

# **Competition in passenger rail services in Great Britain: A discussion document for consultation**

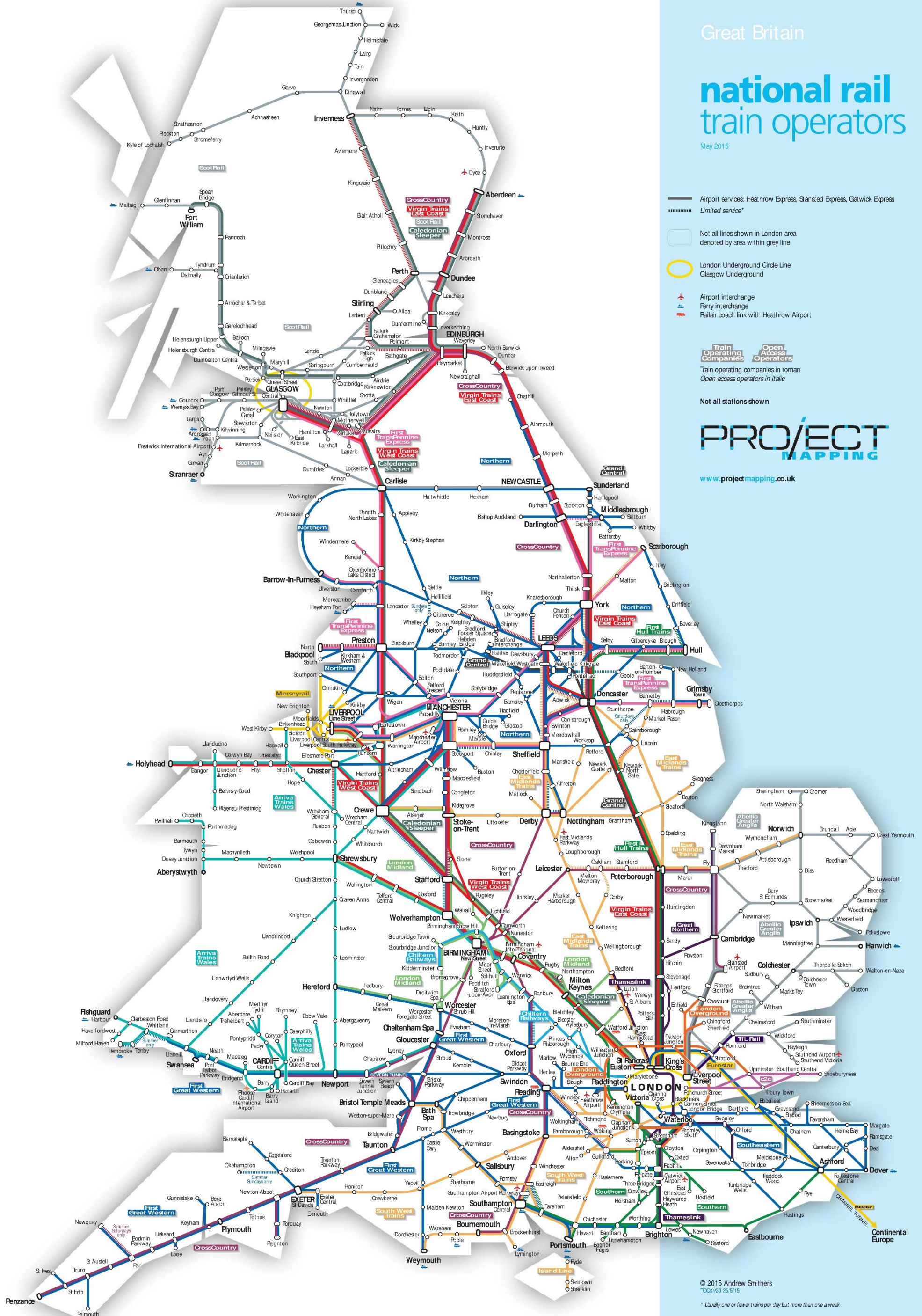
## **Appendices**

Appendix A: Map of train operators

Appendix B: List of open access proposals submitted to the ORR from 2000 to 2015

Appendix C: Competition between overlapping and parallel franchises

# Appendix A: Map of train operators



## Great Britain national rail train operators

May 2015

- Airport services: Heathrow Express, Stansted Express, Gatwick Express
- Limited service\*
- Not all lines shown in London area denoted by area within grey line
- London Underground Circle Line  
Glasgow Underground
- Airport interchange
- Ferry interchange
- Railair coach link with Heathrow Airport

## PROJECT MAPPING

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TOCs v30 25/5/15

\* Usually one or fewer trains per day but more than one a week

## Appendix B: List of open access proposals submitted to the ORR from 2000 to 2015

Row	Year	Operator	Service	Approved?
A	2000	Hull Trains	London to Hull	Yes
B	2002	Hull Trains	Additional daily return: London to Hull	Yes
C	2004	Hull Trains	Additional daily return: London to Hull	Yes
D	2004	Grand Central	Newcastle to Manchester via Bradford	No
E	2005	Hull Trains	Additional daily return: London to Hull	Yes
F	2006	Hull Trains	Additional daily return: London to Hull	Yes
G	2006	Grand Central	Sunderland to London	Yes
H	2006	Grand Central	York to Chester	No
I	2007	Wrexham & Shropshire	Wrexham to London	Yes
J	2009	Grand Central	Additional daily return: Sunderland to London	Yes
K	2009	Platinum Trains	Edinburgh to London	No
L	2009	Hull Trains	Harrogate to London	No
M	2010	Grand Central	Bradford to London	Yes
N	2011	Grand Central	Blackpool to London	No
O	2011	Alliance Rail	Blackpool, Carlisle, Leeds and Bradford to London Euston	No
P	2011	Alliance Rail	Bradford, Leeds to London	N/A <sup>1</sup>
Q	2012	Grand Central	Additional daily return: Sunderland to London	Yes
R	2012	Grand Central	Additional daily return: Bradford to London	No
S	2013	Grand Central	Additional daily return: Bradford to London	Yes
T	2014	Alliance Rail	Blackpool, Leeds to London	N/A <sup>2</sup>
U	2014	Great North Western Railway Company Limited	Blackpool to Queen's Park London Leeds to Queen's Park London	No
V	2014	Great North Eastern Railway Company	Edinburgh to London King's Cross	TBC
W	2015	Hull Trains	Extension of some services to/from Beverley	Yes
X	2015	Great North Eastern Railway Company	Bradford to London King's Cross Cleethorpes to London King's Cross	TBC
Y	2015	East Coast Trains Limited	Edinburgh to London King's Cross	TBC

<sup>1</sup> Alliance Rail withdrew its application to the ORR due to abstraction at Leeds.

<sup>2</sup> Alliance Rail's application was superseded by the application in Row U.

## **Appendix C: Competition between overlapping and parallel franchises**

### **Introduction**

1. This appendix considers the extent of competition between overlapping and parallel franchises by examining the degree to which franchisees compete on price and other factors on each of the current overlapping and parallel routes in Great Britain.<sup>1</sup> It does not consider competition between OAOs and franchisees, which is described in paragraphs 4.36 to 4.60 of the main document.
2. The degree of competition between franchisees operating overlapping and parallel routes varies significantly according to factors including the relative frequency of the overlapping services and the extent of journey time differentials between the different franchised operators.
3. In contrast to OAOs, franchisees are generally restricted to competing on fare levels given that factors such as service frequency and on-board services are specified in many franchise agreements. However, where franchises are loosely specified or where significant changes in franchises and/or access rights were permitted, there are examples of franchisees competing on factors including service quality, innovation and journey times.

### **The extent of competition between overlapping and parallel franchises**

#### ***Great Northern and Virgin East Coast (London to Stevenage and Peterborough)***

4. Great Northern operates services from London King's Cross to Stevenage and Peterborough calling at intermediate stations. Many regular Virgin East Coast intercity services from London King's Cross to destinations in the North of England and Scotland also call at Stevenage and/or Peterborough. Great Northern's services offer a fastest off-peak journey time from London to Peterborough of 78 minutes (69 minutes at peak time). The same journey on Virgin East Coast takes 45 minutes.
5. There is evidence of price competition between the two franchisees. For example, Great Northern offers a dedicated annual season ticket between London and Peterborough for £6,140, undercutting the interavailable ticket priced at £7,276. Great Northern also offers dedicated 'walk-up' fares from

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<sup>1</sup> 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.

London to Peterborough, including a standard off-peak return priced at £27.50, undercutting the £33.00 interavailable fare. Although the dedicated fares are only valid on Great Northern services, passengers still have a choice of at least four services per hour and benefit from the availability of cheaper tickets which, in turn, may constrain the interavailable off-peak return fare. Virgin East Coast offers its own dedicated advance single fares which, while valid only on a particular service, undercut the cheapest Great Northern tickets (for example, a Virgin standard advance single is available from £11.50 as compared with £27.40 for the cheapest interavailable off-peak single fare).

6. Analysis by Arup suggested that East Coast's main commercial focus may be on longer-distance trips rather than on attracting passengers from Peterborough given that there were neutral effects in terms of timetabling and passenger growth from the presence of two operators.<sup>2</sup> However, Arup did find that revenue yields (ie average fares) increased on this flow at a lower rate compared with control flows, suggesting that competition has delivered lower prices. Moreover, at the time of Arup's work in 2009, the cheapest East Coast off-peak return to Peterborough was priced at £57.50 against £23.00 on the Great Northern route. The off-peak interavailable fare has now fallen from £57.50 to £33.00, suggesting that competition might now be more intense on this route.

### ***Great Northern and Abellio Greater Anglia (London to Cambridge)***

7. Great Northern offers regular services from London King's Cross to Cambridge. Abellio Greater Anglia also offers regular services on a parallel route from London Liverpool Street to Cambridge, with the journey taking approximately 20 minutes longer than the fastest Great Northern journey.
8. There is price competition between the two operators, with Abellio Greater Anglia offering an advance standard single for just £6 compared with Great Northern's standard off-peak single priced at £23. Although the advance ticket is only valid on a specific train it offers a significant saving to passengers able to plan their journeys in advance. There is also price competition on commuter services. Abellio Greater Anglia offers a dedicated annual season ticket between London Liverpool Street and Cambridge for £4,264 compared with the interavailable ticket (valid on both operators) priced at £4,648.
9. Analysis by Arup found that passenger growth on the Cambridge to London flow significantly outperformed control flows without competition between 2004 and 2009, and that revenue yields were lower than on the control flows.

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<sup>2</sup> On Rail Competition Analysis Key Findings, Ove Arup & Partners Ltd, December 2009.

Service performance also improved over the period, although satisfaction deteriorated slightly.

***London Midland and Virgin Trains (London to Milton Keynes, Coventry and Birmingham and London to Rugby, Nuneaton (peak only), Tamworth (peak only), Lichfield (peak only), Stafford, Stoke-on-Trent and Crewe)***

10. London Midland offers regular services with 'commuter/regional style' rolling stock from London Euston to destinations in the North West. London Midland offers both dedicated 'turn up and go' fares and dedicated advance fares priced significantly below the fares offered by Virgin Trains, although journey times are significantly slower than Virgin Trains' intercity services.
11. For example, London Midland offers advance single fares from London to Crewe from £9, around half the price of Virgin Trains' cheapest advance single fare. The London Midland advance single fare to Crewe is even priced below the level of the some of the cheapest off-peak single tickets on its local flows with no on-rail competition (such as London to Berkhamsted, which is priced at £14.60 for an off-peak single).

***London Midland service enhancements***

12. In addition to competing with Virgin Trains on price, London Midland was incentivised by the competition it faces from Virgin Trains on the West Coast main line and from the parallel Chiltern Railways franchise to invest in new capacity in order to grow its revenue and to limit the opportunity for scarce paths to be consumed by competitors (which would, in turn, limit its ability to expand in the future).<sup>3</sup> The timing of London Midland's proposal to increase capacity coincided with the end of Virgin Trains' moderation of competition clause in 2012 and was only made possible by the lifting of the restrictions.
13. As a franchised TOC, London Midland has the ability to influence only some of the factors relevant to the provision of capacity (such as timetabling, light train maintenance and modifications and some element of rolling stock choice). Other factors, such as infrastructure upgrades and major procurement of rolling stock, are generally led or supported by other parties. London Midland therefore explored factors within its direct control in its search for a capacity enhancement solution.
14. The chosen solution minimised the requirement for new rolling stock by focusing on a modification to existing units. Services operating on key flows

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<sup>3</sup> ORR case studies.

from Euston were accelerated from 100mph to 110mph through rolling stock modifications and a small procurement to fulfil the additional requirement at peak times. London Midland's project team found that with this approach it was possible to operate two services in a single train path. This allowed an additional service to be added into each off-peak hour in 2012 and two additional morning peak services and five evening peak services to be added in December 2014. This produced around 4,000 extra seats in the morning peak and around 8,000 in the evening peak.

15. Competition was a driver for the capacity increase in two ways – the incentives from competition between train operators and, during the options evaluation process, competition to produce the best solution and be granted access rights.

### ***London Midland, Virgin Trains and Chiltern Railways (London to Birmingham)***

#### *Chiltern Railways' competitive strategy*

16. In addition to competition between London Midland and Virgin Trains services between London Euston and Birmingham International and Birmingham New Street, Chiltern Railways (Chiltern) operates a parallel franchise from London Marylebone to Birmingham Moor Street.
17. Chiltern has developed both its price and service offering in recent years in order to compete with London Midland and Virgin Trains for passengers travelling between London and the Midlands. In 2008, following the upgrade of the West Coast main line, Virgin Trains introduced a new 'very high frequency' timetable for its services from London Euston to Birmingham. Virgin Trains' revenue on services to Birmingham International increased following the timetable changes, while Chiltern saw its revenue on services to Solihull (in the same catchment area as Birmingham International) fall steadily.
18. In response to Virgin Trains' enhanced service, Chiltern introduced an upgraded service to Birmingham in 2011, branded as 'Mainline', offering refurbished intercity rolling stock, a 'Business Zone' and free wi-fi for all passengers. Journey times were cut by 20% as a result of £130 million of investment in the track which increased the line speed from 75mph to 100mph. Following the roll-out of the Mainline service, Chiltern's revenue on services from London to Solihull increased rapidly. Both Chiltern's revenue and the premium it paid to government therefore increased as a result of competition. Moreover, the market continued to grow overall.

19. Chiltern's competitive response was facilitated by the loosely specified nature of its franchise. As one of the early franchises, Chiltern's franchise specification only concerns first and last trains, the quantum (not timing) of trains per hour and action to deal with overcrowding.
20. The rolling stock changes introduced in response to competition from Virgin Trains were permitted as Chiltern's franchise does not specify rolling stock. The relatively loose franchise specification also facilitated the investment in wi-fi without any changes to the franchise being required. Chiltern observed that this investment was made without any cost to the taxpayer, whereas many other franchisees were relying on the wi-fi funding of £50 million announced in the Spring 2015 Budget (with some franchisees potentially having put off their own investment in order to take advantage of this support).
21. Chiltern's franchise has no 'cap and collar' mechanism and it takes 100% revenue risk for the full duration of its 20-year franchise term. Chiltern therefore has an incentive to 'chase every pound' of revenue. Given the minimum service obligation in Chiltern's franchise and the regulation of many fares, Chiltern told us that its main commercial focus is on growing the market for rail travel.
22. There is also evidence to suggest that competition from Virgin Trains has constrained Chiltern's fares. For example, competition from Virgin Trains has forced Chiltern to set its London to Solihull fares at the same level as those on the shorter London to Banbury route, which faces no competition.
23. Chiltern monitors fares on the West Coast main line and matches London Midland's cheapest fare of £6. Chiltern charges £64 for an anytime single, undercutting Virgin Trains' equivalent ticket priced at £84.

#### *London Midland's strategy*

24. London Midland appears to compete with Virgin Trains and Chiltern on price. For example, London Midland undercuts Virgin Trains by offering an advance single from London to Birmingham New Street from £6. For peak-time departures from London Euston to Birmingham between 0600 and 0900, London Midland's cheapest dedicated advance ticket costs £6 while Virgin Trains' cheapest dedicated advance tickets costs £65.
25. There is also price competition on anytime tickets. London Midland charges £51 for an anytime single from London to Birmingham against the interavailable anytime single ticket priced at £84.
26. While London Midland's journey time is longer than Virgin Trains' (at around 2h 12m from London to Birmingham New Street compared with 1h 25m on



Virgin Trains), London Midland's fares offer significant savings for less time-sensitive passengers and may also constrain Virgin Trains' fares.

27. As set out in paragraphs 12 to 15 above, London Midland also competes with Virgin Trains on its services from London to the West Midlands on factors other than price, upgrading its rolling stock and innovating in order to introduce faster and more frequent services in response to competition.

#### *Arup analysis*

28. Arup examined the impact of on-rail competition between London and Birmingham between 2002 and 2009. Chiltern's fares were about 40% less than Virgin Trains' during the peak period, whilst London Midland's fares were roughly 50% lower than Virgin Trains' for anytime and off-peak return tickets. All three companies provided competitively priced advance single fares and deployed extensive marketing to publicise their fares. Arup found that both Virgin Trains and Chiltern improved their journey times during the period and introduced additional seats. There was clear evidence that passenger journeys from Birmingham increased at a faster rate than on the control flows. There was also evidence that revenue yields from Birmingham increased at a lower rate than those on the control flow.

#### ***Virgin Trains, Cross Country and London Midland (Coventry to Stafford via Birmingham and Wolverhampton)***

29. Cross Country and Virgin Trains both offer dedicated fares on this route – £5.30 and £7.00 respectively for an advance single. London Midland does not offer a dedicated fare on this route. The interavailable anytime single is £15.30.

#### ***Thameslink and East Midlands Trains (London to Luton and Bedford)***

30. Thameslink offers frequent services from London St Pancras to Luton and Bedford with commuter-style trains (passengers are also able to board services at other central London stations including Farringdon, City Thameslink and Blackfriars). A number of East Midlands Trains intercity services on the 'Midland Mainline' call at Luton or Bedford and there is evidence of price competition between the two operators. For example, East Midlands Trains offers a dedicated advance single from London to Bedford for £11.00 against £22.40 for an interavailable off-peak single ticket valid on either operator. The corresponding fares on services to Luton are £14.00 and £14.90, respectively.

31. Although the East Midlands Trains fare is not interavailable, its service is faster and more comfortable than the Thameslink service and passengers travelling from London St Pancras able to plan their travel in advance benefit from the availability of a cheaper ticket. There is also price competition between the two operators on first class fares.

***c2c and Abellio Greater Anglia (London to Southend)***

32. There is price competition between the two operators that run parallel services between London and Southend. Abellio Greater Anglia offers an anytime single fare from London Liverpool Street to Southend Central from £11.60 with a journey time of 53 minutes. c2c's anytime single fare from London Fenchurch Street to Southend Victoria station is priced at £16.70, with a journey time of 58 minutes. Passengers therefore have a greater range of fare options as a result of two operators competing on the route.

***South West Trains and Southern (London to Portsmouth and Southampton and London to Guildford)***

33. Southern operates services from London Victoria to Portsmouth taking around 2 hours. South West Trains also serves Portsmouth from London Waterloo, with journey times varying between 1h 33m and 2h 09m. There is price competition between the two operators, with Southern offering an advance single from London Victoria to Portsmouth from £8, offering a saving on South West Trains' anytime standard single fare from London Waterloo of £35 for passengers able to plan their travel in advance.
34. Southern operates services from London to Southampton with anytime single tickets priced at £29.70 against a fare of £49.10 for the faster and more frequent South West Trains service. Southern also offers dedicated advance single tickets from £8.00. Passengers therefore benefit from on-rail competition by way of a greater choice of tickets and the availability of discounted fares.
35. South West Trains offers services from London Waterloo to Guildford taking around 35 minutes. Southern offers services from London Bridge to Guildford, but requiring a change. First Great Western also offers indirect services to Guildford from London Paddington. Both Southern and First Great Western services take around 1h 15m to reach Guildford from London. As a result of the journey time differentials and absence of a competing direct service, there is no price competition between the operators on the London to Guildford flow.

*London to Oxford (First Great Western and, from 2016, Chiltern Railways)*

36. Chiltern will commence services from London Marylebone to Oxford from spring 2016 (with services running as far as Oxford Parkway from September 2015). A number of innovations are planned on the new route, including contactless payment for services between London and Oxford Parkway. The new services may compete to some extent with First Great Western for passengers travelling between London and Oxford.

***First Great Western and Southern (Brighton to Southampton)***

37. First Great Western operates a very limited service on this route and, as a result, there is no price competition between the two operators.

***Southern/Gatwick Express and Thameslink (London to Gatwick Airport and Brighton)***

38. Passengers are able to travel from London Terminals to Brighton via Gatwick Airport on two operators. Southern services depart from either London Victoria or London Bridge. Thameslink services also operate from London Bridge, as well as central London stations including London St Pancras International and London Blackfriars.
39. Southern offers a dedicated advance single from London to Brighton for £5.00 while an interavailable anytime single is £22.90. Passengers alighting at Gatwick Airport have the option of using the Gatwick Express service (operated by Southern) with an anytime single fare of £17.70.
40. As set out in paragraphs 4.70 to 4.73 of the main document, Southern and Thameslink fares are expected to be harmonised from July 2015 as Southern becomes part of the Thameslink, Southern and Great Northern franchise (although the 'Southern' brand will be retained).

***South West Trains and First Great Western (London to Reading and Exeter)***

41. South West Trains operates services to Reading and Exeter from London Waterloo via a different route to the faster First Great Western services from London Paddington. South West Trains offers an advance single from London Waterloo to Exeter from £20.50 (with a 3h 24m journey) against a lowest advance single fare from £34.50 on First Great Western from London Paddington (with a 2h 13m journey).

42. South West Trains' fares on shorter journeys to with no on-rail competition (eg Yeovil, Axminster and Honiton) are priced at a similar level to the Exeter fare, which might indicate constraint from First Great Western on the Exeter route.
43. There is negligible price competition between South West Trains and First Great Western on the London to Reading flow, with the journey on South West Trains' parallel route being around three times as long as that on First Great Western.

***South West Trains and First Great Western (London to Basingstoke and London to Bristol)***

44. South West Trains runs direct services from London Waterloo to Basingstoke, while First Great Western offers services from London Paddington to Basingstoke requiring a change at Reading. The two operators do not appear to compete on price.
45. South West Trains runs services from London Waterloo to Bristol Temple Meads while First Great Western serves Bristol from London Paddington. Both operators offer dedicated fares: an advance single on South West Trains is priced from £16.00 and an advance single on First Great Western is priced from £20.00. South West Trains' journey time of 2h 45m is significantly longer than First Great Western's journey time of 1h 30m. South West Trains only offers services from London to Bristol three times a day on weekdays.

***South West Trains and Cross Country (Basingstoke to Bournemouth via Winchester and Southampton)***

46. There is some evidence of price competition on this route with Cross Country offering a dedicated advance single from £10.10 compared with the inter-available anytime single priced at £27.10. Journey times are similar on both operators.

***East Midlands Trains, Cross Country and Abellio Greater Anglia (Peterborough to Ely)***

47. Cross Country offers an advance single from Peterborough to Ely priced at just £4.20 against £11.90 for the cheapest interavailable single ticket. Journey times are similar on the different operators. Passengers able to book in advance and fix their journey time are therefore able to benefit from cheaper tickets.

### ***Cross Country and Abellio Greater Anglia (Ely to Norwich)***

48. East Midlands Trains offers an advance single from Ely to Norwich priced at £7.00 against £16.30 for an interavailable off-peak single ticket valid on both Cross Country and Abellio Greater Anglia. The journey times on both operators are comparable. Passengers able to plan their journeys in advance and fix a train therefore benefit from the availability of cheaper fares which may, in turn, constrain the lead operator's fares.

### ***Abellio Greater Anglia and Cross Country (Cambridge to Stansted Airport)***

49. Neither Abellio Greater Anglia nor Cross Country offer dedicated fares for the half-hour journey between Cambridge and Stansted Airport. An interavailable anytime day single is £12.70.

### ***London Midland, Virgin Trains and Arriva Trains Wales (Birmingham to Wolverhampton and Shrewsbury)***

50. There is some evidence of price competition between the franchisees, even on the relatively short Birmingham to Wolverhampton flow. Virgin Trains offers a dedicated anytime single priced at £3.20 compared with the interavailable anytime single priced at £4.60. Journey times are similar on all operators.

### ***London Midland and Chiltern Railways (Leamington Spa and Birmingham to Kidderminster)***

51. Chiltern runs only an occasional service from Birmingham to Kidderminster and neither London Midland nor Chiltern offer dedicated fares on the route.

### ***Cross Country and First Great Western (Taunton to Tiverton, Exeter and stations to Plymouth and Penzance, Reading to Oxford and Banbury and Reading to Basingstoke)***

52. Cross Country and First Great Western compete on price on these flows, both offering similar journey times and intercity services. For example, between Exeter and Plymouth, both operators offer dedicated advance fares (from £7.90 on First Great Western for a standard advance single and from £7.40 on Cross Country, which also offers an advance first class fare for £6.40).
53. On the Reading to Oxford flow, Cross Country offers an advance single from £7.40 against the £9.00 interavailable fare set by the lead operator, providing a cheaper alternative to passengers able to plan their travel in advance and fix their train.

54. Although Cross Country and First Great Western both offer services between Reading and Basingstoke, neither operator offers a dedicated fare.

***Cross Country, Virgin East Coast and First TransPennine Express (York to Newcastle and Edinburgh)***

55. Cross Country and Virgin East Coast both offer dedicated fares between York and Newcastle with similar journey times and intercity services. At certain times of day, Virgin East Coast undercuts Cross Country, whilst at others, the reverse is true. First TransPennine Express offers dedicated fares between York and Newcastle, again with a similar journey time.
56. On the Newcastle to Edinburgh route, Virgin East Coast and Cross Country compete on price, with both operators offering dedicated fares and similar journey times.

***First TransPennine Express, East Midlands Trains and Northern Rail (Liverpool to Manchester)***

57. First TransPennine offers a dedicated advance single for £5.10 between Liverpool and Manchester Victoria. East Midlands Trains offers a dedicated advance single for £4.10 from Liverpool to Manchester Piccadilly, with a journey time of 49 minutes compared with First TransPennine's 32-minute journey. Northern Rail does not offer advance fares on this flow, with the cheapest off-peak single (interavailable) priced at £12.20 and a journey time of around an hour.

***First TransPennine Express and Northern Rail (Manchester, Leeds and York)***

58. There is some evidence of price competition on Manchester to Leeds flow. Northern Rail offers an advance single from Manchester Victoria to Leeds from £3.00 (with a journey time of 1h 28m) against an advance single on First TransPennine Express from Manchester Piccadilly or Oxford Road to Leeds at £8.20 (with a journey time of between 49 minutes and 1 hour).

***First TransPennine Express and Virgin Trains (Wigan to Preston, Carlisle and Glasgow)***

59. There is price competition for advance tickets on this flow. An advance single from Wigan to Carlisle is priced at £18.50 on First TransPennine Express and £23.00 on Virgin Trains. From Wigan to Glasgow, the advance single fares are from £13.30 and £28.00, respectively. Both operators offer similar journey times.

***First TransPennine Express and Northern Rail (Blackpool to Manchester)***

60. There is also some evidence of price competition on the flow between Blackpool and Manchester. Northern Rail's dedicated advance off-peak single is priced from £5.50 while the First TransPennine Express advance off-peak single ticket is priced from £6.10. Northern Rail's journey time is, however, slightly longer than that of First TransPennine Express. An interavailable off-peak single ticket is available for £16.70.

***Arriva Trains Wales and Virgin Trains (Chester to Holyhead)***

61. There is some price competition on this route, with Arriva Trains Wales offering an advance single priced from £15.00 compared with the anytime interavailable off-peak single priced at £26.10, offering certain customers a cheaper alternative. Virgin Trains offers a range of dedicated fares including a standard off-peak return from £22.00 and an advance first class single from £20.00.

***Arriva Trains Wales and First Great Western (Newport to Cardiff, Swansea and Carmarthen)***

62. There is some evidence of price competition, with dedicated fares available between Cardiff and Carmarthen (although First Great Western only operates a limited frequency service on this flow).

***Virgin Trains/Virgin East Coast, First TransPennine Express and ScotRail (Edinburgh to Glasgow)***

63. There is a high service frequency on this flow and the majority of tickets are interavailable. Only ScotRail runs services between Glasgow Queen Street and Edinburgh, while four operators run between Glasgow Central and Edinburgh (typically a slightly slower journey). Cross Country undercuts the standard off-peak single priced at £12.50 (and anytime single priced at £13.50) with a dedicated anytime single priced at £8.40. Other tickets are interavailable.

***Virgin East Coast, Cross Country and ScotRail (Edinburgh to Aberdeen)***

64. This flow is served by Virgin East Coast (with a limited frequency service), Cross Country and ScotRail, which all offer similar journey times. There is evidence of some price competition on this route. Virgin East Coast offers a dedicated advance single on certain services from £10.00 with ScotRail offering the same ticket type from £11.30. Cross Country's dedicated advance

single, by comparison, is £31.50. An interavailable off-peak single on this route is £51.60.

***Virgin East Coast and ScotRail (Edinburgh to Inverness)***

65. Virgin East Coast's service frequency on this route is very limited. However, there is still a degree of price competition. For example, ScotRail undercuts Virgin East Coast on the Edinburgh to Inverness route with an advance single ticket priced from £11.00 against an advance single fare starting from £21.50 on Virgin East Coast. Journey times are similar on both operators.