

Competition in passenger rail services in Great Britain

A discussion document for
consultation

Summary

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NOTE: The paragraph cross-references in parentheses relate to paragraphs in the more detailed 'main document' which is being published simultaneously with this summary.

Context

1. Rail transport is an essential part of people's daily lives, and a key element of the country's economic infrastructure. In Great Britain, over four million passenger rail journeys are made on the Network Rail network every day. It is clearly important that the service should put passengers first and that there should be maximal value for money, with downward pressure on fares, and constant efforts to improve the quality of service that passengers experience.
2. The country's railway sector has undergone a remarkable renaissance. In the immediate post-war period, there was a sharp decline in rail usage: the number of rail passenger journeys per year in Great Britain, which had been about 1 billion in 1950, had fallen to barely over 600 million by the mid-1980s. Since the mid-1990s, there has been a steady rise, and by 2013–2014, over 1.6 billion rail passenger journeys were being made annually in Great Britain.¹
3. Passenger satisfaction has also improved in recent years. The National Rail Passenger Survey, conducted by Transport Focus, shows that passenger satisfaction improved from an overall satisfaction rating of 72% in spring 2002 to a rating of 82% in spring 2013.²
4. This seems to suggest that the arrangements for passenger rail services in Great Britain in place since the mid-1990s have broadly yielded successful outcomes, in spite of well-known difficulties such as the collapse of Railtrack in 2001–2002, the failure of the private sector East Coast franchisee in 2009 (resulting in a state-owned operator of last resort running the service for the subsequent five years) and the failure of the West Coast franchise letting competition in 2012.
5. As the UK's principal competition authority, the Competition and Markets Authority (CMA) is interested in exploring the extent to which this broad success story is attributable to competition in passenger rail services, and the extent to which that success might be enhanced – to the benefit of passengers, the industry and the country as a whole – by introducing a greater degree of competition.

¹ Department for Transport, Rail Executive (October 2014), *Rail trends factsheet, Great Britain: 2014*.

² Office of Rail Regulation (April 2014), *Rail Passenger Satisfaction Benchmarking: Report on ONS Opinions and Lifestyle Survey*, paragraph 2.1.

6. The CMA's statutory duty is to promote competition for the benefit of consumers.³ In addition, when the CMA was established, the government announced, in a 'strategic steer' to the CMA, that it saw the CMA 'playing a key role in challenging Government where Government is creating barriers to competition'.⁴ The same point has been made in a new draft strategic steer which the government is publishing for consultation in July 2015.

The competition landscape for passenger rail services in Great Britain

7. The supply of passenger rail services in Great Britain involves competition 'for' the market, by way of the competitive bidding for franchises to operate passenger train services in a region or on a major route for a specified period (around seven to 15 years) (*paragraphs 2.18 to 2.25*).
8. The system of competitive bidding for franchises has been a largely successful model and, as noted, appears to have delivered real benefits – reversing the decline in passenger numbers and improving passenger satisfaction in the past decade, as described in paragraphs 21 and 22 below. Moreover, since the Brown review into the future of franchising in 2012–2013, very significant and welcome improvements have been made to franchising, enabling franchisees to be more responsive to passenger needs (as described in paragraph 10 below).
9. There is also a small degree of competition 'in' the market – ie competition between passenger train operators, also called 'on-rail' competition – by way of overlapping franchises, parallel franchises and 'open access operators' (OAOs) (*paragraphs 2.58–2.70 and 3.1–3.4*). OAOs represent only about 1% of passenger miles. The extent of overlapping franchises has reduced over time (*paragraph 2.37*). (In contrast, rail freight services involve full 'on-rail' competition.)
10. Meeting passenger needs has involved incremental, considered change, and often the balancing of conflicting priorities. For example:
 - In specifying franchisees' obligations, there is a balance to be struck between guaranteeing service levels for passengers and giving franchisees the flexibility to be more responsive. We welcome the Department for Transport's July 2013 statement, in response to the Brown Report on the future of franchising, that it will in future 'seek to give bidders

³ Enterprise and Regulatory Reform Act 2013, section 25(3).

⁴ *Strategic steer for the Competition and Markets Authority 2014-17*, paragraph 8 (Annex 1 to Department for Business, Innovation and Skills (October 2013), *Competition regime: Response to consultation on statement of strategic priorities for the CMA*).

as much flexibility as possible ... by allowing bidders to propose more innovative solutions', while continuing to 'safeguard essential levels of services and comfort for passengers and realisation of the benefits of Government investment'.

- In addition, the desirability of protecting franchisees from undue risk needs to be balanced against the need to avoid weakening incentives to attract passengers. We welcome the Department for Transport's decision to phase out the 'cap and collar' mechanism in franchise agreements for sharing risk between the government and franchisees, which had the disadvantage of muting incentives for franchisees to increase passenger numbers, in favour of a risk-sharing mechanism reflecting exogenous risks such as GDP changes.
 - We also welcome moves to encourage innovativeness on the part of franchisees – the new franchise award programme uses a weighted scoring system to assess bids, reflecting initiatives in bids that drive service quality improvements for passengers (*paragraph 2.49*). In addition, specific funds are now available through a pilot scheme to certain franchisees during the life of a franchise to encourage innovation and a new approach to the treatment of the residual value of investments made by franchisees was introduced to address the risk of investment tailing off towards the end of a franchise (*paragraph 2.33*).
11. The question that the CMA, in this discussion document, wishes to consider is whether such beneficial incremental measures are the best way to improve services for the passenger – or whether more significant improvements could be achieved by introducing a greater degree of head-to-head on-rail competition, with competitors offering a greater competitive constraint on incumbents (in place of the current 1% or so).
 12. In preparing this discussion document, we have engaged with a number of interested parties and industry experts. We have liaised closely with the industry regulator, the Office of Rail and Road (ORR), and jointly with ORR we hosted a 'round table' of franchised TOCs and a separate round table of OAOs and applicants. We have also individually met representatives of OAOs, franchisees, Network Rail, the rail freight industry, the consumer representatives Transport Focus and Which?, as well as academics and other experts specialising in the sector. We have engaged with the Rail Executive at the Department for Transport and with officials at Transport Scotland, the Department for Business, Innovation & Skills, HM Treasury and international rail regulators. We are extremely grateful to all of these for their valuable contributions.

Our goals

13. In issuing this discussion document, our objectives are to seek improvements in the railways in Great Britain and benefits for passengers and taxpayers, including by:
 - securing better value for money – for passengers by way of downward pressure on fares, and for taxpayers through efficiencies that lead to lower operating costs at the ‘retail’ level of passenger train services;
 - enhancing service quality and encouraging innovation; and
 - unlocking efficiencies at the ‘upstream’ level of infrastructure operations/management, for example by giving Network Rail greater incentives to use capacity on the network more efficiently and to control costs.
14. Downward pressure on fares, upward pressure on service quality and innovation, and greater efficiency are – in theory at least – benefits that competitive markets tend to deliver. As a competition authority, we wish to explore claims made in recent years (by regulators, think tanks and commentators⁵) that, in Great Britain’s passenger rail sector, these objectives could be better achieved through greater competition between passenger train operators.
15. In assessing this, our approach has been that any recommendations to adapt the current industry framework for the future must be capable of being implemented:
 - without disrupting the current and forthcoming rounds of franchise awards;
 - while maintaining the provision of socially valuable passenger rail services which may not be commercially viable;
 - without jeopardising current and future investment in the network; and
 - without any adverse operational impact.

⁵ See, for example: Martin Cave (CERRE) and Janet Wright (Indepen Consulting) (29 May 2010), *Options for increasing competition in the Great Britain rail market: on-rail competition on the passenger rail market and contestability in rail infrastructure investment – Final report to the Office of Rail Regulation*; Office of Rail Regulation (2011), *Consultation on the potential for increased on-rail competition*; Tony Lodge (March 2013), *Rail’s second chance: Putting competition back on track*, Centre for Policy Studies; and articles by Allister Heath, *Daily Telegraph*, 20 August 2014 and by Tony Lodge, *Daily Telegraph*, 28 August 2014.

- With this in mind, and conscious of the complexities of the issues involved, the CMA in this discussion document is seeking to examine whether it is (a) desirable and (b) feasible to build on the successes achieved to date from competitive franchising, by introducing a significantly greater degree of ‘on-rail’ competition.
- This is a discussion document, intended to contribute to, and stimulate, debate.
- At the end of the document, we propose a range of options for improving services for passengers through materially greater on-rail competition. We consider that the options are most likely to deliver benefits on three major intercity routes – the East and West Coast main lines and the ‘Great Western’ route linking London with the South West and South Wales. We are not suggesting options for commuter services, where capacity constraints and the particular desire of passengers to take the first train seem to us at this stage to pose additional challenges for introducing greater on-rail competition.
- We are conscious that there are no simple solutions, and that a range of considerations need to be weighed in the balance. We also know that, if policy-makers choose to move in this direction, careful thought will need to be given to implementation; we do not envisage any of these options coming into effect until after the end of the current rail franchise terms (or, where new franchise tenders are imminent, after the terms of those franchises about to be tendered), which would mean 2023 at the earliest. We recognise that network capacity constraints are most likely to relax, as a result of Network Rail’s longer-term enhancements and on-board electronic signalling coming on-stream, after 2029.
- This is therefore a debate for the long term. We believe that, with this time frame, now is an appropriate moment to commence the debate.

The history of on-rail competition over the past 30 years

16. On privatisation of the British rail industry in the mid-1990s, it had been intended that, after an initial transitional period, competition ‘in’ the market – ie on-rail competition – would play a greater role (*paragraph 2.28*).
17. However, this has not in fact happened, for a variety of reasons.
 - The extent of overlapping and parallel franchises has fallen in recent years as a result of a conscious policy decision in 2001 by the then franchising authority, the Strategic Rail Authority (*paragraph 2.37*).

- For open access operations, applications for new services have been relatively small in scale, in part reflecting (a) limitations on spare capacity on the network in geographical areas where there is passenger demand for more services, and (b) the extensiveness of services that franchisees are obliged to provide under their franchise agreements with the government. In practice, OAOs have thereby been restricted to markets underserved by franchisees, where there is also available network capacity.
 - Moreover, the industry regulator, ORR, has statutory duties that require it to consider not only the effects of competition, but also the effect of new entry on the funds available to the government for its railway functions; ORR has sought to meet these duties and balance them, through a policy under which ORR will normally only approve open access operations if they meet a ‘not primarily abstractive’ test (ie which requires them to generate at least 30 pence of new revenue for every £1 abstracted from existing operators). Although this test places significant weight on the potential benefits of competition, and so permits a material proportion of abstraction from taxpayer funds, it has led to a number of open access applications being refused. Against this background, there are now only two OAOs (First Hull Trains and Grand Central), running three open access services, all of which are on the East Coast main line.
18. Policymakers have been understandably concerned about the potential risks from greater on-rail competition, including in particular the concerns that taxpayers would face higher costs as a result of:
- the risk of new entrants ‘free-riding’ on past investment in network, stations, etc or using past investments in ways other than intended (eg using diesel trains on electrified lines) – and consequently making it harder to finance future investment; and
 - the risk of new entrants ‘cream-skimming’, competing on the most profitable services, and abstracting revenue from franchisees on those profitable services, weakening franchisees’ financial ability to subsidise unprofitable but socially valuable services (including public service obligation (PSO) operations) (*paragraphs 6.63 to 6.65*).
19. The desire to avoid risk has become stronger in the aftermath of a number of ‘shocks’ sustained by the system in the past 15 years, including the collapse of Railtrack in 2001–2002, the failure of the private sector East Coast franchisee in 2009, and the failure of the West Coast franchise-letting competition in 2012, as well as reflecting the increased focus on the UK’s fiscal position. This is entirely understandable, but there is a balance to be

struck, and there is a countervailing risk that excessive emphasis on minimising disincentives to franchise bidding, by protecting franchisees from risk, may deprive passengers, taxpayers and the industry of many of the benefits that more intense competition could bring (*paragraphs 2.31 to 2.52*).

20. Nevertheless, greater on-rail competition has remained a policy objective of the authorities. ORR, in its long-term regulatory statement of July 2013, said (*paragraph 2.30*):

There is an opportunity for there to be much greater on-rail competition in the future, if governments desire it. The addition of new [network] capacity, including HS2, and the introduction of new signalling technology that allows much more dense use of network capacity, will open up new route paths that could allow greater on-rail competition between operators.

Competition ‘for’ the market, through the current franchising system, has yielded real success

21. Competition for the market has been intense, with franchise competition consistently attracting a number of credible bidders – including, in franchise competitions in 2014, Abellio, Arriva, FirstGroup, Govia, Keolis, Stagecoach and a Stagecoach/Virgin joint venture (*paragraph 4.1*).
22. In the years since the competitive franchising system was established, there has been substantially increased usage of passenger rail services – virtually doubling since the mid-1990s – and, over the past decade, increased passenger satisfaction and ongoing improvements to safety (*paragraph 4.4*).
23. Nevertheless, there are limitations to what the current system can deliver:
- First, a recurrent concern in the industry is that the current rail franchising system in Great Britain has, in recent years, been characterised by highly specified obligations being imposed on the franchisees, limiting the flexibility and scope for innovation and differentiation. In this context, as noted above, it is encouraging that the government in July 2013 indicated a desire to redress this by increasing flexibility for franchisees and has since taken steps to reduce the degree of specification in new franchises (*paragraph 2.32*).
 - Second, the provision in franchise agreements under which the government indemnifies franchisees against increases in track access charges that occur during a franchise term weakens the incentives of franchisees to control costs and operate efficiently (*paragraph 2.56*).

- Third, concerns have also been expressed that mechanisms in franchises in Great Britain for sharing risk and reward between the franchisee and the government have limited the incentives for franchisees to attract increased numbers of passengers, and therefore the incentives to make the price and service more attractive. Again, as noted above, the government has made welcome moves to change this, phasing out the cap and collar mechanism and replacing it with an alternative risk-sharing arrangement reflecting exogenous risks such as GDP changes (*paragraph 2.49*).
- More generally, insights from standard economics suggest that, in many sectors, competition directly between operators ‘in’ the market tends to be more effective at delivering benefits than competition ‘for’ the market (where bidding processes are unlikely to be perfectly efficient and where, for the duration of the franchise, competitive incentives are muted) (*paragraph 2.52*). In practical terms, we have considered whether the evidence bears this out in the context of passenger rail services (*Chapters 4 and 5*).

The conditions are present in Great Britain for greater on-rail competition

24. First, the design of the Great Britain rail industry, with no vertical integration between the network owner/manager and the incumbent passenger train operator(s), entails that there is no interest or incentive for the network owner/manager to discriminate in favour of incumbents, and the prospect of a ‘level playing field’ of undistorted competition (*paragraphs 6.3 to 6.5*).
25. Second, there are potential opportunities as a result of network constraints receding – through enhancements of existing network capacity, building of new capacity (including for HS2⁶), and new technologies such as on-board electronic signalling that enable more efficient use of capacity. Moreover, there is potential for load factors on trains to increase at certain times of day, particularly in the off-peak period, allowing more passengers to be carried on existing services without expanding capacity (we note that load factors increased in the European air transport sector following liberalisation and the introduction of new competition). (*Paragraphs 3.5 to 3.24.*)
26. Third, changes in franchising following the Brown Review of 2012–2013, and in particular the phasing out of the cap and collar risk-sharing mechanism, are

⁶ The Department for Transport has made the point that there are potential risks to the HS2 business case, such as reduced timetable co-ordination, that could arise from greater on-rail competition. The Department also made the point that open access competition could limit the government’s ability to secure the financial benefits of the major, upfront investment.

increasing incentives on franchisees to compete to attract passengers. This makes it more likely that new competitive challenges to franchisees will elicit a competitive response.

27. Fourth, the rail regulator, ORR, is currently undertaking a review of the structure of track access charges and related charges paid to Network Rail, which may remove some of the distortions in the current funding structure which are impediments to increased competition; the new structure should be in place by the time of its next periodic review in 2018, before any of the changes we are proposing would come into effect.
28. Fifth, the trend of international practice – including the EU’s rail liberalisation packages and the introduction of on-rail competition in various European countries – favours more competition ‘in’ the market, and offers valuable experience for its expansion in Great Britain (*paragraphs 2.115–2.125 and 4.74–4.123*).
29. Sixth, the current system is under pressure, as increasingly ambitious open access applications are submitted (eg those by Alliance Rail for major services on the East and West Coast main lines) and the rail regulator must consider whether to accept them in circumstances where (unlike the options proposed here) there is no obligation on new entrants to pay fixed track access charges or otherwise compensate for any resultant shortfall in government revenues.

Empirical evidence: would greater on-rail competition deliver *passenger* benefits?

30. We have considered whether there is evidence to suggest that greater on-rail competition would deliver benefits for **passengers** in Great Britain’s privatised rail sector (ie a marked increase over the current 1% of the sector).
31. In the nature of things, given that on-rail competition does not exist on this scale in Great Britain, it is not (and cannot be) possible to draw definitive conclusions. Nonetheless, we have extensively engaged with industry experts and examined detailed evidence from other markets by way of analogy, including:
 - transport markets where there is full competition ‘in’ the market – including in the Great Britain rail freight sector and the experience of EU airline deregulation (*paragraphs 4.7 to 4.25*);

- existing, albeit limited, on-rail competition in Great Britain – from open access and from overlapping and parallel franchises (*paragraphs 4.36 to 4.73*); and
- on-rail competition in other European countries (*paragraphs 4.74 to 4.117*).

Looking at the evidence in the round, there seems to be compelling evidence to suggest that greater on-rail competition would indeed be likely to deliver, for passengers, downward pressure on fares and upward pressure on service and innovation.

32. In the Great Britain rail freight sector, which is entirely open access, on-rail competition has generated significant benefits, including improved staff productivity and investment which enables prices to be kept down and service standards to improve (*paragraphs 4.7 to 4.22*). In addition, the sector has generated upstream efficiencies (as described in paragraph 39).
33. Increased competition in air transport, following EU deregulation, has led to lower airline costs and passenger fares, introduced innovative business practices and supported substantial growth in the choice of flights, including out of regional airports (*paragraphs 4.23 to 4.34*).
34. In Great Britain currently, as noted above, the limited scale of on-rail competition constrains the extent to which one can draw conclusions about what would happen if the scale of on-rail competition were to increase materially. Nevertheless, concrete examples of current open access rail competition in Great Britain are suggestive that:
 - As regards fares, new entrants' incentive to attract passengers encourages them to undercut incumbents, with a general downward pressure on fares in the affected market. For example, for peak time travel from London to York, a dedicated advance single ticket on the OAO Grand Central is priced from £20.80, whereas on the franchisee Virgin East Coast, the equivalent ticket is priced from £49.50. In contrast, for travel from London to Manchester (a similar distance), on the West Coast main line where there is no on-rail competition, the cheapest peak time advance single costs £105.00.⁷
 - In relation to service quality and innovation, OAOs have introduced a number of innovations, including free wi-fi, carnet ticket offers and real-time passenger information systems, and there is evidence that this has

⁷ In order to compare the fares of different operators, the CMA examined the fare options available to passengers for travel at a similar time on a given day.

generated a competitive response by franchisees.⁸ On the other hand, OAO's rolling stock is often older and lacking some of the features of more modern stock (*paragraphs 4.36 to 4.60*).

35. There are, similarly (and with the same caveats) examples that where franchises overlap or are parallel, there has been a degree of price competition (*paragraphs 4.61 to 4.63*). For example:
- Three operators compete between London and Birmingham. At peak time, passengers may buy an anytime single valid on London Midland for £51, an anytime single valid on Chiltern Railways for £64 or an interavailable anytime single ticket (also valid on Virgin Trains) for £84. There is also competition on advance fares. For departures between 0600 and 0900, Virgin's cheapest dedicated advance single ticket costs £65 while London Midland's cheapest dedicated advance single ticket costs only £6 (albeit for a slower service).
 - For travel between London and Peterborough, passengers have the option of purchasing a dedicated season ticket valid on Great Northern services that is 16% cheaper than the interavailable ticket valid on all services, representing an annual saving of over £1,000.
 - Competition from Virgin Trains has forced Chiltern Railways to set its London to Solihull fares at the same level as those on its shorter London to Banbury route, which faces no on-rail competition.
 - Where franchisees have relatively loosely specified franchise agreements, they are able to compete on factors other than price. For example, Chiltern Railways introduced new timetables, launched new rolling stock and worked with Network Rail to improve line speeds in response to competition from other operators on the London to Birmingham route, leading to overall growth in passenger numbers between London and Birmingham (*paragraphs 4.63 and 6.80*).
36. On-rail competition in other European countries has yielded demonstrable benefits in terms of fares, service standards/innovation, and increased passenger usage (*paragraphs 4.75 to 4.118*). For example, in Italy:

⁸ For example, the emerging findings of the ORR's retail market review highlighted the limited ability and incentive for franchisees to compete to offer new fares and products during the life of their franchises, but noted the competitive response by Virgin East Coast to the introduction of carnet tickets by First Hull Trains and Grand Central – *ORR retail market review*, emerging findings, June 2015, paragraphs 3.8–3.11.

- the new entrant, NTV, undercut the fares of the incumbent operator, which responded by offering its own discounts;
- NTV launched a range of service innovations, introducing the latest trains which offer more comfortable seating, a greater range of dining options and a cinema car; and
- passenger demand on the Milan to Rome rail route grew by 15% following the introduction of on-rail competition, mainly due to the operators winning passengers from airlines.

Empirical evidence: would greater on-rail competition deliver efficiency gains?

37. Bearing in mind the considerations described in paragraph 31, and looking at rail and other transport markets by analogy, again there appears to be compelling evidence overall to suggest that greater on-rail competition would deliver efficiency gains.
38. At the retail level, where passenger train operators compete, evidence from existing open access operations in Great Britain suggests that:
 - New entrants have shown their ability to achieve operational efficiencies in terms of (a) greater operational flexibility, (b) greater use of outsourcing, (c) efficiencies in ticketing, and (d) lower staff costs (often combined with higher employee engagement and satisfaction) (*paragraphs 5.17 to 5.23*).
 - OAOs' unit costs seem to be less than those of equivalent franchisees (*paragraphs 5.10 to 5.13*).
 - Empirical work we commissioned from Leeds University's Institute of Transport Studies has found that OAOs' input prices are 29% lower than those of franchisees operating intercity routes. As the study notes, there is a degree of uncertainty regarding the precise magnitude of the efficiencies, although certain observations may be made:
 - using an econometric model that makes allowances for differences between OAOs and franchisees, the study suggests that efficiency advantages offered by OAOs, which are able to adopt a more efficient business model than franchisees, more than offset any cost

disadvantages from the limited scale and density of their current operations;⁹

- expanding the role of open access has the potential to deliver greater efficiencies as operators would benefit from greater economies of scale and density, although the overall cost impact depends on the extent to which the incumbent loses economies of scale and density, and is route-specific. The paper also acknowledges that the incentives that dynamic competition would create for operators to reduce costs may generate further efficiencies over and above those reflected in the model (*paragraphs 5.14 to 5.16*).

39. 'Upstream', at the level of infrastructure operations/management:

- there is evidence to suggest that, where there is competition, there are greater incentives to put pressure on Network Rail to use capacity more efficiently (to accommodate new entry and to control costs) (*paragraphs 5.24–5.43 and 6.31–6.39*), for example:
 - London Midland, which competes with Virgin West Coast and with Chiltern Railways on London to Birmingham services (as parallel franchisees), was able, by investing in enhancements, to secure the capacity and Network Rail's approval to run additional train services;
 - when the OAO Grand Central launched its services from London to York, the additional capacity required by the incumbent to run services to York was identified by Network Rail partly as a result of this increased competitive pressure on the specific route;
- as noted by the Department for Transport in 2012, in the rail freight sector, the competitive environment has forced freight operators to find significant efficiencies over recent years, and it has encouraged Network Rail to do the same¹⁰ (*paragraphs 5.31 and 5.32*);
- in another context, the air transport regulator, the Civil Aviation Authority, has noted the positive impact that liberalisation of airline services had on the 'upstream' management of airports (*paragraphs 5.37 to 5.39*); and
- in the Scottish water sector, evidence suggests that the introduction of downstream retail competition in the past decade very substantially

⁹ Differences allowed for include access charges, density, scale, train length, station operations, average passenger loads and input prices.

¹⁰ Department for Transport (March 2012), *Reforming our Railways: Putting the Customer First*, Cm 8313, p50.

increased the efficiency of the upstream wholesale water monopolist (*paragraphs 5.40 to 5.43*).

Feasibility: barriers to, and opportunities for, greater on-rail competition

40. We have examined the feasibility of greater on-rail competition in current conditions.
41. Vertical separation in rail: As noted above (paragraph 24), Great Britain's separation of passenger train service operations from network infrastructure – although widely criticised – has the advantage in terms of facilitating greater on-rail competition in that it allows for a level playing field between operators (*paragraphs 6.3 to 6.10*).
42. Capacity constraints are, again as noted above, likely to recede over the coming decade (see paragraph 25 above). (*Paragraphs 6.11 to 6.17.*)
43. Rolling stock:
 - Although there is current scarcity, more rolling stock is likely to come online in 2017–2018 as new InterCity Express Programme (IEP) units replace existing franchisees' rolling stock, which is likely to improve availability in the market for re-leased (ie used) rolling stock. Moreover, there are some encouraging signs that OAOs can procure new rolling stock, as evidenced by the proposals for new rolling stock (not yet realised) in the open access applications made by Alliance, Grand Central and East Coast Trains Limited for the East Coast and West Coast main lines (*paragraphs 6.18 to 6.24*).
 - We have considered the risk that increased competition could lead to higher lease charges for rolling stock – increasing a major component of train operators' costs – as a result of uncertainty in rolling stock demand. We consider this risk to be small because (*paragraphs 6.28 to 6.30*):
 - competition is likely to raise overall passenger volumes, so countering any uncertainties about rolling stock demand;
 - a more dynamic train operation market would permit secondary trading in rolling stock, mitigating risk; and
 - OAOs are themselves potential entrants in the rolling stock market, creating greater competitive pressure on lease charges.

Operational issues

44. It has been put to us that greater on-rail competition through open access operations could lead to:
- inefficient use of network capacity, resulting from the potential for a multiplicity of operators on the network, with varied journey times and stopping patterns, and using a wider range of rolling stock with different performance and reliability characteristics; and
 - greater complexity in operating the network, in terms of developing a robust timetable, regulating services and in making strategically important changes to facilitate the provision of new services (such as the introduction of HS2). It was suggested to us that, with a greater variety of services operating within a more complex timetable, any deviation from on-time operation could be more likely to have a wider knock-on effect on other services and on overall punctuality. We were also told that decisions on how to respond to severe disruption could be more difficult to manage given potentially conflicting commercial interests. The presence of multiple operators might also reduce the flexibility in the use of rolling stock in the network.

We consider these issues in greater detail below.

45. On the suggestions of inefficient use of network capacity, arguments have also been made to us which suggested that greater on-rail competition might not have an adverse impact on the operation of the network and could, in fact, lead to more efficient identification and allocation of capacity (see paragraph 39 above). In this regard, we note that our proposed options are likely to have significant effect only as the current network capacity constraints begin to relax, as a result of Network Rail's longer term enhancements and innovations such as on-board electronic signalling coming on-stream.
46. Slot allocation: this would indeed become more complex, but evidence from other sectors and from a number of European countries where on-rail competition takes place suggests that it should not be an insuperable problem. For example, air transport is a competitive market, but there are mechanisms for slot allocation at airports. Although there is arguably greater complexity in railways than in air transport (airport slots are for take-off and landing only, whereas rail slots must reserve track for the whole journey), it seems to us possible that Network Rail could take a more active role in managing the timetable, while reforms to access rights could increase flexibility, opening up more opportunities for new entry. This would also mean

that the regulator would need to continue to settle access disputes (*paragraphs 6.53 to 6.57*).

47. Punctuality: The added complexity of coordinating the operations of multiple operators may adversely affect punctuality and this was one reason for the Strategic Rail Authority seeking to reduce the number of overlapping franchises in 2001 (see paragraph 17 above).
- However, the evidence on the impact of multiple operators on punctuality is mixed. It was also put to us that the ‘Schedule 8’ indemnity included in track access agreements incentivises operators to plan their services in a way that will not disrupt those of other operators (*paragraph 6.48*).
 - We were also told that timetabling complexity is often a function of running a mix of services (eg commuter and long-distance services) to satisfy passenger demand, rather than the number of operators (*paragraph 6.55*).
 - Moreover, greater on-rail competition would help to provide the correct signals and information for deciding on trade-offs between capacity maximisation and performance as compared to a merely centralised process. As set out above in paragraph 39, there is also evidence that on-rail competition has led to the identification of new capacity on the network (*paragraphs 6.31 to 6.39*).
 - It was also suggested to us that a greater number of operators may lead to a wider range of rolling stock being used on the network, which could adversely affect performance. However, we note that a range of rolling stock is already used on many franchises (including on Greater Western, East Midlands and the East and West Coast main lines) without adversely affecting performance. In relation to open access, ORR examines the performance of the rolling stock that applicants propose to use and will not grant access rights where operational performance would be unreasonably compromised (*paragraph 6.47*).
48. Recovery from disruption: it was put to us that it would be more difficult for the network to recover from disruption with a greater number of competing operators. However, the system is already designed to work with multiple operators (with most routes having more than one passenger or freight operator). Network Rail actively manages the response to disruption and current rules provide arrangements for ticket acceptance across operators once a certain disruption threshold is reached. Part H of the Network Code¹¹

¹¹ The Network Code is a common set of rules and industry procedures that apply to all parties with a contractual right of access to the track owned and operated by Network Rail.

includes a requirement for operators to comply with the Railway Operational Code, which obliges operators to work together to recover from disruption, having regard to the needs of passengers and freight customers. Operators also have a range of obligations to provide passenger information during disruption and ORR is able to deal with inadequate responses to disruption through operators' licences (*paragraph 6.52*).

We are conscious of the operational complexities involved in introducing greater on-rail competition and welcome responses from consultees on the likely impact of our options for increasing on-rail competition on the efficient and effective operation of the network, having regard to the considerations set out above.

Effects on funding the network and public service obligations

49. This is the fundamental concern that increased on-rail competition puts at risk the level of premium paid by franchise bidders – in the current framework, franchisees pay £1.9 billion in premiums per year to the government while loss-making franchises receive £2.0 billion per year in subsidies (the greater subsidy for the network comes by way of £3.7 billion a year in direct grant from the government to Network Rail).¹² Any significant reduction in premium payments would threaten (a) the funding of network infrastructure investment (ie new entrants 'free-riding' on incumbents' investments – which could, in turn, undermine the business case for the government to make new investments¹³) and (b) the funding of services deemed socially valuable even if uncommercial such as PSO operations (ie 'cream-skimming') (*paragraphs 6.58 to 6.62*):

- There is certainly a real possibility that, for all the passenger/consumer benefits described above, the threat of competition to incumbents may well reduce the premiums they pay.
- Our options for reform seek to address this issue, by seeking to ensure that any shortfall through a reduction in franchise bid premiums would be

¹² The UK government signalled its intention in the summer 2015 Budget to change the way in which it channels public money through the industry, directing funding through the train operating companies instead of through the network grant, with the aim of encouraging customers of the railway to demand efficiency and the best use of scarce capacity on the rail network.

¹³ For example, franchise premiums were a critical element of the business case for major investments such as the IEP programme for new rolling stock.

largely recouped through a combination of requiring new entrants (eg OAOs):

- (a) to bear a proportionate share of network costs, for example through making a contribution to fixed track access charges (from which OAOs are currently exempt), particularly where they are making use of parts of the network where there is strong demand or where their use directly or indirectly leads to the need for more investment (*paragraphs 6.83–6.85 and 6.89*);¹⁴
- (b) to contribute to the cost of unprofitable but socially valuable services, eg by paying a ‘universal service’ levy to subsidise such services – subject to this being compliant with EU law obligations – or bearing obligations to provide some of these services themselves (which they may be able to operate more efficiently than the incumbent franchisee) (*paragraphs 6.86 to 6.91*).¹⁵

The aim would be to minimise any adverse effect on government revenues.¹⁶ (Alternatively, policymakers may think that some degree of shortfall in revenues is a price worth paying for the passenger benefits of greater on-rail competition.)

We are particularly interested, in this consultation, to hear the views of open access operators and other potential entrants into the market as to whether they would be able and willing to enter the market on these terms.

- It should be noted that only a proportion of government funding of the industry comes from franchise premiums – £1.9 billion per year in franchise premiums, out of a total government funding of £5.7 billion.
- In terms of the scale of any shortfall to government revenues, we have had some indication from the Department for Transport of the magnitude of the potential impact of recent open access applications on the finances of the East Coast franchisee if it were unable to secure the necessary train paths to deliver the key services specified in its franchise as a result of open

¹⁴ In the current funding framework, fixed track access charges account for 8% of Network Rail’s income, compared with 16% from variable access charges (based on the wear and tear costs of running additional trains) and 64% from the network grant paid to Network Rail by the government.

¹⁵ Article 12 of Directive 2012/34/EU allows the authority responsible for passenger rail transport in an EU member state to impose a levy on rail operators providing passenger services to contribute to the financing of public service obligations laid down in public service contracts that have been awarded according to European law. We note that the UK government chose not to transpose Article 12 into UK law in 2009 (when it formed part of a 2007 Directive).

¹⁶ Although we recognise that the ability to recoup any shortfall fully is constrained by the fact that head-to-head competition at retail level would limit the returns that each operator could obtain.

access operations – and hence on the premiums it could pay. The figures are substantial. We have been told that the calculations do not take into account the dynamic benefits of on-rail competition to passengers and taxpayers.

- However, we have had other evidence that there are grounds to expect that the threat to funding from greater on-rail competition may not be as severe as supposed:
 - On-rail competition tends to increase overall passenger volumes (as demonstrated, for example, by the growth in passenger numbers on the East Coast main line on routes served by OAOs), which may increase revenue for the whole industry (*paragraphs 6.70 to 6.75*).
 - Efficiencies from greater on-rail competition are likely to go some way to offsetting any loss. A simple model of the rail industry's income and expenditure suggests that if efficiencies were delivered over a four-year period of 10% at the train operators' level (a more cautious figure than the econometric analysis we commissioned might suggest – see paragraph 38 above) and 4% 'upstream' by Network Rail, the government's financial position would not worsen if revenue from train operators were to fall by up to 9% over the period (with fares able to fall by more than 9% given the growth in passenger numbers generated by lower fares).
 - Evidence from the East Coast main line shows that significant franchise premiums can be maintained, and indeed, increased on routes with significant current and prospective open access operations. GNER, the winner of the 1996 franchise competition, bid on the basis of an average premium of £130 million per year. In 2007, National Express won the franchise competition, bidding on the basis of an average premium of £190 million per year despite Hull Trains having launched services in competition with the franchisee in 2000 and the award of access rights in 2006 for Grand Central to offer services from London to Sunderland.¹⁷
 - Moreover, there is evidence that bidders' appetite for acquiring passenger rail operations has not lowered. Indeed, the recent

¹⁷ In the 2014 East Coast franchise competition, Stagecoach and Virgin bid on the basis of an average premium of £410 million per year, despite the growth of First Hull Trains and Grand Central since 2007 (including Grand Central's introduction of services to Bradford in 2010). However, in the 2014 competition, bidders were indemnified against 80% of any revenue loss from failing to obtain sufficient train paths on the network to deliver the franchisee's key specified services, eg as a result of new open access services commencing during the period of the franchise.

successful sale of the UK's Eurostar shareholding on an international route where competition is expected suggests that competition does not necessarily deter investment (*paragraphs 6.76 to 6.82*).

50. Experience of on-rail competition elsewhere in Europe shows:

- some problems of financial viability, but it has been introduced quite recently and it is not unusual for new entrants in capital-intensive sectors to experience start-up losses (*paragraphs 6.112 to 6.116*); and
- less of a problem in funding unprofitable but socially valuable services, because there appears to be less specification of PSO services than in the Great Britain franchising system (*paragraphs 6.117 to 6.121*).

Other feasibility issues

51. Interavailable tickets: Many passengers value the right to 'turn up and go' on the first train arriving on their platform, and therefore value interavailable tickets¹⁸ – but interavailability limits the possibility of operators competing on price to attract passengers (*paragraphs 6.102 to 6.105*). This could be at least partially addressed by:

- greater choice about interavailable tickets – with passengers having a discount if they buy non-interavailable tickets, and being able to pay to 'upgrade' non-interavailable season tickets when they require more flexibility; and
- smart ticketing – allowing more precise allocation of payments to operators according to passenger usage where passengers travel on interavailable tickets than the current estimates generated by the 'ORCATS' computer model. This would increase the incentives for train operators to compete for passengers as their revenues would directly reflect passengers carried (*paragraph 6.105*).

52. 'Sunk costs': We have considered the risk that on-rail competition, in driving down prices, would threaten the financial viability and sustainability of market participants because of the sunk costs involved in making a franchise bid (*paragraphs 6.106 to 6.108*). This risk may not be so great in the rail industry because:

¹⁸ The emerging findings of the ORR's retail market review note, however, that while passengers benefit from the flexibility provided by interavailable fares, its analysis suggested that passenger take-up of this fare is at least 10% lower for long-distance, intercity travel and that there may therefore be merit in relaxing the obligations for train operators to create and sell interavailable fares on all routes – *ORR retail market review, emerging findings, June 2015, paragraph 5.15*.

- franchise bidders are likely to assess at the outset of the franchise the nature of competition they would face, and to factor this into their bid price;
- if new companies came into the market by taking over the rights of a failing company, there would be no incentive for market participants to drive down prices to the point at which they force a competitor to exit;
- cost-reflective track access charges paid by incumbents and new entrants would act as a 'price floor' for all operators; and
- there is some product differentiation in passenger rail, so that competition may not be close enough to push the prices down to marginal costs, particularly if the timetables of the competing operators are differentiated (eg only one operator offering peak-time services). (*Paragraph 6.108.*)

Options for reform

53. We have considered four options for increasing on-rail competition in passenger rail services.
54. In terms of practical implementation of the options:
 - We consider that they are most likely to deliver benefits on the three main intercity routes in Great Britain – namely the East and West Coast main lines, and the 'Great Western' route linking London with South West England and South Wales – although the framework could be applied nationally to allow for open access growth elsewhere (with the Midland Mainline intercity route in particular being another candidate if it were isolated from the wider East Midlands franchise). (*Paragraph 7.8.*)
 - To protect against risk for existing and imminent franchisees, we do not envisage any of these options coming into effect until after the end of the current rail franchise terms (or, where new franchise tenders are imminent, after the terms of those franchises about to be tendered), which would mean 2023 at the earliest. We recognise that network capacity constraints are most likely to relax, as a result of Network Rail's longer-term enhancements and on-board electronic signalling coming on-stream, after 2029. There would also be the possibility of a pilot scheme in a particular franchise (*paragraph 7.32*).

Option 1 – existing market structure, but significantly increased open access operations

55. Option 1 involves adapting the existing system by permitting a significantly increased role for OAOs, alongside franchises. Concerns regarding free-riding and cream-skimming would be addressed by requiring OAOs to pay proportionately towards fixed track access charges and a universal service levy, to largely make up for any shortfall in government revenues from lower franchise premiums (after taking account of efficiencies). This would allow ORR to review and potentially remove the ‘not primarily abstractive’ test (*paragraphs 7.13 to 7.38*).
56. This option represents an incremental development of the current system, retaining franchising while allowing greater open access where it has the potential to outperform franchised services, and providing the government with flexibility to adjust the balance between franchisees and OAOs in a broadly revenue-neutral way.
57. In return for greater access to the network, the charging structure could be reformed so that OAOs pay charges that are reflective of the fixed and variable costs of the infrastructure they use, potentially reflecting the opportunity costs of their access rights. (We note and welcome the fact that ORR is currently undertaking a review of the structure of access charges paid to Network Rail, in preparation for the next five-year ‘control period’ for access charges which starts in 2019.) Overall, OAOs and franchisees would have broadly similar risks and broadly similar charges in this framework.
58. Funding for unprofitable but socially valuable services (ie PSOs) currently provided by cross-subsidisation between franchises could well be eroded by competition. This funding could instead come from a levy imposed on OAOs with long-term access rights and franchisees that operate profitable services. In order to mitigate any risk to financial viability, it may be sensible for the levy paid by OAOs to increase over time.

Advantages of option 1

59. The advantages of this option include the potential for greater competitive pressure on fares, efficiency savings, improved service quality and significant innovation (as has been seen in other European countries such as Austria, Italy and Sweden) – as well as better security of supply than a system entirely based on open access (ie the franchisee would continue operations in the event of the exit of the OAO). This option, moreover, is broadly in line with open access systems in other European countries.

Disadvantages of option 1

60. There is a risk of a possible adverse effect on government funds from lower franchise premiums, but this can be mitigated by the adoption of cost-reflective access charges and a 'universal service levy' on OAOs. While the universal service levy may be passed on to passengers, the overall effect of on-rail competition would remain positive due to the efficiencies and passenger benefits achieved from open access operations. There is also a risk of a loss of economies of scale and density arising from a greater number of smaller operators running on the network, although this effect may be more than offset by greater efficiencies arising from on-rail competition.

Option 2 – two franchisees for each franchise

61. In this option, there would be two successful bidders for each franchise – either symmetrically (each having 50% of services), asymmetrically (for example, with a 60:40% split in terms of service frequencies and unprofitable but socially valuable services) or with one 'anchor franchisee' being responsible for the unprofitable but socially valuable services and both franchisees responsible for more commercial services (*paragraphs 7.39 to 7.57*).
62. The choice of specification within this option depends on achieving the right balance between the benefits of competition and the risk of operators engaging in tacit collusion on fare levels. Increasing the degree of asymmetry between operators reduces the risk of tacit collusion between operators.

Advantages of option 2

63. All scenarios under option 2 would result in greater competitive pressure on fares and stronger incentives for operators to improve service levels and deliver efficiencies.

Disadvantages of option 2

64. The disadvantages of this option include the risks of reduced franchise premiums and loss of economies of scale and density and the possible costs of coordinating a greater number of franchises. In contrast to open access competition, the potential for innovation and efficiencies may also be limited by the ability of franchisees to innovate and to lower their costs due to the specification of franchises.

Option 3 – more overlapping franchises

65. This option would involve redesigning the franchise map over time to generate more overlapping franchises, creating more flows on which there would be competition between franchisees (*paragraphs 7.58 to 7.77*). In practice, this would reverse the conscious decision taken over the last 15 years to reduce substantially the number of overlapping franchises.

Advantages of option 3

66. Price competition between franchisees would lead to lower fares for passengers and growth in passenger numbers. Reducing franchise specification would allow franchisees to compete on other factors, including service quality, frequency and innovation. Competition would also increase incentives for franchisees to reduce their costs. A policy to increase the number of overlapping franchises would be implementable under the current legal framework. Unprofitable but socially valuable services (such as PSO services) would be provided as under the current system, by franchisees. The government would retain control over where and when competition took place, reducing uncertainty for franchise bidders.

Disadvantages of option 3

67. Greater competition may lead to lower franchise premium payments to the government as a result of lower fares and a loss of economies of scale and density, although greater efficiency is likely to go some way to offsetting any loss. In this framework there would be no flexibility for operators to take over each other's services and responsibilities outside of franchise competitions, limiting the dynamics of the market.

Option 4 – licensing multiple operators, subject to conditions (including public service obligations)

68. In this option, there would be multiple operators and the system of formal franchises would be replaced with a system closer to that of competition between OAOs, but with a licensing regime placing some restrictions and obligations on their activities (eg to provide a certain number of PSO or other unprofitable but socially valuable services) (*paragraphs 7.78 to 7.97*).
69. Licences could be implemented in a number of ways, including by way of administratively designed licences (where a central planning body designs the licence) or through a trading-based allocation (where an operator chooses PSO or other unprofitable but socially valuable services from a 'list' and is able to trade these with other operators or subcontract them to third parties).

Advantages of option 4

70. The flexibility afforded to operators under option 4 would generate strong competitive pressure on prices and incentives to improve service quality. Operators would also have much greater flexibility to pursue efficiency savings and innovation as compared with the franchise models under options 2 and 3.

Disadvantages of option 4

71. In addition to the risk of a loss of economies of scale and density resulting from multiple operators and the possible costs of coordinating a greater number of operators, a mechanism would need to be designed to allocate track access rights between operators. Designing and implementing licence conditions would also require extensive planning and technical design, particularly given the fact that train paths are both location- and time-specific.

Our vision for the future

72. These recommendations, if effectively implemented, are designed to achieve real improvements for rail passengers, for taxpayers and for the industry. Specifically, we have devised them with a view to:
- better value for money for passengers and the taxpayer;
 - improved service quality;
 - a more dynamic sector in which increased competition acts as a spur to greater innovation;
 - more efficient and effective use of capacity on the rail network;
 - effective protection and proper funding for public service operations which are not necessary profitable but are socially valuable;
 - a model which is to the extent possible broadly revenue-neutral for government – ie which, while recognising that government subsidy remains necessary for the railways, creates no additional demands on the taxpayer;
 - a well-functioning successful industry in which it is worthwhile to invest – with diverse models of service provision and ownership; and

- building on the renaissance in Britain's railways over the past quarter century to deliver a railway that works for passengers, for taxpayers and for the country as a whole.

- We would now like to give interested parties an opportunity to consider this discussion document, and respond to it in writing to Rail@cma.gsi.gov.uk by no later than **Friday 16 October 2015**. We would also like to hold an industry-wide 'round table' in September.
- We have not yet reached a view as to which option for increasing on-rail competition is to be preferred.
- We value responses generally including, but by no means limited to, those concerning the following issues:
 - The views of OAOs and other potential entrants into the market as to whether they would be able and willing to enter the market if they were required to bear a proportionate share of network infrastructure costs and to contribute to the cost of unprofitable but socially valuable services so as to make up for any shortfall in government revenue arising from the options for greater on-rail competition suggested in this discussion document, as described in *paragraphs 7.13 to 7.107*.
 - The operational impact of our options for increasing on-rail competition and the extent to which any operational barriers to implementing the options may be overcome through developments such as new technology and improved incentives for Network Rail to allocate capacity efficiently, including in particular as regards the points in *paragraphs 6.40 to 6.57*.
- The CMA will undertake further work in the light of responses to the consultation before deciding which option to recommend.