the marginal future cost of upgrading the line
4	Scarcity charge (administered)	Set a scarcity charge, supplementing the VUC at constrained locations/times, based on the estimated full economic value (opportunity cost) of reserving a path
5	Scarcity charge (auctions)	Set a scarcity charge, supplementing the VUC at constrained locations/times, based on operators' revealed willingness to pay for scarce network capacity
6	Environmental charge	Capture a broader set of external environmental costs in variable charges
7	Reservation charge	Charge non-refundable deposits to secure capacity, discouraging hoarding of paths
8	Track occupancy charge	Allocated fixed charges based on the duration of scheduled journeys, rather than traffic metrics
9	Geographically disaggregated Variable Usage Charge	Set the VUC to capture the impact of track type on wear and tear, not just vehicle type
10	Average cost charges	No fixed charges. Variable charges set to capture average costs and recover Network Rail's revenue requirements
11	Revenue sharing	Give Network Rail a stronger financial incentive to focus its activities on those that would boost revenue, not just traffic
12	Regulate station Qualifying Expenditure (QX)	A regulated QX charge would provide an independent challenge to the charges for the day-to-day operation of stations that are currently negotiated confidentially between Station Facility Owners and operators at each station
13	Station-by-station Long Term Charge (LTC)	A station-by-station (rather than portfolio) LTC would ensure that the charge for each station within the portfolio also reflects expenditure at each station, providing a clearer basis for franchisees to challenge these charges at each location
14	Station revenue sharing	A station revenue sharing mechanism sought to address the current lack of financial incentive to align Network Rail's station maintenance activities with the interests of franchised station facility owners and other operators

Option	Title	Description of option
15	Reset Schedule 8 benchmarks more frequently for traffic	Schedule 8 could absorb the capacity charge through updating Network Rail's Schedule 8 benchmark annually to take into account traffic growth/reductions
16	More granular, rebranded capacity charge	This option proposes including peak vs. off peak as well as weekend vs, weekday, and further geographic disaggregation (currently Service Code level) of the charge
17	Payments < or > compensation[10]	Schedule 8 payments are 100% of the calculated financial impact. This option examines paying less than (<)100% to incentivise train operators to help reduce disruption or greater than (>) 100% to increase the incentive factor on Network Rail
18	Recover end-user compensation	The performance regime does not include a component to reimburse passenger operators for passenger compensation (i.e. that paid through Delay Repay). This option proposes including such a component
19	More frequent access charge supplement recalculation	The Access Charge Supplement (ACS) is currently set ex-ante at periodic reviews. More frequent recalculations could be used to adjust the baseline Schedule 4 cost (and the ACS) for variations in the volume of renewal and maintenance activity during the price control period
20	Benchmarked possessions regime	A benchmarked possessions regime would set an allowed level of possessions, for which Network Rail would not have to pay compensation to train operators. Payments would only be made if possessions rise above the relevant benchmark
21	Payments < or > 100% compensation	Schedule 4 payments are 100% of the calculated compensation requirement; adjusting the payments rates alter the level of risk and the incentives faced by both Network Rail and train operators in minimising possessions disruption
22	Reform possessions regime discounts	Reforming the structure of discounts for early notification of possessions would aim to address some concerns in the industry that discounts incentivise early but not necessarily efficient planning of possessions

[10] These options relate to payments being set at a level greater or less than compensation. The same is true of option 21.

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