



OFFICE OF RAIL REGULATION

The potential for increased on-rail competition – a consultation document

October 2011

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Executive summary

This document

1. In this document we set out for consultation our thinking on the potential for more direct competition for passengers between passenger train operators (on-rail competition) to help meet the value for money challenge that faces the industry. We consider whether more on-rail competition would be desirable, taking account of its impact on passengers and taxpayers. We note the impact that it could have on the flow of funds through the industry and in particular on the flow of taxpayer funds. We also consider how greater on-rail competition might be achieved, setting out in particular how an effect on taxpayer funds might be mitigated.
2. ORR has a statutory duty to promote competition in the provision of railway services for the benefit of users of railway services. Our consideration of on-rail competition in this document is in line with our statutory duty. We must balance this duty against our other duties, including duties to have regard to the funds available to the Secretary of State and to enable persons providing railway services to plan the future of their businesses with a reasonable degree of assurance. If we were to change the way we regulate in favour of more on-rail competition we would need to see an overall benefit rather than, for example, benefits to passengers that were paid for by taxpayers. In fulfilling our duties and discharging our functions we must also have regard to the Secretary of State's guidance to ORR¹ and to Scottish Ministers' guidance to ORR².
3. It is important that we consider our position on on-rail competition now. In February 2012 we will formally begin our Periodic Review of the charges levied by Network Rail for access to its track. These charges – and other non-price conditions of access – are critical in determining the extent of on-rail competition and its impact on flows of money in the industry including

¹ See Secretary Of State For Transport, *Guidance To The Office Of Rail Regulation*, <http://www.rail-reg.gov.uk/server/show/nav.94>.

² See <http://www.transportscotland.gov.uk/strategy-and-research/publications-and-consultations/scottish-ministers-guidance-office-rail-regulation>. In having regard to any guidance from Scottish Ministers we also have to give weight to the extent to which this guidance relates to matters in respect of which expenditure is to be or has been incurred by Scottish Ministers.

taxpayer funds. We therefore need to be clear about our approach to on-rail competition in good time to inform our Periodic Review. The importance of the value for money challenge facing the industry, highlighted by the recent value for money study³, also makes a review of our policy on on-rail competition timely. It is also important to clarify our position ahead of forthcoming franchise competitions so that firms are able to bid for passenger rail franchises with a reasonable degree of certainty.

4. Competition within Great Britain (GB)'s passenger rail sector currently takes place principally 'for the market' by way of franchise competitions. The extent of on-rail competition 'in the market' between overlapping franchises or between franchised passenger train operators (franchised TOCs) and TOCs who operate outside the scope of any franchise ('open access operators') is very limited. Open access operators currently run relatively few services. They are restricted from doing so in part because of the network capacity that is allocated to franchised TOCs and to freight operators. They are also restricted, especially in respect of the stations they call at, as a result of our current access policy, which restricts them to the provision of services that will have a minimal impact on the revenues of franchised TOCs. This policy reflects the need to preserve the financial viability of franchises. Open access passenger services account for less than 1% of all timetabled train kilometres⁴.
5. Evidence from the open access operations that do exist suggests that on-rail competition brings passenger benefits through, other things being equal, lower fares and higher growth in passenger numbers. It also suggests that open access operators might have lower costs than franchised TOCs (although this evidence must be interpreted with caution). An independent study recently commissioned by government⁵ favoured increased contestability in "*a number of areas of infrastructure management*". And the benefits of competition have been recognised in the other regulated utilities and in the wider economy. We have also commissioned a case study of the potential for on-rail competition to deliver benefits in respect of the East Coast Mainline franchise. This shows that increasing the number of long-distance

³ See below and <http://www.dft.gov.uk/publications/realising-the-potential-of-gb-rail/>.

⁴ See, for example, Table 1.4a, *National Rail Trends 2010-11 Yearbook*, ORR.

⁵ *Realising the Potential of GB Rail*, Report of the Rail Value for Money Study, May 2011.

paths⁶ per hour out of Kings Cross station provided by open access competition from one to two and removing restrictions on open access stopping patterns could bring about benefits to passengers that would significantly outweigh the cost to government.

6. There is therefore evidence to suggest that on-rail competition could help the industry to meet the value for money challenge, both by improving the TOCs' responsiveness to passenger needs and wants and by placing downward pressure on TOC costs. On this basis, our view is that greater on-rail competition would be desirable. We would see any such increase as evolutionary and incremental. The nature of franchises, together with our access policy, currently restricts the network capacity available to open access operators. Further, those areas where the market could support competition are in general those areas where network congestion is most acute (and therefore available capacity is most restricted)⁷. This document sets out and seeks views on the evidence of the benefits of on-rail competition, and our interpretation of this evidence as meaning that greater on-rail competition is desirable.
7. We also consider how greater on-rail competition could be achieved. We set out and discuss possible changes to our policy on access. Under our current policy, we will not approve track access rights where the services proposed are projected to take away ('abstract') revenues from franchised TOCs in excess of the passenger benefits they would generate. This is called the 'not primarily abstractive' test ('NPA test'). We could move to assess open access applications on the basis of a wider cost-benefit test. We seek views on this possible approach.
8. We further set out and discuss possible changes to the way in which access to the network is allocated and to the charges paid for access, which could support greater on-rail competition. Currently, Network Rail recovers the efficient costs of operating, maintaining and renewing the network through a combination of variable track access charges (which reflect the cost of

⁶ In this document we use the term 'path' to refer to timetabled routes between the start and end point of a passenger train service.

⁷ See, for example, *East Coast Main Line Route Utilisation Strategy*. Network Rail, February 2008, <http://www.networkrail.co.uk/browse%20documents/rus%20documents/route%20utilisation%20strategies/east%20coast%20main%20line/east%20coast%20main%20line%20rus.pdf>.

running an additional vehicle on the track), fixed track access charges, and a direct grant from government (the network grant). Now, only franchised passenger TOCs pay the fixed track access charges; open access operators pay only the variable track access charges. This reflects the fact that the open access operators have much more restricted access (e.g. as a result of the NPA test). The structure of charges and the way they are levied on different track users would mean that, other things being equal, a reduction in the number of services run by franchised TOCs and an increase in the number of services run by open access operators could reduce franchised TOCs' capacity to pay fixed track access charges, potentially either increasing taxpayer subsidy to franchised TOCs or reducing the payments made by franchises to government.

9. We determine the amount of revenue Network Rail can recover through charges and the network grant, and the way in which this translates into charges. We have a statutory duty to have regard to the funds available to the Secretary of State, and are sensitive to pressures on the public purse at the current time. We therefore set out for consultation a way in which we could adjust the structure of charges in order to mitigate this impact on taxpayer funds. This could involve moving to a system of capacity auctions, which would see network users pay a price for access that reflected the value they placed on network capacity. We set this out and invite views.
10. We note that one way in which greater on-rail competition could be achieved is through changes to the way that franchises are specified, either to create more overlapping franchises or to reduce the number of services covered by franchises, leaving more for open access. We fully recognise that franchising policy is a matter for the Department for Transport (DfT) and Transport Scotland (TS). The DfT will shortly begin a new passenger franchise round, and we welcome its stated intention to adopt a 'light touch', more flexible, approach to these franchises. By consulting on our thinking on on-rail competition now, we will be able to set out clearly, in advance of most of the next round of franchising, the extent to which a franchisee may be exposed to competition to be clear before bids for franchises are made.
11. In this document we outline:
 - the potential benefits of competition, together with its impact on the flow of funds through the industry, with a focus on its potential impact on public funds;

- examples from other industries, such as GB's rail freight market and European passenger air flights, showing significant downward pressure on prices and costs as a result of increased competition;
- evidence from current and previous instances of on-rail competition in GB of the benefits that it has provided for passengers;
- evidence from new work that we commissioned from the transport consultancy MVA and Institute for Transport Studies at Leeds University (ITS) ('the MVA report'⁸) on the passenger benefits that could be obtained from a greater role for on-rail competition, primarily through lower fares;
- a description of how more on-rail competition could be introduced including replacing the NPA test with a wider assessment, facilitated by higher access charges paid by open access operators paying higher access charges than they do now; and
- evidence from the report of consultants MVA on the potential impact of on-rail competition on public funds⁹, through reduced revenue growth and a loss of economies of density¹⁰.

Consultation

12. We welcome responses to any part of this document, which will inform any decision to change our policy on on-rail competition going forward. We welcome in particular views on the issues for consultation set out in the next chapter of this document.
13. We will consult further, and carry out a full impact assessment, before implementing further specific proposals.
14. We are seeking responses to this document by 4 December 2011.

⁸ http://www.rail-reg.gov.uk/upload/pdf/onrail_competition_report_july2011.pdf.

⁹ Here and elsewhere in this document we have used 'cost to government' to refer to the net subsidy requirement caused by a franchise.

¹⁰ Here and in the MVA report the term, 'economies of density' refers to unit cost savings obtained from the density of volume within a network that firms achieve, rather than cost savings obtained simply through overall scale.

1. Introduction

This document

- 1.1 This document sets out our thinking on so-called ‘on-rail competition’, by which we mean direct competition between rival train operating companies (TOCs) competing against each other to attract passengers. Its purpose is to set out for consultation:
- The benefits that on-rail competition could deliver in principle;
 - The benefits that existing on-rail competition has delivered;
 - The role that we consider further on-rail competition could play in driving value for money in the railways¹¹, in terms of keeping costs down and also driving innovation; and
 - Some options for facilitating more on-rail competition together with our evaluation of those options, taking account of the impact on passengers and taxpayers.
- 1.2 In discussing these issues we consider both competition between franchised TOCs and between franchisees and train operators who provide passenger services on an ‘open access’ basis (‘open access operators’). Open access operators provide services on a purely commercial basis, not pursuant to any franchises let by government. In this document we generally use the term ‘open access operator’ to refer to any firm, existing or potential, that runs passenger services outside of the franchise system (possibly in addition to some franchised services), regardless of the identity of its parent company. While franchising policy is a matter for the Department for Transport (DfT) and Transport Scotland (TS), the way in which we assess access applications from open access operators has a significant effect on the extent and nature of open access operations. In this document, we therefore focus on the role of open access operators in providing greater on-rail competition.
- 1.3 In this document we do not consider the competition that TOCs face from other modes of transport, such as road. Neither do we consider competition

¹¹ The VFM study referenced later in this chapter identified potential savings of up to £1bn per year annually.

between freight operators or between rail freight and other modes of freight transportation.

1.4 This early chapters of this document is structured as follows.

- Chapter 2 sets out some relevant context and background material.
- Chapter 3 discusses the potential benefits that on-rail competition could bring by driving value for money, with reference to evidence to date of the impact of competition and this in other industries.
- Chapter 4 describes the status quo in terms of the level of on-rail competition.

1.5 The remainder of the document sets out ways in which the extent of on-rail competition could be increased for the benefit of passengers and taxpayers.

- Chapter 5 describes some of the options for change that would bring about more on-rail competition.
- Chapter 6 outlines a quantitative assessment of some of the options.
- Chapter 7 provides a summary of our position and consultation questions.

Our aims

1.6 It is essential that the railways provide value for money for passengers and taxpayers¹². Earlier this year an independent report jointly commissioned by ORR and DfT to look at value for money in railways in GB ('the VFM study') highlighted the need for GB's railways to become more efficient. In particular the VFM study identified a significant "*efficiency gap*", concluding that GB rail's "*...target at present should be to achieve a 30% reduction from the 2008/09 level of industry unit costs by 2018/19.*" The Study estimates that its recommendations could deliver savings between around £700m and £1bn annually by 2019.

1.7 In order to deliver value for money, GB's railways need to provide what their customers and society want, at a price that they are willing to pay (directly or through taxation) and which reflects the efficient costs of provision.

1.8 Regulation has a key role to play. As economic regulator we aim to drive improvements in value for money in GB's railways. We have a number of tools available to us to do this. Competition is one means by which the value

¹² See our corporate strategy, *Promoting safety and value in Britain's railways: our strategy for 2009-14*.

for money challenge can be addressed. Many industries, including rail and other regulated, former state-owned, industries, have seen competition drive value for money, including efficiency through competitive prices (fares) and strong incentives to control and reduce costs, increased service quality, and innovation in new products and processes. In line with our statutory duty to, “*promote competition in the provision of railway services for the benefit of users of railway services*”¹³, we must consider whether and how greater on-rail competition could bring benefits.

- 1.9 We recognise that these questions are multi-dimensional and complex. In particular, the extent to which public money funds franchised passenger train operations directly (through subsidy payments to some TOCs) and indirectly (through grants provided to Network Rail which reduce the charges that franchisees would otherwise have to pay) is a major factor. Although we would expect greater competition to drive benefits for passengers and taxpayers in terms of passenger experience and efficiency, we must also understand and take account of the implications for the flow of public money into the railways.
- 1.10 We fully recognise that our statutory duty to promote competition must be balanced against our other duties, including duties to have regard to the funds available to the Secretary of State and to enable persons providing railway services to plan the future of their businesses with a reasonable degree of assurance. The Secretary of State’s guidance to us also assists us in fulfilling our duties and discharging our functions.¹⁴
- 1.11 We believe that a number of factors favour a review of this area now. First, the imperative for railways to deliver value for money is increasing. In the current economic climate there is even greater need to ensure that passengers and taxpayers get value for money, and that the potential for railways to drive economic growth is fulfilled¹⁵. Second, following our first consultation in May 2011, we will formally begin the 2013 Periodic Review of Network Rail’s access charges in February 2012. These are the charges that Network Rail is permitted to levy on TOCs for their access to its network.

¹³ See, e.g., <http://www.rail-reg.gov.uk/server/show/nav.94>.

¹⁴ See *Secretary Of State For Transport, Guidance To The Office Of Rail Regulation*, <http://www.rail-reg.gov.uk/server/show/nav.94>.

¹⁵ Competition is a key part of the Government’s policies for economic growth. See, e.g. *The Plan for Growth*, HM Treasury/BIS, March 2011.

These charges – and other non-price conditions of access – are critical in determining the extent of on-rail competition. We therefore need to be clear about our approach to on-rail competition in good time to inform our Periodic Review. Third, the DfT will shortly begin a new passenger franchise round. Franchising policy is clearly a matter for the DfT and TS. But it is important for the extent to which a franchisee may be exposed to competition to be clear before bids for franchises are made, and this is in part a function of our approach to on-rail competition.

- 1.12 Our aim for this document is to stimulate debate about whether and how to move towards greater on-rail competition. We recognise in particular that the options for change that we have set out in this document are not fully exhaustive. Rather, they are intended to illustrate the range and the associated issues. If, having considered the responses to this document, we propose to make specific changes to our approach and process these would be subject to further consultation and an impact assessment.

Issues for consultation and how to respond

- 1.13 We welcome comments on any aspect of this document. In particular we are asking for stakeholders' views on the following, especially in the light of the evidence that we present, our interpretation of it, and any other important evidence that stakeholders think we have omitted:
- The effects of existing on-rail competition, in particular on price, number and nature of service, service quality, and costs.
 - The potential benefits of competition as described in chapter 3 of this document onwards, in particular the potential for it to drive value for money by:
 - Improving firms' responsiveness to passenger demands; and
 - Placing downward pressure on costs.
 - Any wider benefits of competition that should in your view be taken into account.
 - The extent to which benefits could be realised in GB passenger rail through increased on-rail competition, with particular reference to your views on:
 - The likelihood that increased on-rail competition would drive lower fares and improved service quality; and

- The potential for competition to drive cost savings and in particular on the assumptions made by MVA in its modelling as summarised in chapter 6 of this document.
 - The potential for developments in the sector, including technological change to increase the scope for greater on-rail competition in future. Please highlight in particular:
 - What developments you consider could take place;
 - How you consider it could facilitate greater on-rail competition (e.g. by increasing the efficiency of capacity utilisation)
 - What would need to happen in order for these developments to increase the scope for more on-rail competition, and in what time period you believe they could take place.
 - The potential impact of more on-rail competition on the taxpayer.
 - Specific policy options that could be pursued to facilitate increased on-rail competition, including but not necessarily limited to the ones we assess in chapter 6, including:
 - Impacts on the flow of money in the industry, and in particular on flows of public funds;
 - Impacts on key stakeholders including taxpayers; and
 - Any issues associated with using financial bids as a criteria for allocating network capacity, including any views on any complexities or administrative costs that this might introduce. In drawing our attention to any downside risks or costs associated with specific policy options you should also set out your thinking on how these costs or risks might be mitigated.
- 1.14 Please send your responses in electronic format (or if not possible in hard-copy) by 4 December 2011 to:
- Joe Quill
Office of Rail Regulation
1 Kemble Street
London WC2B 4AN
Email: joe.quill@orr.gsi.gov.uk
Tel: 020 7282 3874
- 1.15 Please note, when sending documents to us in electronic format we would prefer Microsoft Word format. This is so that we are able to apply web

standards to content on our website. If you email us a document in PDF format, where possible please:

- create it from the electronic Microsoft Word file (preferably using Adobe Acrobat), as opposed to an image scan; and
- ensure that the PDF's security method is set to 'no security' in the document properties.

1.16 If you send a written response, you should indicate clearly if you wish all or part of your response to remain confidential to ORR. Otherwise, we would expect to make it available on our website and potentially to quote from it. Where your response is made in confidence please can you provide a statement summarising it, excluding the confidential information, that can be treated as a non-confidential response. We may also publish the names of respondents in future documents or on our website, unless you indicate that you wish your name to be withheld.

2. Context

The evolution of on-rail competition

2.1 At present, on-rail competition is limited in scope to open access competition, which currently only exists on the East Coast mainline, and to a small number of instances of competition between franchised TOCs as a result of franchise overlaps.

Open access

2.2 The extent of open access is restricted by physical capacity constraints. Over 90% of capacity on the rail network in GB is currently used by the passenger, rather than freight, railway. But most of the network capacity available for passenger services is needed to run services as part of franchises. Taking the existing franchises, franchised passenger services account for over 99% of all passenger train miles. Open access passenger services account for less than 1% of all timetabled train kilometres¹⁶.

2.3 The scope for open access is also currently restricted by regulation, which has evolved over time.

2.4 On-rail competition in the post-privatisation period was limited by a policy known as ‘Moderation of Competition’ (MoC).¹⁷ Under MoC, new franchise holders in their first years were given contractual MoC protection from the unpredictability of unrestricted competition. MoC reflected the notion that each franchise represented a bundle of services, some of which would be profitable and others not. The premium the franchisee paid to government, or the subsidy it received, reflected the overall expected financial position of the franchise. It was therefore considered important to limit the scope for open access operators to ‘cherry pick’ the profitable services and thereby undermine the viability of the franchise overall. This was achieved by specifying in each track access contract, those flows¹⁸ on which Network Rail

¹⁶ See, for example, Table 1.4a, *National Rail Trends 2010-11 Yearbook*, ORR.

¹⁷ The ORR document *Review of access policy: Phase 1 final conclusions*, November 2010 provides a brief history of the MoC policy and explains why we no longer approve contractual MoC protection in new track access contracts.

¹⁸ In this document we use the term ‘flow’ (other than where discussing funds flows) to describe a route between any two points on a passenger train service.

(and before it, Railtrack) was prohibited from selling access rights to would-be competitors to franchisees.

- 2.5 In May 2004 in our *Moderation of Competition: Final Conclusions*, we confirmed that we would only approve contractual MoC protection in exceptional cases where it could be shown that planned investment would not otherwise occur.
- 2.6 In our *Review of access policy: Phase 1 final conclusions*, November 2010 we said that we would no longer approve contractual MoC protection. But we remained concerned that by ‘abstracting’ revenues on profitable routes from franchisees, open access operators could undermine the viability of a franchise. So we said that, in cases where there is clear evidence that revenue abstraction may be a material concern we will not approve track access rights where the services proposed are projected to take away (‘abstract’) revenues from franchised TOCs in excess of the passenger benefits they would generate. This is called the ‘not primarily abstractive’ test (‘NPA test’). The NPA test has reduced the need for franchise bidders to take account of the revenue risk that results from open access competition in their franchise bids. It has therefore resulted in higher franchise bids than would otherwise have been the case.
- 2.7 The advantage of the NPA test is that it provides a market-based framework for assessing access applications. It has allowed us to move away from often abstract, contractually based protection towards a more specific and effects-based approach. It allows us to assess a proposed service in terms of the implications for the franchisee, and the passenger.
- 2.8 While the scope for open access operations is restricted by the NPA test, it is increased by the way in which open access operators are charged for track access. The charges that Network Rail levies for access to its track are of two types: there is a variable track access charge (VTAC) that reflects the cost generated by running an additional train over the track (i.e. marginal cost), and a fixed track access charge (FTAC). These two charges, together with the direct grant that Network Rail receives from government (the network grant) allow Network Rail to recover the efficiently incurred cost of operating, maintaining and renewing the network. In order to make the best use of capacity on the network, open access operators (passenger and freight) generally pay only the VTAC¹⁹. Franchised TOCs pay both the VTAC and the

¹⁹ See Figure 1.

FTAC. The difference in the charges paid by franchised TOCs and open access passenger operators reflects a range of issues including the restrictions on the stopping patterns of open access operators imposed by the NPA test and, particularly, the provisions in the franchise agreements.

- 2.9 Our access policy aims to make the best use of available capacity for the benefits of all rail users. Our *criteria and procedures for the approval of track access contracts*²⁰ set out how we process applications for track access contracts, exercising our functions under sections 17 to 22A of the Railways Act 1993 as amended. We set track access charges in order to achieve a range of objectives, including: cost reflectivity, provision of incentives for efficient behaviour, non-discrimination, minimisation of administrative burdens, transparency, and consistency²¹, as well as consistency with relevant domestic and European legislation.

Franchise overlaps

- 2.10 The 1992 white paper *New opportunities for the railways: the privatisation of British Rail*, which outlined the then Conservative government's proposals for privatising British Rail²², envisaged a significant level of on-rail competition. But at privatisation there were relatively few franchise overlaps, so that actual on-rail competition at that time was very limited.
- 2.11 The number of overlaps was subsequently reduced further. The then Strategic Rail Authority's (SRA)²³ announcement on Franchising Policy on 19 December 2001 stated that the SRA was, *"looking at the longer term benefits of combining franchises and a simpler structure in particular where two or more franchises share access to a London terminal."* The SRA argued that having single operators at the major London termini would have a number of practical advantages (including, *"...optimum use of available capacity both in the station and on the approaches to the station"*) as well as offering the benefits of economies of scale. In line with this policy, when the second round of passenger franchises were let, the number of franchise overlaps, and

²⁰ See <http://www.rail-reg.gov.uk/server/show/nav.1656>.

²¹ See Paragraph 18.19, page 286, 'Period Review 2008', ORR October 2008.

²² DoT, *Cm 2010*, July 1992.

²³ Following the passing of the Railways Act 2005 many of the SRA's key functions were transferred to the DfT.

therefore the scope for this form of on-rail competition, were substantially reduced (see chapter 4 for examples of current rail overlaps).

- 2.12 The evidence that we present in the next chapter of this document includes examples of the effect of this policy on passengers.

Key legislation

- 2.13 As noted above, we have a statutory duty to promote competition where it is in the best interests of the users of the railway. We must balance this with our other statutory duties, including those requiring us to have regard to the funds available to the Secretary of State and to enable persons providing railway services to plan the future of their businesses with a reasonable degree of assurance. Our statutory duties are engaged when we are considering our access and charging policies and when we make decisions on individual access applications.
- 2.14 We are also required to set access charges consistent with EU legislation including EU Directive/2001/14/EC. In particular in respect of access charges we have to take into account the provisions of the Railways Infrastructure (Access and Management) Regulations 2005 ('Access and Management Regulations'), which require, amongst other things, that track access charges are non-discriminatory and transparent.

3. The potential for on-rail competition to drive value for money

Introduction

- 3.1 In order to deliver value for money, GB's railways need to provide what their customers and society want, at prices that they are willing to pay (directly or through taxation) and that reflect the efficient costs of provision. The VFM study briefly summarised in chapter 6 of this document identified potential savings of up to £1bn per year annually.
- 3.2 Competition is a potentially important way to drive value for money improvements. Where operators need to win or retain passengers in the face of rivalry, this puts them under pressure to:
- keep costs down ('productive efficiency');
 - use resources where they are valued most ('allocative efficiency');
 - find new and better ways of doing things ('dynamic efficiency'); and
 - better understand and respond to passengers' needs and wants, which may stimulate product or service innovation.
- 3.3 On the other hand, competition does have potential downsides. Untrammelled competition *could* lead to:
- Consumer protection concerns, if operators pursued strategies designed to confuse passengers (see for example current concerns about the complexity of energy tariffs);
 - Loss of coordination benefits, if competition reduces the extent to which operators share information and best practice or work together to maximise benefits across the network (e.g. to manage services and inform passengers when there is disruption);
 - Reduced investment, especially over the longer term, for example if competition drove prices down such that operators could not recover the costs of investment; and
 - Reduced economies of scale, scope and density thereby raising costs, for example, a single operator may be able to bulk-buy inputs or coordinate its

use of trains and track to a greater extent than two (or more) competing operators.

- 3.4 Competition may also have an impact on the amount of taxpayer funding that is needed to fund the railway, and on when and to whom public funds are provided. To some extent, the impact on public funds from greater competition will be a result of transfers from taxpayers to passengers. For example, if the premium paid for a franchise is lower because the bidder has taken account of the fact that it may earn less profit on some services because of competition, some of that lower profit may be because passengers pay lower fares. In line with the standard approach to impact assessments²⁴ we do not consider a transfer from taxpayers to passengers to be in itself a benefit. In any case, these impacts need to be considered.
- 3.5 In this chapter we set out some of the key recent evidence of benefits being delivered by competition, both in railways in GB and the wider economy.
- 3.6 We consider the impact of greater on-rail competition on the flow of money through the industry, and in particular whether there is a trade-off between the benefits of on-rail competition and cost to government, in chapters 5 and 6.

Evidence from GB rail markets

Fares and passenger numbers

- 3.7 There are a number of historic examples of on-rail competition delivering benefits to passengers. Many of these are summarised in the 2009 Arup study *On Rail Competition Analysis - Key Findings*²⁵. This study focused on a series of case studies spanning both the introduction of new on-rail competition (primarily from open access operators) and the removal of on-rail competition through franchise re-mapping. Arup used these case studies to test a central proposition that, other things being equal, more on-rail competition would lead to lower fares, faster growth in passenger numbers, and what Arup termed “soft” passenger benefits, generally around service quality improvements. Five of Arup’s case studies provided what it considered to be “strong” evidence in support of this proposition, with another three providing “some” supporting evidence, with one case study “largely inconclusive”.

²⁴ See http://www.hm-treasury.gov.uk/data_greenbook_index.htm.

²⁵ See <http://www.rail-reg.gov.uk/server/show/nav.2254>.

3.8 Arup found strong evidence of the benefits of competition in five case studies as set out below.

Open access entrants

3.9 Arup assessed the impact of on-rail competition as a result of open access entry, including from Hull Trains from 2000 and Grand Central from 2007. In both cases Arup found evidence of lower fares growth and higher passenger journey growth than on comparable routes that had not been opened up to competition.

3.10 Arup showed that entry by Hull Trains had the following effects between 2000/01 and 2008/09:

- the number of passenger journeys from London to destinations served by Hull Trains more than doubled, compared to growth of less than 30% on comparable flows with no competition; and
- average fares increased by around 20-30% on flows where Hull Trains had entered the market, compared to around 30-40% on comparable flows with no competition.

3.11 Arup showed that entry by Grand Central led to the following effects between 2007/08 and 2009/10:

- passenger journeys grew by around 15-20% on flows where Grand Central had entered the market, whereas they fell by over 10% on comparable flows with no competition; and
- average fares increased by around 10-15% on flows where Grand Central had entered the market, compared to around 20-30% on comparable flows with no competition.

3.12 New analysis carried out this year by Grand Central compares revenue growth in markets served by Grand Central²⁶ with 'control' markets (journeys to Darlington, Edinburgh, Newark, and Newcastle). This analysis showed that total revenue growth was higher (growth of around 125% between 2007/08 and 2010/11) in Grand Central markets than in control markets (around 5-10% over the same period).

Franchise-on-franchise competition

²⁶ See <http://www.grandcentralrail.com/destinations>.

- 3.13 The Arup study also contained an analysis of fares and passenger numbers over time to assess the impact of on-rail competition delivered via franchise overlaps.
- 3.14 First, Arup assessed the impact of the franchise overlaps between London and Birmingham that have existed since 2001. During the period analysed by Arup (2002 to 2009), passengers were able to choose between three franchised TOCs (Chiltern Railway, London Midland, and Virgin Trains) providing services between London and Birmingham. Arup found that over this period:
- passenger journeys between London and Birmingham grew by around 40-50%, compared to around 10-25% on comparable flows with no competition; and
 - average fares increased by around 15-20% for journeys between London and Birmingham, compared to around 15-45% on comparable flows with no competition.
- 3.15 Arup also assessed the impact of the separation of WAGN²⁷ in 2004, which led to increased on-rail competition between Cambridge and London. Between 2004 and 2009:
- passenger journeys between London and Cambridge grew by over 10%, compared to around 0-10% on comparable flows with no competition; and
 - average fares increased by around 30% for journeys between London and Cambridge, compared to around 35-40% on comparable flows with no competition.

Reduced franchise-on-franchise competition

- 3.16 Arup found that the amalgamation of the Anglia Railways and First Great Eastern franchises in 2004 led to a reduction in on-rail competition between Ipswich and London that brought about higher fares growth and lower passenger journeys growth than on comparable routes where the level of competition had remained constant. Between 2004 and 2009:
- passenger journeys between London and Ipswich grew by around 10-20%, compared to around 20-80% on comparable flows where there had not been a fall in the level of competition; and

²⁷ West Anglia Great Northern.

- revenues per passenger (i.e. average prices) grew by around 20-35% for journeys between London and Ipswich, compared to around 10-20% on comparable flows where there had not been a fall in the level of competition.

Passenger satisfaction

3.17 Open access operators consistently score higher than their franchised counterparts in passenger satisfaction surveys. Research by Passenger Focus (PF)²⁸ shows that, since PF started to include open access operators in their National Passenger Survey (NPS) in Autumn 2009, all open access operators have always scored significantly higher for overall satisfaction than any of the comparable franchised intercity operators. On average PF reports that over 95% of surveyed open access passengers gave a rating of “satisfied” or “good”, as opposed to an average of around 87% for passengers on other intercity services²⁹. Passenger satisfaction scores for other types of operator (regional and commuter) also tended to be lower (the average score for London and South East operators being around 85%, and for regional operators being around 87%).

Cost reduction

3.18 The rail freight sector in GB provides an example of competition in the market putting downward pressure on prices and costs. These benefits are described in the final conclusions of the 2011 VFM study, which notes that “...*Faced by a competitive environment with other transport modes and with each other, the freight operators have focused on reducing costs and improving service*”:

- On prices - “...*One result of competition has been a reduction in prices, where the beneficiaries have been rail freight shippers and their customers*”; and
- On costs – “*Over the last 14 years rail freight operators have invested heavily in new equipment with low maintenance costs, reducing the assets they employ. Rail freight growth of 60% has been achieved using only half the locomotives and two-thirds of the wagons employed in the mid-nineties.*”

²⁸ <http://www.passengerfocus.org.uk/research/nps/content.asp?dsid=496>, quoted averages represent ORR analysis.

²⁹ All figures provided here are unweighted averages scores across operators, Autumn 2009 to Spring 2011.

- 3.19 The VFM study also contrasts post-privatisation trends in freight operating company (FOC) and passenger train operating company (TOC) productivity levels. It shows that, relative to TOCs, FOCs were able to make significant productivity gains in the post privatisation period. In our view competition is likely to have played an important part in providing incentives for these gains.

East and West Coast modelling exercise

- 3.20 In 2011 we commissioned a study from MVA and the Institution of Transport Studies at the University of Leeds (the MVA report)³⁰. The study looked at the potential benefits of greater on-rail competition. Among other things, the report describes a modelling exercise for a series of scenarios for increased on-rail competition on the key East and West Coast intercity franchises. Among other things MVA and ITS reviewed the literature and evidence on the impact of competition in various UK sectors, and especially in transport.

Evidence from other sectors

- 3.21 The scope to consider the effects of competition in sectors across the economy is clearly huge. Here we highlight some studies that we consider particularly relevant.

UK Government case studies

- 3.22 A key study commissioned by the previous UK government and published in 2004, *The Benefits from Competition: some illustrative UK cases*³¹, highlights the significant benefits conferred on consumers as a result of the introduction of greater competition via six UK case studies³². Key findings of this study included the following:

- The impact of competition on price, with four out of six cases studies linking at least “very significant” (i.e. 10% or more) price reductions with increased competition.
- The various means by which competition can be enhanced, including competition policy and deregulation, but also opportunities generated within markets, including technological advance.

³⁰ http://www.rail-reg.gov.uk/upload/pdf/onrail_competition_report_july2011.pdf.

³¹ Economics paper No. 9, July 2004, <http://www.bis.gov.uk/policies/business-law/competition-matters>.

³² Retail opticians, international telephone calls, net book agreement, passenger flights in Europe, new cars, and replica football kits.

- The insufficiency of government policy on its own without, “a pool of resourceful entrepreneurs, capable of exploiting changed market conditions”.
- The “multi-faceted” benefits of competition, which are not limited to price - “Sometimes freeing up a market stimulates new ways of doing things (e.g. new business practices by low cost airlines[...]). These are generally unpredictable ex-ante, but may ultimately be worth more than just lower price”.

MVA and ITS study

3.23 As well as modelling greater on-rail competition on the east and west coast lines, the MVA report also reviewed the literature and evidence on the impact of competition in various UK sectors, and especially in transport.

3.24 MVA’s key findings were:

- In the UK bus industry - evidence that increased competition has led to significant cost reductions, albeit with no definitive evidence as to the relative efficacy of competition for- or within- the market in achieving this;
- In the UK air transport industry – evidence that increased competition had led to very significant downward pressure on fares and costs, with fares and costs reduced by around 75% and 50% respectively following the entry of the most recent wave of low-cost carriers beginning in the 1990s; and
- In UK rail – evidence that post-privatisation franchise competition has not been effective in putting downward pressure on costs, but that the limited observed instances of on-rail competition have delivered benefits to passengers (see reference to the Arup report above).

OFT and CC studies of the UK bus industry

3.25 A number of concerns have been expressed in recent years about whether the market for local bus services is working well for consumers. These concerns led the Office of Fair Trading (OFT) to make a Market Investigation Reference to the Competition Commission (CC) in January 2010³³. The CC’s provisional findings report, published in May 2011, focused on two broad categories of competition problem, namely:

³³ See <http://www.competition-commission.org.uk/inquiries/ref2010/localbus/>.

- A situation whereby many local markets are characterised by *“limited head-to-head competition”* from both existing and potential competitors. The CC observed that *“When operators compete on largely overlapping routes, the process of competition is generally such that only one tends to succeed in the longer run”*; and
- A lack of competition for the tendering of contracts for supported local bus services since, *“...the number of operators bidding for Local Transport Authority (LTA) contracts and the intensity with which operators compete for these tenders can be limited by one or both of the way LTAs design tenders, and the limited number of potential bidders in local areas...”*.

3.26 The CC investigation is of limited relevance to our consideration of greater on-rail competition in passenger rail. The first of the problems it highlights refers to a lack of head-to-head competition in local bus markets. Any increase in the extent of head-to-head competition for passenger rail services could reasonably be expected to reduce the extent of similar concerns in this industry. A particular feature of local bus services is a tendency for operators to compete on service frequency in addition to fares and service quality. Service frequency is a key means for bus operators to attract passengers, both where passengers decide which operator to use at the bus stop and where they choose operator in advance, buying returns or network tickets. The CC has found that head-to-head competition provides bus operators with an incentive to increase service frequency so as to attract more passengers from rivals, which can lead to oversupply on individual routes. The CC has found that operators are incentivised to compete in such a way as to raise the likelihood that rivals exit routes, meaning that head-to-head competition is often unsustainable. We are not aware that such concerns apply to passenger rail services.

3.27 The second of the problems highlighted by the CC concerns weak competition for the market for provision of subsidised services, and is therefore not relevant to our consideration of head-to-head competition in passenger rail services.

4. Competition between passenger train operators: the status quo

The current position

- 4.1 In the previous chapter we set out evidence from the rail industry and beyond of the benefits that customers can enjoy as a result of competition. We now consider the extent to which passengers in GB currently benefit from competition in the provision of rail services.
- 4.2 The primary mode of competition between TOCs is in the form of competition for franchises. In order to win the franchise, bidders will bid an amount up to the level of the profits they expect to earn across the lifetime of the franchise. This form of ‘competition for the market’ therefore incentivises efficiency because the bidder whose expected revenue exceeds its expected cost to the greatest extent will win the franchise. Other things being equal, this provides franchisees with weaker incentives to charge lower prices and/or improve service quality than would be the case for companies facing direct competition. In practice, their ability to exploit their market power is restricted – and passengers are protected – by service standards and fares regulation as applied by the DfT and TS and competition and consumer protection law as enforced by us.
- 4.3 The extent to which a franchisee is incentivised to grow revenues and reduce costs having won a franchise depends on the extent to which it is exposed to revenue and cost risk (downside and upside) by its franchise contract. In the main, franchised TOCs are highly exposed to risk on the cost side (other than in the case of changes to the track access charges levied by Network Rail) but on the revenue side share a significant amount of risk with government. This historically took place through ‘cap and collar’ revenue support mechanisms in franchises although in future this support will be more closely linked to economic indicators
- 4.4 At present, on-rail competition is delivered in two separate ways, namely open access and franchise overlaps.
- 4.5 On-rail competition through open access is currently restricted to the East Coast mainline, and accounts for fewer than 1% of all passenger rail kilometres in GB.

- 4.6 While there are overlaps between franchise areas of operation, the number of instances of overlapping or parallel services being operated by franchises is relatively limited. This is especially true of London commuting services.
- 4.7 Examples of franchise overlaps or parallel operations that exist today include the following³⁴:
- 1) between East Coast and First Capital Connect (FCC) for journeys between London and Stevenage/Peterborough;
 - 2) between Virgin Trains and London Midland between London, Milton Keynes and Rugby;
 - 3) between c2c and National Express East Anglia for journeys between London and Southend;
 - 4) between Southern and FCC for journeys between London and Brighton;
 - 5) between Southern and South West Trains for journeys between London and Portsmouth;
 - 6) between Virgin Trains, London Midland, and Chiltern Railways for services between London and the West Midlands;
 - 7) between Northern and First TransPennine Express between Manchester and Yorkshire;
 - 8) between Scotrail and East Coast between Edinburgh and Inverness/Aberdeen;
 - 9) between Virgin Trains and First TransPennine Express between Preston and Glasgow/Edinburgh;
 - 10) between London Midland and Virgin Trains for journeys between Birmingham, Stafford and Crewe;
 - 11) between Cross Country and East Coast between York and Edinburgh, and
 - 12) between First Great Western and South West Trains between London and Exeter.
- 4.8 Both in relation to open access competition and franchise overlap the strength of competition tends to be reduced currently by, amongst other things, fares

³⁴ An indication of the whereabouts of all franchise overlaps is available from operator route maps such as the one at <http://www.barrydoe.co.uk/railmap21.pdf>.

regulation³⁵ and the widespread use of interavailable tickets. Interavailable tickets are valid on trains run by all TOCs on a flow (e.g. both franchised and open access operators on the East Coast mainline). Fares for interavailable tickets are set by the lead operator on a flow. There is little scope for competition on price where most tickets are interavailable. Although fares regulation and interavailable tickets clearly deliver passenger benefits, it is important also to recognise that there is a cost in terms of the benefits of competition that are foregone as a result. The materiality of this cost will depend on the extent to which competition would otherwise have occurred, which will vary flow by flow.

- 4.9 In summary, the extent of on-rail competition is currently limited in scope to a relatively small number of instances of franchise overlaps and open access competition. And even within this limited scope, the strength of competition is limited by fares regulation and interavailability of tickets. This suggests considerable scope to increase the extent of on-rail competition, and taken together with the evidence we have presented showing the benefits of competition, that consideration should be given to how this *could* be achieved. In the next chapter we therefore consider options to bring about further on-rail competition. Clearly, whether changes *should* be achieved will depend on the costs and benefits. In Chapter 5 we outline the results of a cost-benefit analysis that has been performed on a discrete set of options for change, illustrating the effects of possible options on the flow of money through the industry.

The future

- 4.10 This document broadly reflects the industry as it stands today. We recognise that future developments could have an impact on the potential for and desirability of greater on-rail competition. We provide two examples of this below.
- 4.11 First, our analysis is predicated on the existence of significant capacity constraints on the rail network, which have the effect of limiting scope for open access and other new entry. But in the future it may be the case that such constraints will be eased by technological change. A notable example of this is the European Rail Traffic Management System (ERTMS)³⁶. This is an

³⁵ Where prices are capped well below their profit-maximising level this will, other things being equal, tend to reduce the impact of competition on prices.

³⁶ See <http://www.ertms.com/home.aspx>.

'in-cab signalling' system which would allow more trains to be operated on the network, thereby potentially freeing up capacity and facilitating greater competition.

- 4.12 Second, it may in future be possible to have smart rail ticketing. This could involve systems, like Transport for London's Oyster card, which allow individual passenger journeys to be recorded and different charges levied according to origin, destination and time of day or season. This in turn would allow passenger revenues to be allocated specifically to TOC(s) specifically on the basis of which passengers they carried where. This would make it easier, and potentially attractive, to end the current 'knock-for-knock' arrangements that underpin interavailable tickets. It would also increase the incentives on existing TOCs to compete for passengers as their revenues would directly reflect passengers carried.
- 4.13 Third, the UK government has recently been looking at changes to its franchising policy. Some of the issues under consideration are set out in the document *Reforming Rail Franchising: Government response to consultation and policy statement*³⁷. The DfT will shortly begin a new passenger franchise round. We welcome its stated intention to adopt a 'light touch', more flexible, approach to these franchises.

³⁷ <http://www2.dft.gov.uk/consultations/closed/2010-28/govresponse.pdf>.

5. Options for change

Introduction

- 5.1 In the previous chapters we have set out the evidence that head-to-head competition can deliver benefits in terms of value for money, and noted that currently there is very limited head-to-head competition in rail in the form of on-rail competition. In this chapter we consider how greater on-rail competition could be achieved, setting out changes from the current position that could be made. Some of these changes could be implemented by us, taking account of our statutory duties and guidance from the Secretary of State and Scottish Ministers. Others would need action to be taken by us and by the DfT/TS. Others would be for the DfT/TS to implement alone. For completeness we mention all options here. But we fully recognise that any action to be taken by DfT/TS is entirely a matter for its decision, and we focus here on those options that would involve action by us.
- 5.2 The next few paragraphs provide a broad overview of the different areas in which action to further on-rail competition could be taken. We then move on to consider in more detail the options for greater on-rail competition through open access.
- 5.3 Our statutory duties include the promotion of competition in the provision of railway services for the benefit of railway users. This duty has to be balanced against our other objectives, including our duties to have regard to the impact on government finances and to enable those providing railway services to plan their future business with a reasonable degree of assurance. We must also have regard to guidance provided to us by the Secretary of State and Scottish Ministers. Within this framework we could make a number of changes that would affect levels of on-rail competition. In particular we could make changes to our approach to approving or directing access contracts and the way in which we determine the access charges that Network Rail levies on TOCs. Such changes could increase the scope for on-rail competition in their own right, or could complement changes made by the DfT or TS (see below).
- 5.4 The DfT and TS also have objectives and obligations in relation to railways, including ensuring the delivery of a safe, reliable and efficient rail service that delivers value for money for taxpayers.

- 5.5 The DfT and TS are in a position to bring about change through modifications to franchise policy. They could achieve this by one or both of:
- Specifying the number and boundaries of rail franchises such that there were a greater number of franchise overlaps; and
 - Franchising fewer rail services such that capacity on the network was available to enable a larger number of open access services.
- 5.6 The potential for the second of these two types of change to bring about benefits to passengers and taxpayers could be facilitated and complemented by changes to ORR's approaches to access and charging that firstly, enabled a greater amount of head-to-head competition and, secondly, increased the contribution to infrastructure costs made by open access.
- 5.7 In the remainder of this chapter we focus on those changes that we could implement directly, i.e. changes to our approach to access and access charging. Where appropriate, we note complementarities with action DfT/TS could take if it wished to franchise fewer services. We do not consider further the changes the DfT/TS could make to increase franchise overlaps as this is purely a matter for the DfT/TS.

Options – access and charging policy

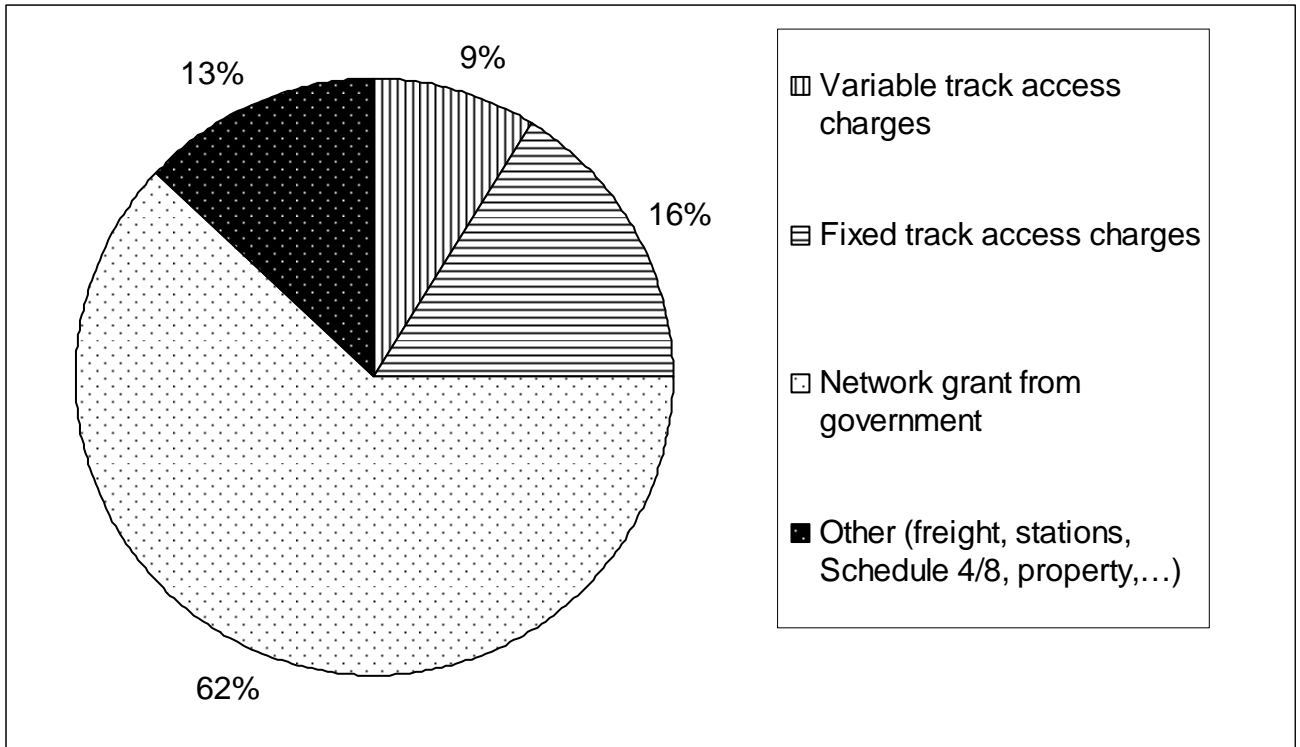
Background

- 5.8 Our current access policy, through the application of the NPA test has deliberately limited on-rail competition in recognition of the potential effect that greater on-rail could have on the viability of franchises and the flows of money through the industry. In order to consider whether and how further on-rail competition could be achieved, we have therefore considered possible alternatives.
- 5.9 Under the NPA test, new open access services are only approved where the revenue that they are projected to take (or 'abstract') from franchised operators will be more than offset by passenger benefits. Our analysis when assessing access applications is strongly focused on the impact of granting capacity to open access operators on franchise revenues. A key indicator that we use to assess the impact of open access is the ratio of generated (by open access) to abstracted (from franchised operators) revenues. We would not normally approve services with a revenue generation / abstraction ratio of less than 0.3. This approach leaves open the possibility that we would reject access applications that, in an extreme case, both benefited passengers and

increased the aggregate amount of profits available to franchised and open access operators.

- 5.10 Currently, Network Rail recovers the efficient costs of operating, maintaining and renewing the network through a combination of variable track access charges (which reflect the cost of running an additional vehicle on the track), fixed track access charges and a direct grant from government (the network grant). Now, only franchised passenger TOCs pay the fixed track access charges; open access operators pay only the variable track access charges. This reflects the fact that the open access operators have much more restricted access (e.g. as a result of the NPA test). The structure of charges and the way they are levied on different track users would mean that, other things being equal, a reduction in the number of services run by franchised TOCs and an increase in the number of services run by open access operators could reduce franchised TOCs' capacity to pay fixed track access charges, potentially either increasing taxpayer subsidy to franchised TOCs or reducing franchise payments made by TOCs to government. Such effects could, though, be mitigated if we were to change our approach to access charging so that a greater contribution to infrastructure costs were made by open access operators.
- 5.11 The chart below shows the relative contribution of network grant and access charges to Network Rail's income in CP4.

Figure 1 – Breakdown of Network Rail’s income for CP4



5.12 As a part of MVA’s study we asked it to model the impact of a number of options for reforming track access charges. All of these are described in more detail within the MVA report. In essence the two main classes of option would be:

- a re-distribution of the existing fixed track access charge between franchised and open access operators; or
- a system of charging whereby open access operators paid charges that reflected the value of capacity to them.

5.13 The first of these two types of charging would have considerable advantages in terms of simplicity, with few administrative costs involved. It would also have considerable advantages in terms of certainty, since access charges would be independent of future open access revenues, at the outset for all parties. Under the current model open access operators develop business plans and track access applications based on a standard published set of variable track access charges. But a simple redistribution of fixed track access charges would have potentially serious implications for cost to government. In the next paragraphs we illustrate this point by means of a worked example.

Worked example to show effect on flow of funds

- 5.14 A significant proportion (around 60% - see Figure 1) of the total cost of the railway is currently recovered via a network grant paid direct to Network Rail rather than track access charges. This increases the profitability of, or reduces the subsidy paid to, franchised TOCs. If we consider a franchise that is, on this basis, profitable, such as the East and West Coast mainlines, government therefore has three distinct income streams (directly or indirectly through payments made to Network Rail since such payments reduce the total government funds required), namely:
- fixed track access charges;
 - variable track access charges; and
 - premium payments (which are received directly by government).
- 5.15 Figure 2 below shows an example whereby a hypothetical region served by a single premium-paying³⁸ rail franchise is, by way of an extreme example, at the time of a franchise competition divided into two sets of services, each set comprising half the number of services as the original franchise, the first set (labelled 'A') run as a franchise, the other set ('B') served by a single open access operator.
- 5.16 For simplicity the example assumes that a move towards more open access does not affect the aggregate value of either ticket receipts or TOC costs. In other words (see below) we assume that after franchise re-mapping total ticket revenue earned by the two TOCs will be the same as that earned by the previous single franchisee (in our example it will still be 100) and that the total costs of the two TOCs will be equal to the total cost of the previous franchisee (in our example costs will still add up to 20).
- 5.17 Prior to franchise competition, on the left hand side of Figure 2 the single franchise is assumed to earn annual fares revenue of 100, meaning that, after covering its own costs³⁹ of 20, fixed track access charges ('FTACs') of 30, and variable track access charges ('VTACs') of 20, it is able to earn profits of 30. We assume that all of these profits are paid to government in the form of a franchise premium. This means that total government receipts (from all of

³⁸ Analogous issues would be raised in the case of a franchise requiring direct subsidy.

³⁹ including a profit margin for its shareholders.

FTACs, VTACs, and premium payments) with respect to this franchise are 80 per year.

5.18 The right hand side of Figure 2 shows two separate options for access charging to the open access operator, B, labelled (i) and (ii).

5.19 Under the option labelled (i) *All FTACs remain with FO* (here denoting 'franchised (passenger train) operator'), we assume (as an illustration of the need for a contribution from open access) that, despite its reduced scale, the franchised operator A will continue to pay the same level of FTACs, 40 in this example, as its predecessor TOC. Figure 2 shows that, under such an arrangement:

- The franchised TOC, A, will still be able to break even (i.e. will not require a direct subsidy), but will not be prepared to make any franchise premium payments;
- The open access operator, B, will be able to earn substantial profits, since it will have to pay neither FTACs nor (as an open access rather than franchised TOC) franchise premium payments.
- Government's total receipts (40+10) have fallen by 30, the amount of profit retained by open access operator B.

5.20 Under the option labelled (ii) *Equal share of FTACs*, it is assumed that franchised TOC A and open access operator B will each pay fixed track access charges of 20. Figure 2 shows that, under such an arrangement:

- The franchised TOC, A, will be able to make franchise premium payments of 10;
- The open access operator, B, will, after paying fixed and variable track access charges, earn profits of 10.
- Government's total receipts (40+30) have fallen by 10, the amount of profit retained by open access operator B.

Figure 2 - Illustrative example, fixed track access charges with an increased role for open access

	A+B		(i) All FTACs remain with FO		(ii) Equal share of FTACs		
			A	B	A	B	
			Fra	OA	Fra	OA	
Ticket sales	100	Ticket sales	50	50	Ticket sales	50	50
TOC costs	(20)	TOC costs	(10)	(10)	TOC costs	(10)	(10)
	<hr/> 80		<hr/> 40	<hr/> 40		<hr/> 40	<hr/> 40
FTACs	(30)	FTACs	(30)	(0)	FTACs	(20)	(20)
VTACs	(20)	VTACs	(10)	(10)	VTACs	(10)	(10)
Premium	(30)	Premium	(0)	n/a	Premium	(10)	n/a
'Excess' profits	0	'Excess' profits	0	30	'Excess' profits	0	10
Govt receipts	80	Govt receipts	40	10	Govt receipts	40	30

5.21 The worked example above highlights the importance in terms of the flow of funds through the industry of a fundamental difference between franchised TOCs and open access operators, namely the system of franchise premium (or subsidy) payments faced by the former. For a hypothetical premium-paying franchised TOC Figure 2 illustrates, albeit in a highly simplified form a number of issues and outcomes that would follow a move towards significantly more open access rather than franchised services:

- There would be a significant fall in government revenues if the contribution to infrastructure costs made by open access was limited to variable track access charges only (as it is now);
- There are fundamental difference between open access and franchised operators that hold regardless of factors such as the size of any franchise premium and the impact of increased competition on aggregate revenues and costs; and
- The potential impact of open access on franchise premium payments and hence total government receipts is significant even where total receipts from track access charges are unchanged.

5.22 It is clear from the worked example that if only franchised TOCs pay fixed track access charges, the effect of more open access on the flow of funds in the industry is significant. However, it would be possible to change the structure of charges so that open access operators paid some charge in addition to variable track access charges. This could mitigate the effect on the flow of funds and in particular on taxpayer funds. In the worked example we

therefore also show what the effect on the flow of funds would be if, by construction in this example, open access operators paid the same fixed track access charges as franchised TOCs.

- 5.23 Such a system would incur some administrative costs and involve some complexity, and its effectiveness would depend on the design and execution of the process. But in our view, the inevitably small amount of capacity that would be allocated in this way should make the cost modest. As now, Network Rail would collect all access charges. For this to work in practice we would need to see various changes including amendments to Network Rail's network statement⁴⁰.

Implications - a possible change in our approach?

- 5.24 An alternative to the current model that would enable us to, as now, balance our duties to passengers and funders would be for us to assess applications from open access operators with reference to a wider assessment of the overall costs and benefits than permitted by the NPA test.
- 5.25 We could envisage changing our criteria for the approval of access contracts so that we would approve applications from open access operators where we considered them to be cost-beneficial. In assessing this we would take into account the wider costs and benefits of applications from all would-be open access operators, whose parent groups could be either current open access operators, franchised TOC owner groups, or new entrants to the industry.
- 5.26 Rather than focusing on the extent to which open access operations would abstract revenues from franchised TOCs our decisions would turn on a wider assessment of the costs and benefits of access with reference to variables similar to the ones used in the analysis summarised in chapter 6 of this document. In other words we would assess the overall impact on users of the railway, the overall impact on non-users such as motorists, and the impact on cost to government. In doing so we would be able to fully weigh up the costs and benefits of access applications.
- 5.27 As noted previously, that open access operators currently do not pay fixed track access charges but pay only the variable track access charge, reflects the fact that the NPA test allows them only marginal access to the network.

⁴⁰ See, e.g., <http://www.networkrail.co.uk/aspx/3645.aspx> - the Network Statement is currently couched in terms of the current split between fixed and variable track access charges.

Given this, and taking into account the impact that more open access could have on the flow of funds in the industry and on in particular taxpayer funds, we are of the view that, were we to relax the NPA test, providing open access operators with the opportunity to earn significant profits, the most appropriate form of access charging to open access operators would be one that required them to make a contribution over and above variable track access charges to Network Rail's costs.

- 5.28 One way in which to do this would be to ensure that open access operators faced the same fixed track access charges as franchised TOCs. But such a system would have a number of disadvantages. It would risk pricing open access off the network, limiting the benefits in terms of greater competition and potentially not making the best use of network capacity. It could also create a cost to government through lost premium payments (see Figure 2 for a worked example).
- 5.29 An alternative that would avoid these disadvantages is that open access operators could face charges, beyond the variable track access charges, that reflect the value to them of the network capacity they use. In the simple example shown in Figure 2, this would mean a value-based access charge of 30 payable by the open access operator, i.e. an amount equal to the 'excess' profits earned by open access in example (i). In a true value-based charging system, the amount would be determined by operators' financial bids rather than administratively (see below).
- 5.30 If access charges to open access operators were set so as to capture (a proportion of) the value of network capacity to the operator, it could be possible for open access to take away at least some business from franchised operators, bringing the benefits of competition without a major detrimental impact to the taxpayer.
- 5.31 The financial bids made by open access operators would contribute to infrastructure costs and be collected by Network Rail. Where this led to an Network Rail recovering more than the revenue we had allowed it in our periodic review of charges this could be addressed either through a reduction in the network grant or through access charge rebates payable to the passenger and freight operators that use the network.
- 5.32 We recognise that moving to a wider cost-benefit test and some form of capacity charge for open access operators, would represent a significant change from the current position and the basis on which existing franchises

submitted their bids. It would be possible for us to address this by only applying this new approach in respect of newly franchised areas, so that companies could factor it into their franchise bids.

- 5.33 We also recognise that if we were to require existing open access operators to pay additional contributions to Network Rail's costs in excess of the variable track access charges, this could undermine their business models. We value the benefits that have been generated through the application of our current access policy, based on the NPA test, including the provision of 'not primarily abstractive' direct services to destinations such as Hull and Sunderland. Recognising that the access these operators have was limited by the application of the NPA test, we would envisage their continuing to pay only the variable track access charges.
- 5.34 If we were to adopt all of these approaches, we would have the following mix of operators, paying the following charges:
- franchised TOCs, as now, paying fixed and variable track access charges (and also in payment/receipt of franchise premium/subsidy payments);
 - open access operators whose access applications had been subject to a wider cost-benefit test rather than the more restrictive NPA test, paying both variable track access charges and further charges reflecting the value they place on the network capacity they use, derived from financial bids for capacity (described in more detail in the remainder of this chapter); and
 - open access operators, as now, whose access applications had been subject to the restrictive NPA test, paying only variable track access charges.
- 5.35 Each of these three categories of operator is different in the following important respects:
- The key difference between restricted and unrestricted open access operators is the application of the NPA test, which places significant restrictions on calling patterns and, at least to date, has had the effect of preventing open access operators from earning more than a normal return (albeit not explicitly by design); and
 - The key difference between franchised operators and all open access operators is the existence of franchise subsidy/premium payments, which

enables operators' expected surplus profits to be extracted without the need for value-based access charging.

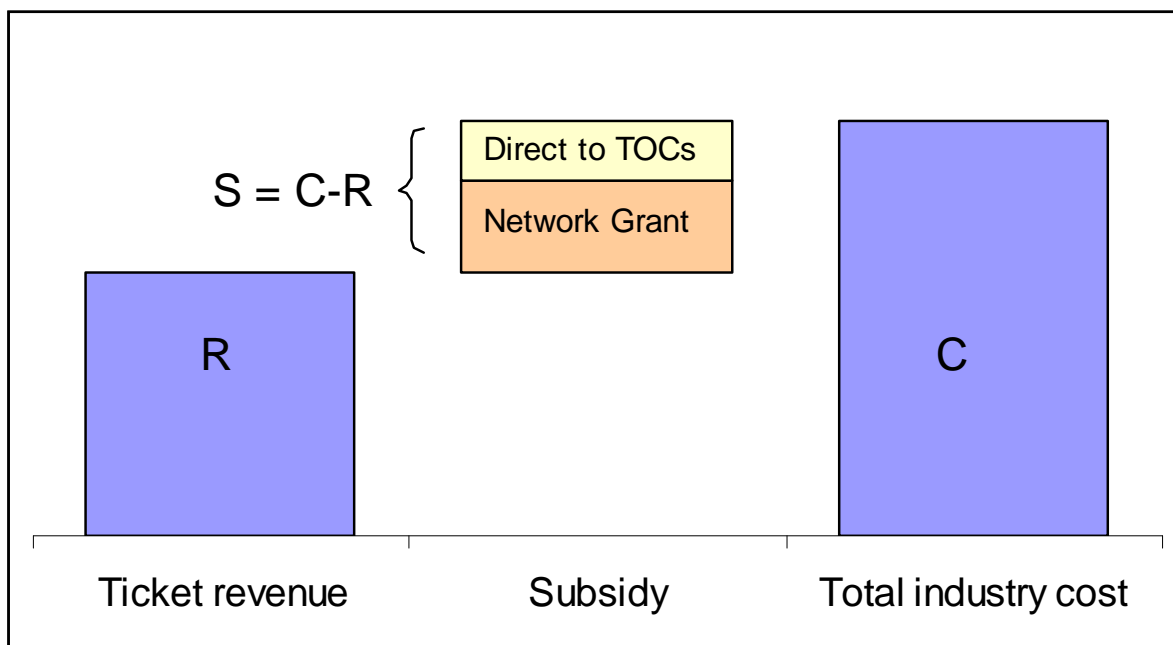
- 5.36 One of the key principles behind the Access and Management Regulations is that access charges should be non-discriminatory, specifically that a charging scheme, *“results in equivalent and non-discriminatory charges for different railway undertakings that perform services of an equivalent nature in a similar part of the market”*.
- 5.37 We consider that the differences between franchised TOCs, open access operators restricted by the NPA test and open access operators subject to the wider cost-benefit test, and the different types of access they would in principle justify different levels of charges. We therefore consider that, as an approach, this would be consistent with the non-discrimination requirement in the Regulations. Our view is that the value-based charges levied on top of variable track access charges would constitute a “mark-up” in the language of the Access and Management Regulations, which state that, *“...In order to obtain full recovery of the costs incurred the infrastructure manager, with the approval of the Office of Rail Regulation under the access charges review or, in the case of a rail link facility, the Secretary of State through the development agreement, may levy mark-ups on the basis of efficient, transparent and non-discriminatory principles...”*.

6. Cost-benefit analysis

Introduction

- 6.1 The evidence set out in the previous chapters provides some qualitative indications of the possible impact of a move towards further on-rail competition. Basic economic theory suggests that more competition would tend to benefit passengers by reducing prices and improving service quality. It could also benefit the economy and society more widely through, for example, reduced congestion on the road network and environmental benefits as more people use the railways.
- 6.2 The impact on taxpayer funds is clearly also important, and is more difficult to predict. In broad terms we would expect more on-rail competition to tend to:
- drive aggregate fare revenues down, the upside of more passengers travelling being outweighed by a lower average revenue per passenger, due to fares competition; and
 - have an ambiguous impact on total industry costs, depending on whether improved incentives to cut costs outweighed or were outweighed by other effects such as a loss of economies of density and higher margins required by open access operators.
- 6.3 The value of the overall subsidy to rail is, broadly speaking, determined by the difference between aggregate industry revenues and total industry costs including TOC margins (see Figure 3 below). A fall in aggregate fare revenues would therefore tend to place an upward pressure on total subsidy. In all cases there would be a reduction in franchise premia, due to fewer valuable services being provided through franchises, but this effect would be at least partly offset through receipt of financial bids made by open access operators, with the net impact on total industry profits, given the potential for cost efficiencies, less clear.

Figure 3 – Total industry costs, revenue, subsidy (illustrative)



6.4 We asked MVA, supported by ITS, to carry out (for a limited range of scenarios) a quantified assessment of the introduction of more on-rail competition, as described below.

Cost-benefit analysis

6.5 A cost-benefit analysis (CBA) or impact assessment is an analysis that “...quantifies in monetary terms as many of the costs and benefits of a proposal as feasible...⁴¹”. A key part of the MVA report was a CBA which appraised the impact of increased competition on rail users, cost to government, and the wider economy.

6.6 HM Treasury's ‘Green Book’, *Appraisal and Evaluation in Central Government*, sets out best practice to be applied by promoters and sponsors when assessing projects. In carrying out this assignment, MVA used a methodology that was consistent with WebTAG, the DfT's more detailed guidance on the application of the Green Book principles to transport studies and appraisal. The WebTAG compliant methodology was used to forecast the impact of increased on-rail competition on the wider economy, consistent with the approach used by the UK Government when appraising major projects such as Crossrail and High Speed Two (HS2).

⁴¹ Green Book, HM Treasury, 2010.

6.7 In terms of benefits, MVA's analysis focused on three key areas as follows (where italics denote MVA's own terminology).

- **User benefits** – MVA assessed how increased competition would affect railway users, i.e. passengers, through fares, changes to the destinations served by rail, journey times, service frequency, service quality, and crowding. In MVA's analysis these impacts are reported separately as:
 - *Crowding* – the impact on passengers of changes to the level of crowding on trains. More on-rail competition would, because of lower fares, tend to increase crowding on trains, i.e. deliver disbenefits to passengers all else being equal;
 - *Fares* – the benefits obtained by existing and new passengers as a result of paying lower prices for train tickets;
 - *Interchange and Journey time* – the impact of time savings enjoyed by passengers as a result of faster services and/or a reduced need for passengers to change trains (e.g. because of new direct services).
- **Non-user benefits** – increased competition should encourage rail use through cheaper fares and/or improved service quality. MVA therefore sought to capture the wider economic benefits associated with encouraging modal shift from car and air to rail. MVA used forecast changes to car and air demand (including car usage for 'rail heading'⁴²) to estimate the non-user benefits of environmental (carbon emissions, noise, local air quality), accident, indirect taxation (fuel duties and taxes lost through reduced car use), and highway congestion benefits.
- **Producer surplus** – MVA estimated the impact of further on-rail competition on the total amount of profit (after all costs including access charges and premium/subsidy payments) earned by franchised TOCs and open access operators.

6.8 MVA compared net benefits calculated above with the change in total cost to government resulting from increased on-rail competition. MVA assumed that

⁴² As set out in the Select Committee on Transport Twelfth Special Report, "*Rail heading is the phenomenon where passengers drive to a main station rather than use their local station, because of fares, service level or other journey options, putting them off travelling from their local station and adding to traffic congestion levels elsewhere and encouraging car users to drive further. Rail heading goes against the desire to reduce net vehicle trip kilometres and increase public transport use.*"

increased competition would be anticipated at the franchise bid stage and therefore that, where new entry reduced the potential for franchised operators to earn profits, this would be reflected through lower franchise premium bids. The change in cost to government could be expressed as either the total change in access charge and premium payments received (directly or indirectly) by government or (as done below) the sum of the following items:

- Any reduction in total fares revenue (increased fares revenue would, other things being equal, tend to reduce costs to government);
- Any increase in total industry costs (reduced costs would, other things being equal, tend to reduce cost to government); and
- Any increase in the total profits retained by TOCs.

6.9 Having completed these calculations, MVA estimated a benefit to cost ratio (BCR) by calculating the relative magnitudes of benefits as set out in the previous two paragraphs.

MVA's modelling

MVA's modelling approach

6.10 MVA modelled, for the current East and West Coast franchises, a series of scenarios characterised by progressively increased levels of on-rail competition, starting with the current status quo. MVA modelled 'steady states', based on 2010 data on prices and passenger numbers, in which forecast efficiencies had been achieved and in which firms had set prices reflecting the competition that they faced. Key modelled variables included the following (see the full MVA report for more detail):

- Service patterns – in scenarios where the number of franchised services was reduced, MVA assumed that the least profitable franchised services would be removed from franchises first. MVA assumed that open access operators would run to the most profitable destinations available to them absent any constraints such as the NPA test.
- Fares – MVA assumed that operators would price to maximise profits given, amongst other things, capacity constraints and the fares set by others in the market. MVA used its assumed fares levels to drive the overall level of demand and choice of operator within its models.

- Costs – MVA modelled the costs of franchised and open access operators using a top-down approach, pivoting from the current cost base of incumbent franchised operators adjusted to reflect, firstly, any assumed differences in volume/density of services, and, secondly, assumed efficiency savings associated with open access (see below).

6.11 These variables were used to estimate total economic welfare (in line with published guidance) and the cost to government under various track access charging scenarios.

Key assumptions

6.12 Details of a wide range of scenarios are included within the MVA report. We provide a brief summary below in relation to their modelling of greater on-rail competition on the East Coast franchise. We focus on this set of results because this is the part of the network where on-rail competition from open access has been most comprehensively tested.

6.13 Returning to the key variables listed in paragraph 6.10, on fares/revenues:

- MVA's modelling suggests that, primarily due to capacity constraints, none of its modelled options would lead to drastic (e.g. more than 10 to 20%) fare reductions below current levels. MVA arrived at these forecast fare changes using a simple iterative method and drawing on published evidence on fares elasticities; and
- Elasticities of demand close to 1⁴³ meant that the reduction in fares would only lead to a modest decline in total revenues.

6.14 On costs:

- MVA assumed that, for a given density of operation, open access operators would have 10-30% lower unit costs (across all cost categories) than franchised operators⁴⁴. The primary source behind this key assumption was a comparative efficiency analysis carried out by ITS. Secondly, MVA assumed that, due to a greater ability to control wage rates, open access operators' labour costs are on average around 12% lower due, primarily, to an ability to

⁴³ Where elasticity of demand equals 1, this means that any percentage change in price generates the same percentage change in demand.

⁴⁴ MVA's modelling used a midpoint of this range, i.e. 20%.

better control wage rates. ITS found a historic range of 6%-18% in its analysis of TOC costs.

- Economies of density⁴⁵ played a key role in MVA's modelling. MVA assumed a cost elasticity of 0.8 with respect to train density (train miles per route mile), holding load factors and route miles constant. This figure was in line with evidence in cost literature.
- MVA's modelling for the East Coast mainline found that, where two or more paths per hour were run by open access (generating cost savings) and where service changes led to an increase in output on particular route sections, there was potentially scope for the first of these two effects to dominate, i.e. for aggregate costs to fall as a result of more open access.

Outline of MVA's results

- 6.15 The first key output of MVA's modelling was a series of estimates of the welfare implications of a change in approach. MVA found that all of its modelled options in which the level of on-rail competition was materially increased would deliver net economic benefits. This was primarily due to lower fares driving higher passenger numbers. Generally speaking, MVA found that subjecting more rather than fewer flows to on-rail competition would, through lower fares, lead to greater economic benefits.
- 6.16 The second key output of MVA's modelling was an estimate of the impact on the cost to the taxpayer arising from increased on-rail competition. In most cases, MVA found that an increased role for open access operators would increase the cost to the taxpayer. This was driven primarily by lower aggregate revenues⁴⁶ resulting from lower fares. MVA found, however, that these increases could be significantly reduced through operator efficiencies and increased track access charges paid by open access operators.
- 6.17 Broadly speaking MVA found the cost to the taxpayer to be lowest where, other things being equal:
- The downward pressure on fares was least;

⁴⁵ i.e. the unit cost savings obtained from the density of volume within a network that firms achieve, rather than cost savings obtained simply through overall scale.

⁴⁶ As noted above MVA's modelling followed a 'steady state' approach that did not take into account the underlying overall growth in GB passenger numbers and the revenue impact of this.

- Commercial freedom allowed operators to replace loss-making services with those with a better balance between costs and revenues, in some cases with fewer train miles.
- Relatively significant economies of density were enjoyed (there tends to be, other things being equal, a tension between the level of economies of density earned and the closeness of on-rail competition); and
- The proportion of franchised, as opposed to open access, services was lowest (due to the lower modelled costs of open access services).

6.18 MVA found that the cost to government would be lowest where track access charges to open access operators were set so as to fully capture the value of capacity to operators.

Results for individual options

6.19 Detailed results of MVA's modelling are set out in Annex A of the MVA report.

6.20 In this document we provide for illustrative purposes an outline of MVA's results for two separate options for increased competition on the East Coast mainline. These are, in MVA's terminology:

- *Option 2:*
 - Two (rather than one as in the status quo) paths out of London per hour are operated by an open access operator.
 - These paths are not subject to the NPA test.
 - The open access operator serves Leeds (one train per hour) and Newcastle/Edinburgh (one train each in alternating hours).
 - The open access operator would lower its own (and therefore total industry) costs through a more efficient utilisation of rolling stock by running half-length stock on the hourly service to Leeds. MVA's analysis suggested that this would not cause significant overcrowding in the short to medium term.
 - Open access operators pay for paths based on the results of an 'auction', i.e. a financial bid reflecting the value of capacity to operators, which they pay in addition to the variable track access charge.
- *Option 4:*

- The current East Coast franchise is divided on geographic grounds, with direct competition consequently restricted to services between London and Peterborough.
- Services between London and Bradford are operated by the franchised operator, whilst remaining services (e.g. to Edinburgh, Newcastle and Hull) are operated by open access.
- Open access operators pay for paths based on the results of an 'auction', as in option 2 above.

6.21 We focus our summary in this document on these two options because, in our view, they highlight the key trade-off in MVA's modelling between, on the one hand, greater competition driving passenger benefits and, on the other, the key role played by MVA's assumptions on industry costs.

Detailed results

East Coast Option 2

6.22 Results for this option are summarized in Figure 3 below.

Figure 4 – Appraisal for East Coast Option 2

<u>Benefits</u>						
	£m	Crowding	Fares	Interchange	Journey Time	Total
Business		-£16.68	£23.01	-£1.37	£8.74	£13.70
Leisure		-£5.09	£31.98	-£0.32	£2.37	£28.95
Commute		-£0.09	£2.08	£0.00	£0.17	£2.15
User Total		-£21.86	£57.07	-£1.69	£11.28	£44.80
Congestion						£13.25
Accident						£1.50
Environmental						£0.89
Indirect Tax						-£3.63
Non User Total						£12.01
Producer Surplus						£27.07
Total						£83.88
<u>Cost to government</u>						
	£m					Total
(a) Change in aggregate TOC costs						-£28.06
(b) Change in TOC revenues						-£11.67
(c) Change in profits retained by TOCs.						£27.07
Total change in costs = (a)-(b)+(c)						£10.69
<u>Net position</u>						
	£m					Total
Benefits						£83.88
Costs						£10.69
BCR						7.8 : 1

6.23 In summary, the figure above shows that MVA's Option 2 is forecast to generate benefits to users and non-users of around £84m. The most material items within this total are (figures rounded to the nearest £1m):

- On-rail crowding disbenefits of £22m, lower fares and shorter trains feeding through into a higher level of crowding on trains;
- £57m of benefits to passengers as a result of paying lower prices (here labelled simply 'fares');

- £13m of benefits resulting from reduced road congestion; and
- An additional £27m of producer surplus resulting from the higher margins of open access operators.

6.24 These benefits are set against a cost to the taxpayer of £11m, which results from:

- TOC cost savings of £28m, primarily driven by the assumed lower costs of open access operators (and, to a lesser extent, open access running shorter trains to Leeds) being outweighed by;
- An overall reduction in ticket revenues of £12m together with an increase in the amount of profits retained by operators of £27m.

6.25 We discuss these results at the end of this chapter.

East Coast Option 4

6.26 Results for this option are summarized in Figure 5 below.

Figure 5 - Appraisal for East Coast Option 4

<u>Benefits</u>						
	£m	Crowding	Fares	Interchange	Journey Time	Total
Business		-£4.06	£6.68	-£2.95	£11.79	£11.46
Leisure		-£1.16	£6.84	-£0.84	£2.97	£7.81
Commute		£0.00	£4.03	£0.00	£0.22	£4.25
User Total		-£5.22	£17.55	-£3.80	£14.99	£23.52
Congestion						£5.31
Accident						£0.60
Environmental						£0.36
Indirect Tax						-£1.45
Non User Total						£4.81
Producer Surplus						£33.12
Total						£61.45
<u>Cost to government</u>						
	£m					Total
(a) Change in aggregate TOC costs						-£68.27
(b) Change in TOC revenues						-£0.72
(c) Change in profits retained by TOCs.						£33.12
Total change in costs = (a)-(b)+(c)-(d)						-£34.44
<u>Net position</u>						
	£m					Total
Benefits						£61.45
Costs						-£34.44
BCR						Financially Positive

6.27 In summary, the figure above shows that MVA's Option 4 is forecast to generate benefits to users and non-users of around £61m. The most material items within this total are (figures rounded to the nearest £1m):

- £18m of benefits to passengers as a result of paying lower prices ('Fares'); and

- An additional £33m of producer surplus resulting from the higher margins of open access operators.

6.28 MVA's modelling suggests that this option would not bring about a cost to government. This is because the cost to the taxpayer brought about by an increase in the profits retained by TOCs, and as a result of marginally lower ticket revenues, is outweighed by TOC cost savings.

Cost-benefit analysis - summary and conclusions

6.29 The summary model outputs summarised above show a number of important effects. In particular,

- **Lower fares** have a wide-reaching impact:
 - In terms of an impact on individuals
 - Lower fares generate direct benefits to passengers.
 - They also have an impact on congestion, both on rail (whereby trains become more crowded) and the roads (whereby roads become less congested).
 - In terms of its impact on cost to the taxpayer, lower fares will tend to reduce aggregate industry revenues and hence increase the overall subsidy required.
- **Cost to the taxpayer** is influenced by a number of factors other than the revenue effect referred to in the previous bullet:
 - A loss of economies of density tends to place an upwards pressure on total industry costs, thereby adversely affecting cost to the taxpayer, although this may be outweighed by cost savings; and
 - The assumed higher margins required by open access operators will tend to adversely affect cost to the taxpayer.

6.30 A comparison between Figure 4 and Figure 5 shows the following:

- Option 2 would generate stronger benefits for passengers. This is because under Option 4 the extent of head-to-head competition is restricted to a relatively small proportion of the East Coast mainline.
- Option 4 as modelled would not place any pressure on cost to the taxpayer. Rather, it would be revenue-generating. This is because the cost savings

achieved as a result of a bigger role for open access operators outweigh the (relatively small) negative impact on revenues resulting from competition.

- 6.31 These differences highlight aspects of the key trade-offs summarised at paragraphs 6.15-6.18 above.
- 6.32 In our view the results of Option 2 are more useful in informing the debate. This is because it represents change that would:
- deliver significant benefits to passengers; and
 - represent a modest increase on the amount of open access competition seen to date, thereby offering a degree of certainty.
- 6.33 It is also important to note that MVA's results for Option 4 are very strongly driven by the assumed lower costs of open access operators for a given density of operation. Our view is that, whilst the use of this assumption in MVA's work is generally reasonable, it would be risky to rely on it, especially in Option 4, since in this scenario:
- the scale of open access is relatively large (being around half the size of current franchised operations on the East Coast mainline), potentially calling into question the ability of open access to maintain lower unit labour costs; and
 - the level of direct head-to-head competition between open access and franchised operations is relatively small, potentially reducing the incentives for open access operators to reduce costs.
- 6.34 We also recognise that MVA's modelling has not captured all the costs and benefits that would be associated with greater on-rail competition. There are further issues that we did not ask MVA to model, notably:
- An increase in the number of TOCs active in GB might of itself have implications, for example:
 - It could provide potential for efficiency gains through a greater number of TOC cost benchmarks; and/or
 - An extreme fragmentation of TOCs, to the extent that this is likely, could act as a barrier to closer working arrangements between TOCs and Network Rail. Joint working of this sort was an important theme of the VFM study.

- Generally, operators exposed to more commercial pressures than under the status quo could help to bring more pressure to bear on Network Rail. By means of an illustration, a saving of 1% on the total expenditures of Network Rail in the London North East (LNE) region would be worth £5-£10m per year.

7. Summary and next steps

Introduction

7.1 This chapter summarises the key points from the evidence set out in this document both in relation to the potential benefits of greater on-rail competition in driving value for money and the implications of its being achieved in different ways. It also sets out our position, having considered this evidence. It outlines some of the practical issues that would need to be resolved before increased on-rail competition could become an operational policy. Finally, it sets out the questions on which we are seeking views through this consultation in order to inform the further development of our policy in this area.

Summary

7.2 This document has summarised:

- Evidence from both the passenger rail industry and elsewhere of past instances where competition has delivered benefits by placing downward pressure on prices and/or costs;
- A newly commissioned study completed by MVA and ITS, providing:
 - further detailed analysis of the impact of competition in other transport markets; and
 - a quantitative assessment of how increased on-rail competition would affect passengers and cost to government on GB's East and West Coast franchises.

7.3 Specifically in the case of the East Coast mainline we have described a modelled scenario whereby the removal of the NPA test and release of a second hourly path to open access could deliver economic benefits in excess of over £80m p.a. at a cost to government of around £10m p.a., given changes to access charging for open access operators (see chapter 6 for details). We have focused on this result in our summary here, rather than others in the MVA report that describe potentially greater gains and/or lower costs because, in our view, such a scenario would represent a significant departure from the status quo without stepping so far into the unknown as to create unacceptable uncertainty or risk.

- 7.4 As set out within the MVA report, its results depend crucially on a number of key assumptions made within the modelling. A failure of these assumptions to be realised would clearly alter MVA's predicted cost-benefit relationship. Of particular concern from an affordability perspective would be the risk of an increased cost to government. But we do not consider that this uncertainty should be viewed as an insurmountable barrier to increased on-rail competition. We consider some of MVA's key assumptions in turn below.
- 7.5 MVA's analysis assumes average **fare reductions** (by both franchised and open access operators) of 10-15% below the current level. Given the current level of intercity fare elasticities we would not expect cuts of this magnitude to have a very significant negative impact on revenues. We also do not consider that there is a very high risk of significantly greater fares cuts than assumed by MVA leading to a very large reduction in industry revenues. As noted in the Arup report (see above), on-rail competition has often tended to have a dampening effect on fares increases in some instances, and in particular the dedicated fares offered by open access operators can be heavily discounted below the full fares of franchised operators. But we are not aware of any reason to consider, across all fares, price reductions greater than the ones modelled by MVA to be likely.
- 7.6 On **costs**, MVA's analysis assumes that for a given density of operation significant cost savings (with an assumed value of 20%) can be achieved by open access operators. The basis for this assumption is the recognised lack of cost efficiency of GB train operators. ITS/MVA explain this assumption on costs by saying that, *"...Overall, our view is that a reasonable central range for the scenarios for efficiency savings (other things equal) is 20-30%. The basis for this view is essentially that franchising has not achieved what would have been expected and that direct competition, via open access, could drive out the savings not yet achieved..."*.
- 7.7 The importance of this assumption is highlighted by table 6.2 within MVA's report. In this particular modelled scenario each ten percentage points of assumed open access operator efficiency reduces cost to government by around £17m p.a. Zero open access operator cost savings would, holding all other assumptions constant, lead to a cost to government that was only marginally greater than the benefits to users and non-users arising from lower fares. But 20% cost savings for open access remains MVA/ITS's central assumption. The results we summarise in this consultation do not assume any

efficiency 'catch up' by franchised operators, something that a more detailed exercise might consider.

Our position

- 7.8 Having considered the evidence set out here, we are of the view that greater on-rail competition would be likely to deliver benefits in terms of improved value for money in the passenger rail sector. We consider that this would occur both through a more passenger-focussed and response service but also through greater downward pressure on cost. We therefore consider that there would be merit in our introducing a wider cost-benefit test for the assessment of access applications from open access operators.
- 7.9 We have considered the impact that greater on-rail competition could have on the flow of funds through the industry, and in particular the potential impact on the taxpayer. Taking this, and the fact that access granted subject to a wider cost-benefit test rather than the current NPA test would be less restricted, we consider that where open access is granted under the wider test operators should pay a contribution to Network Rail's costs beyond the variable track access charge. We see merit in this being a capacity charge that reflects the value the open access operator places on access to the network. And we see merit in such value-based charges being determined as a result of the relevant capacity being auctioned.
- 7.10 We are currently of the view that the requirement to pay a value-based capacity charge should only apply to those open access operations subject to the wider cost-benefit test and not the existing NPA test.
- 7.11 We recognise that greater on-rail competition raises complex issues, not least around the impact on the flow of funds through the industry and the impact on taxpayers in particular. Our aim at this stage is therefore to stimulate discussion, and draw out further evidence and argument, which will help us in due course to decide whether and how to change our policy in this area. Any specific policy changes would be subject to an impact assessment in due course, as would any unresolved issues including, for example, the position of international services.
- 7.12 Crucially, given the uncertainty inherent in forecasts of the impact of change, caution would be required over any change from the status quo that departed

too far from the current position. A fully operational policy would require a number of policy decisions by the DfT/TS, which in addition to weighing up the potential impact on passengers and taxpayers might include:

- Ensuring that passenger rail services still provided a minimum level of service that was necessary from a public policy perspective, potentially through obligations placed on franchised and/or open access operators; and
- Retaining the benefits generated through the application of ORR's current access policy, including new direct services to destinations such as Hull, Sunderland, and elsewhere.

Consultation questions

7.13 We welcome comments on any aspect of this document. In particular we are asking for stakeholders' views on the following, especially in the light of the evidence that we present, our interpretation of it, and any other important evidence that stakeholders think we have omitted:

- The effects of existing on-rail competition, in particular on price, number and nature of service, service quality, and costs.
- The potential benefits of competition as described in chapter 3 of this document onwards, in particular the potential for it to drive value for money by:
 - Improving firms' responsiveness to passenger demands; and
 - Placing downward pressure on costs.
- Any wider benefits of competition that should in your view be taken into account.
- The extent to which benefits could be realised in GB passenger rail through increased on-rail competition, with particular reference to your views on:
 - The likelihood that increased on-rail competition would drive lower fares and improved service quality; and
 - The potential for competition to drive cost savings and in particular on the assumptions made by MVA in its modelling as summarised in chapter 6 of this document.

- The potential for developments in the sector, including technological change to increase the scope for greater on-rail competition in future. Please highlight in particular:
 - What developments you consider could take place;
 - How you consider it could facilitate greater on-rail competition (e.g. by increasing the efficiency of capacity utilisation)
 - What would need to happen in order for these developments to increase the scope for more on-rail competition, and in what time period you believe they could take place.
- The potential impact of more on-rail competition on the taxpayer.
- Specific policy options that could be pursued to facilitate increased on-rail competition, including but not necessarily limited to the ones we assess in chapter 6, including:
 - Impacts on the flow of money in the industry, and in particular on flows of public funds;
 - Impacts on key stakeholders including taxpayers; and
 - Any issues associated with using financial bids as a criterion for allocating network capacity, including any views on any complexities or administrative costs that this might introduce. In drawing our attention to any downside risks or costs associated with specific policy options you should also set out your thinking on how these costs or risks might be mitigated.

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