Completed acquisition by Arriva Rail North Limited of the Northern rail franchise

Provisional findings report

Notified: 9 September 2016

The Competition and Markets Authority has excluded from this published version of the provisional findings report information which the inquiry group considers should be excluded having regard to the three considerations set out in section 244 of the Enterprise Act 2002 (specified information: considerations relevant to disclosure). The omissions are indicated by [✂]. Some numbers have been replaced by a range. These are shown in square brackets.

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Summary

Background

1. On 20 May 2016, the Competition and Markets Authority (CMA), in the exercise of its duty under section 22(1) of the Enterprise Act 2002 (the Act), referred the completed acquisition by Arriva Rail North Limited (ARN), a wholly-owned subsidiary of Arriva plc (Arriva), of the Northern rail franchise (the Northern Franchise) (altogether the Merger) for further investigation and report by a group of CMA panel members (inquiry group). Throughout this document, where appropriate, we refer to Arriva, ARN and the Northern Franchise collectively as 'the Parties'.

2. In exercise of its duty under section 35(1) of the Act, the CMA must decide:

   (a) whether a relevant merger situation has been created; and

   (b) if so, whether the creation of that situation has resulted or may be expected to result in a substantial lessening of competition (SLC) within any market or markets in the United Kingdom (UK) for goods or services.

3. This document, together with its appendices, sets out our provisional findings. We are required to produce our report by 3 November 2016.

The rail and bus sectors in Great Britain

4. Franchised train operating companies (franchised TOCs) operate passenger rail franchises and are awarded the right to run specific services within a specified area for a specific period of time, in return for the right to charge fares. Where appropriate, franchised TOCs receive financial support from the franchising authority, which is currently the Rail Group in the Department for Transport (DfT).[1] There are currently 16 franchises operating in England and Wales and two in Scotland.

5. The rights and obligations of franchised TOCs are specified through a Train Service Requirement (TSR) as part of the franchise agreement negotiated between the franchising authority and the franchisee. The TSR includes obligations on franchised TOCs such as the number of daily calls at stations and the timing of first and last trains. Each franchise has its own specific TSR and the degree of specification by government varies by franchise.

[1] Transport Scotland is the franchising authority for the ScotRail and Caledonian Sleeper franchises. There are also specific arrangements in place for London Overground and Merseyrail.

6. Competition 'for' the market, ie for the award of a rail franchise, is currently the principal form of competition in passenger rail services and franchised services cover 99% of passenger rail miles in Great Britain.

7. There is also a degree of competition 'in' the market (known as 'on-rail' competition) on certain parts of the rail network where different franchised TOCs run services on overlapping or parallel routes. The extent of overlapping and parallel franchises has reduced over time.

8. On-rail competition also takes place where open access operators (OAOs) operate passenger rail services on a commercial basis on routes authorised by the Office of Rail and Road (ORR) for a specified time. OAOs compete with franchised TOCs where their services overlap. OAOs currently account for less than 1% of passenger miles in Great Britain.

9. Arriva also operates a wide range of bus services throughout much of the Northern Franchise area. Buses are the most widely used form of public transport in England. There were around 5.2 billion bus journeys made in Great Britain in 2014/15, with over half being in London. This generated a total of £3.3 billion from passenger fares.[2]

10. The provision of local bus services is now largely in private ownership since the industry was deregulated in 1986. The five largest bus operators in England are Stagecoach (19%), Arriva (17%), FirstGroup (13%), Go-Ahead (13%) and National Express (5%). Other large operators of local bus services account for 22% of services in England, with smaller operators accounting for the remaining 12%.[3]

11. Local transport authorities (LTAs) review the network of commercially registered services, identify additional services which they consider to be socially necessary and then seek providers through a tendering process. Outside London, approximately 20% of bus services are financially supported and tendered by LTAs.

The Parties and the transaction

12. Arriva is part of Deutsche Bahn AG and is one of the largest providers of passenger transport in Europe, operating 2.2 billion passenger journeys per year across 14 European countries.[4] Arriva's revenue in 2015 was €4.8 billion

[2] DfT, *Transport Statistics Great Britain 2015*.
[3] DfT (2014), *Annual bus statistics: England 2013/14*.
[4] Deutsche Bahn AG is 100% owned by the Federal Republic of Germany.

(£3.5 billion).[5] In the UK, Arriva provides passenger rail services (both heavy and light rail), bus services, non-emergency patient transport services and specialist education transport services.

13. Arriva is currently operated through three divisions, each with its own management teams and divisional directors: (a) Arriva UK Trains; (b) Arriva UK Bus; and (c) Mainland Europe.

14. ARN is a wholly-owned subsidiary of Arriva UK Trains Ltd created for the purpose of bidding for, and operating, the Northern Franchise. In addition to operating the Northern Franchise, Arriva UK Trains operates the Arriva Trains Wales (ATW), Chiltern Railway Company Limited (Chiltern Railways) and CrossCountry Trains Limited (CrossCountry) franchises.[6] It also operates open access services through Grand Central Railway.[7]

15. On 9 December 2015, the DfT announced that ARN was the successful bidder for the Northern Franchise. On 22 December 2015, the Secretary of State and ARN entered into a franchise agreement and associated agreements confirming the award of the Northern Franchise to ARN. The operation of the Northern Franchise commenced on 1 April 2016 for a term of nine years (subject to a possible extension of up to one year).

16. The franchise agreement associated with the Northern Franchise includes significant improvements in passenger services, including at least 120 new-build carriages for use on non-electrified routes and the modernisation of all remaining Northern Franchise trains, the phasing out of older 'Pacer' units, additional train services, longer trains, investment in stations, the introduction of free Wi-Fi and new 'Northern Connect' services between a number of northern cities.

Jurisdiction

17. We considered whether a 'relevant merger situation' under section 23 of the Act has been created. Section 23 of the Act provides that a relevant merger situation has been created if two or more enterprises have ceased to be distinct and either the 'turnover test' or 'share of supply test' is satisfied.

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[5] Deutsche Bahn (2015), Integrated Report, p137. All currency conversions from euros are at the average rate for 2015 of €1=£0.72584 (Deutsche Bahn (2015), Integrated Report, p201).
[6] Arriva UK Rail also operates two rail concessions, namely DB Regio Tyne and Wear Metro Limited and London Overground Rail Operations Limited.
[7] Arriva also owns Alliance Rail which has received approval to operate open access passenger rail services between London and Blackpool from December 2017.

18. The award of a rail franchise constitutes an acquisition of control of an enterprise by virtue of section 66(3) of the Railways Act 1993. The Northern Franchise and Arriva have therefore ceased to be distinct.

19. The turnover test in section 23(1)b of the Act is satisfied where the value of the turnover in the UK of the enterprise being taken over exceeds £70 million. The turnover of the Northern Franchise was £568 million in the year ended 3 January 2015.[8]

20. We therefore provisionally concluded that a 'relevant merger situation' has been created.

Rationale for Arriva's bid for the Northern Franchise

21. The Parties told us that Arriva's rationale for bidding for and acquiring the Northern Franchise was to develop its rail operations in Great Britain and to end a period of relatively unsuccessful franchise bidding. The Parties said that in bidding for the Northern Franchise, Arriva had sought to balance its risk portfolio in its rail business.

22. The Parties also told us that the bid aimed to enhance Arriva's reputation as an operator of and bidder for franchised rail services, and to deliver value through a much improved travelling environment and customer experience for rail passengers. The Parties said that it was not part of Arriva's strategy in bidding for the Northern Franchise to benefit from reduced competition on existing rail and bus services overlapping with Northern Franchise rail services.

Counterfactual

23. We considered what would have been the competitive situation in the absence of the Merger (the counterfactual).

24. The counterfactual in rail franchise cases is normally either that the franchisee raises no competition concerns or that such competition concerns as there are have been remedied. We have not identified any reason to depart from this approach in the present case.

25. In so far as the operation of the Northern Franchise is concerned, we have provisionally concluded that the Merger should be assessed against a

[8] Statutory accounts for Northern Rail Limited, 3 January 2015.

counterfactual whereby the Northern Franchise is awarded to a TOC that raises no competition problems.

Market definition

26. The purpose of market definition in a merger inquiry is to provide a framework for the analysis of the competitive effects of the merger. The boundaries of the market do not determine the outcome of the analysis of the competitive effects of the merger.[9]

27. In relation to the geographic market, we note that passengers travel between a specific point of origin to a specific point of destination and, as such, demand is for travel between two points. We describe these journeys as 'flows'.

28. We considered competition between different modes of transport. We considered a reasonable starting point for analysis that, other things being equal, a service competes more closely with another service of the same mode of transport on a flow than with a service using a different mode of transport.[10]

29. We examined evidence regarding the degree of competition between bus and rail services and between public transport and private transport. We noted that these constraints vary by route and flow and therefore considered the evidence as part of the competitive assessment. As a starting point for the analysis we identified overlaps between the Parties' services and assessed competition between transport options on a flow-by-flow basis. We identified overlapping rail services where journeys were provided between the same two settlements. We identified bus and rail overlaps where the catchment area of a bus (rail) service contains rail (bus) stations (stops). We used data from the DfT's National Travel Survey to estimate the relevant catchment area.

30. We also considered the possible effects of the Merger on competition on routes as well as flows as certain aspects of the offer to both bus and rail passengers are set at the route rather than flow level.

[9] *Merger Assessment Guidelines*, paragraph 5.2.2.
[10] This could, for example, be because services of the same mode of transport are more likely to offer a similar set of generalised journey costs (GJC).

Competitive assessment

Competition for the award of rail franchises

31. We considered whether the Merger would reduce competition for the award of future rail franchises.

32. Competition for the market, ie the competition for the award of future rail franchises, could be affected by the Merger if it could lead to a reduction in the number of bidders available for future rail franchise tenders or provide the Parties with an incumbency advantage to other bidders in future bids for franchises.

33. We found that the rail franchise tendering process is designed to minimise incumbency advantages such that bidders are not expected to enjoy significant incumbency or scale advantages as a result of previous franchise bids or awards. We reviewed the identity of successful bidders in previous franchise awards, which suggested that incumbency advantages were not material. We found no evidence that the Merger would reduce the number of bidders for rail franchises.

34. We therefore provisionally concluded that the Merger has not resulted or may not be expected to result in an SLC for the award of rail franchises.

Regulatory constraints on rail and bus operators

35. We considered the extent to which the regulatory framework constrains the commercial behaviour of TOCs.

36. In relation to rail fares, we provisionally found that the Parties do not have the ability to flex regulated fares under the current policy framework. We also examined the extent to which regulated fares constrain unregulated fares and found that regulated fares may act as a constraint on some unregulated fares in some instances. We considered the constraint that regulated fares impose on unregulated fares on a flow-by-flow basis as the mix of regulated and unregulated fares available to passengers varies by flow.

37. In relation to non-price aspects of the rail services, such as service quality, frequency and operational performance, we considered the extent to which TSRs and other obligations constrain the ability of franchised TOCs to adjust their offering. We found that the Parties have limited ability to change non-

price aspects of their franchised rail services, including in relation to timetables, rolling stock and service quality.[11]

38. We also considered the extent to which the Parties' commercial behaviour is constrained by the regulation of local bus services. Commercial bus services are subject to relatively few regulatory constraints compared to rail services. The existence of partnership schemes with LTAs, or the potential for such schemes to be introduced, may impose some constraint on the Parties' commercial behaviour, although the constraint will depend on the nature of the schemes in place in different geographic areas. We also note that the Bus Services Bill intends to enhance the powers of LTAs.

39. Bus operators may be constrained by the need to maintain a good reputation with local LTAs and passenger transport executives (PTEs).

40. We took these regulatory factors into account, where relevant, in our competitive assessment.

Filters applied to overlapping flows

41. The Merger creates 167 overlaps between the Northern Franchise and other Arriva TOCs and creates 1,068 overlaps between the Northern Franchise and Arriva UK Bus services. We therefore applied a series of filters for prioritisation purposes in order to focus our analysis on the flows most likely to raise competition concerns.

The effect of the merger on overlapping rail flows

42. We examined whether the Merger would result in an increase in fares on rail flows where services operated by the Northern Franchise overlap with services operated by other Arriva TOCs, namely ATW, CrossCountry and Grand Central.

43. We considered 19 overlapping flows that remained following the application of filters and four additional flows on which internal documents suggested there was pre-Merger competition between Arriva TOCs and Northern Rail (the previous operator of the Northern Franchise).

[11] We note that the Parties have greater ability to change non-price aspects of their open access services, such as service quality, although track access agreements restrict the timetables of open access services and the rolling stock used.

44. In our initial assessment of these 23 flows, we used the MOIRA industry model to test the closeness of competition between rail services on overlapping flows.

45. We identified 11 flows for further examination where the MOIRA analysis suggested that third party TOCs were not likely to be good alternatives for passengers to Northern Franchise services.

46. In our detailed assessment of these 11 flows, we considered:

(a) the share of services and revenues on the flow held by the Parties and third party TOCs;

(b) the similarity of Northern Franchise and other Arriva and third party TOC services in terms of frequency, hours of operation, journey times and fares;

(c) evidence of pre-Merger competition on fares; and

(d) other constraints on the Parties' ability to increase fares post-Merger, such as fare regulation and the level of flow revenue.

47. We also considered whether entry and expansion would be timely, likely and sufficient to constrain the Parties' commercial behaviour post-Merger.

48. We provisionally concluded that barriers to entry and expansion are high in relation to passenger rail services due to the limited spare capacity on the network and the regulation of track access.

49. Following our detailed assessment of the 11 flows, we provisionally concluded that the Merger has resulted in or may be expected to result in an SLC on four rail flows:

(a) Leeds to Sheffield;

(b) Wakefield to Sheffield;

(c) Chester to Manchester; and

(d) Chester to Stockport.

The effect of the merger on overlapping bus and rail flows

50. We examined whether the Merger may result in an increase in fares and/or a degradation in non-price aspects of the Parties' bus and rail services (such as

service quality and frequency) in local areas where Arriva's bus services overlap with the Northern Franchise.

51. We focused our assessment on the competitive effects of the Merger on Arriva's bus fares and services as franchise specification limits the Parties' ability to change non-price aspects of their rail services and fare regulation limits the Parties' ability to adjust certain rail fares in response to competition from bus services.

52. We examined the competitive effects of the Merger on 89 overlapping bus and rail flows prioritised through filtering. We also examined five further bus routes that were surveyed by the Parties.

53. We examined the Parties' ability to increase fares or degrade bus services on overlapping bus and rail flows as a result of the Merger. The Parties told us that their commercial behaviour was constrained by the need to maintain graduated fare structures on routes, the price of Arriva area tickets and multi-operator tickets and by partnerships between Arriva and local authorities. We considered these potential constraints, where relevant, on a flow-by-flow basis.

54. We examined the Parties' incentives to raise bus fares or degrade bus services post-Merger. In our assessment of overlapping flows, we considered a number of factors including:

(a) the proportion of route revenue accounted for by a flow on which Arriva bus services and Northern Franchise services overlap;

(b) the closeness of competition between bus and rail services pre-Merger;

(c) the extent of competition from other bus and rail operators; and

(d) local geographic factors or market conditions that might affect competition between bus and rail services on individual flows.

55. We noted that, in contrast to fare changes (which may be implemented through, for example, changes to fare stages), any changes to Arriva's service quality and frequency on a flow would necessitate changes at the route level. We therefore provisionally concluded that a flow would have to account for a significant proportion of a route in order for Arriva to have an incentive to degrade bus services on a flow.

56. The Parties commissioned a survey of bus passengers on 18 flows that they identified through their own filtering process. We monitored the survey fieldwork and identified a number of issues with the conduct of the survey. We

also identified a number of methodological issues in the design of the survey. We therefore considered the results of the survey 'in the round' with other evidence at an aggregate, rather than flow-specific, level.

57. The Parties told us that, under its current organisational structure, Arriva saw no potential advantage in coordinating strategy between its bus and rail divisions, and in any event was not set up to do so with each train and bus operating company having its own board and management structures, [✂]. However, we noted that Arriva is a commercial organisation and therefore has incentives to ensure that it profit maximises post-Merger, which may include facilitating a degree of coordination between its bus and rail services post-Merger.

58. We examined barriers to entry and expansion in relation to bus services. We provisionally concluded that whilst *de novo* entry by new operators is unlikely to be timely, likely and sufficient to constrain the Parties' commercial behaviour, expansion by existing operators may act as a competitive constraint in certain areas, particularly where existing operators have a sizeable presence in the local area.

59. We found that the likelihood of entry or expansion by existing bus operators may vary according to local competitive conditions. We therefore considered the level of barriers to entry and expansion on a flow-by-flow basis as part of the competitive assessment.

60. Following our detailed assessment of the overlapping flows, we provisionally concluded that the Merger has resulted in or may be expected to result in an SLC on the following routes:

(a) routes 3, X3/X3A and X4 in the Redcar area;

(b) routes 83 and 84 in the Huddersfield area;

(c) routes X14, X15 and X18 in the Ashington area; and

(d) route 12 in the Darlington area.

The effect of the merger on transport networks

61. Some passengers purchase network tickets rather than route or flow-specific tickets. For these passengers, the relevant market may be the network rather than the route or flow. On the supply side, bus operators organise their services around hubs and depots and may switch their services to or from the overlapping bus and rail flows and routes. We therefore considered the effect of the Merger on transport networks.

62. We found that bus and rail network tickets in the Northern Franchise area serve different market segments and that most passengers are unlikely to substitute between them. We also found that the wide availability of alternative bus network tickets offered by Arriva's competitors are likely to exert a competitive constraint on Arriva post-Merger and restrict its ability and incentive to flex its commercial offer on bus network tickets.

63. We therefore provisionally concluded that the Merger has not resulted or may not be expected to result in an SLC in relation to transport networks.

Provisional conclusion

64. The Merger creates 167 overlaps between the Northern Franchise and other Arriva TOCs and 1,068 overlaps between the Northern Franchise and Arriva UK Bus services.

65. As a result of our assessment, we provisionally concluded that:

(a) the award of the Northern Franchise to ARN has created a relevant merger situation;

(b) the creation of that situation has not resulted in or may not be expected to result in an SLC for the award of rail franchises;

(c) the creation of that situation has not resulted in or may not be expected to result in an SLC in relation to transport networks;

(d) the creation of that situation has resulted in or may be expected to result in an SLC on the following overlapping rail flows:

(i) Leeds to Sheffield;

(ii) Wakefield to Sheffield;

(iii) Chester to Manchester; and

(iv) Chester to Stockport.

(e) the creation of that situation has resulted in or may be expected to result in an SLC on the following overlapping bus and rail routes:

(i) routes 3, X3/X3A and X4 in the Redcar area;

(ii) routes 83 and 84 in the Huddersfield area;

(iii) routes X14, X15 and X18 in the Ashington area; and

(iv) route 12 in the Darlington area.

Provisional findings

1. The reference

1.1 On 20 May 2016, the Competition and Markets Authority (CMA), in the exercise of its duty under section 22(1) of the Enterprise Act 2002 (the Act), referred the completed acquisition by Arriva Rail North Limited (ARN), a wholly-owned subsidiary of Arriva plc (Arriva), of the Northern rail franchise (the Northern Franchise) (altogether the Merger) for further investigation and report by a group of CMA panel members (inquiry group).

1.2 In exercise of its duty under section 35(1) of the Act, the CMA must decide:

(a) whether a relevant merger situation has been created; and

(b) if so, whether the creation of that situation has resulted or may be expected to result in an SLC within any market or markets in the UK for goods or services.

1.3 Our terms of reference, along with information on the conduct of the inquiry, are set out in Appendix A.

1.4 This document, together with its appendices, constitutes our provisional findings. Further information, including non-commercially-sensitive versions of the Parties' initial submission and summaries of evidence from third parties, can be found on our webpages.[12]

1.5 Throughout this document, where appropriate, we refer to Arriva, ARN and the Northern Franchise collectively as 'the Parties'.

2. Industry background

2.1 The structure of the bus and rail industries has evolved since privatisation, with a complex set of governance arrangements being developed in which the public and private sectors retain important roles. This section sets out a high level summary of:

(a) the structure of the rail industry;

(b) the funding of the rail industry;

(c) the role of government and the regulator in the rail industry;

[12] ARN/Northern Franchise merger inquiry case page.

(d) devolution of rail franchises; and

(e) the structure and regulation of the bus sector.

2.2 The financial performance of the rail and bus industries is examined in Appendix B.

The structure of the rail industry

Franchised train operating companies

2.3 Franchised TOCs operate passenger rail franchises and are awarded the right to run specific services within a specified area for a specific period of time, in return for the right to charge fares. Where appropriate, franchised TOCs receive financial support from the franchising authority, which is currently the Rail Group in the DfT.[13] There are currently 16 franchises operating in England and Wales and two in Scotland.

2.4 Franchised TOCs bid for franchises on the basis of the amount of funding they would require – or the premium they would be prepared to pay – in order to run the services specified in the franchise. The winner is selected on the basis of a weighted scoring system taking into account factors including the subsidy required or premium offered and initiatives to enhance the quality of service for passengers.

2.5 The rights and obligations of franchised TOCs are specified through a TSR as part of the franchise agreement negotiated between the franchising authority and the franchisee. The TSR includes obligations on franchised TOCs such as the number of daily calls at stations and the timing of first and last trains. Each franchise has its own specific TSR and the degree of specification by government varies by franchise.

2.6 Following the problems with the re-let of the West Coast franchise,[14] the Brown Review examined the wider rail franchising programme, looking in detail at whether changes were needed to the way risk was assessed and to the bidding and evaluation process.[15] During the hiatus in the bidding process, a number of direct awards were made to extend franchises. The nature of these awards varied but, in effect, the government negotiated

[13] Transport Scotland is the franchising authority for the ScotRail and Caledonian Sleeper franchises. There are also specific arrangements in place for London Overground and Merseyrail.
[14] In August 2012, the DfT awarded the West Coast franchise to FirstGroup. Virgin Trains judicially reviewed the DfT's decision and, in October 2012, the DfT announced that it would no longer contest the judicial review, stating that it had discovered technical flaws in its bidding process.
[15] DfT (January 2013), *The Brown Review of the Rail Franchising Programme*.

directly with the incumbent operator and there was no competition for the award.

2.7 The franchise bidding process restarted in 2013, leading to the subsequent award of the Essex Thameside, Thameslink, Southern & Great Northern and Virgin East Coast main line franchises.

2.8 Competition 'for' the market, ie for the award of a rail franchise, is currently the principal form of competition in passenger rail services and franchised services cover 99% of passenger rail miles in Great Britain. There is also a degree of competition 'in' the market (known as 'on-rail' competition) on certain parts of the rail network where franchised TOCs and other operators run services on overlapping or parallel routes.

2.9 The extent of overlapping and parallel franchises has reduced over time following a policy decision in 2001 by the then franchising authority, the Strategic Rail Authority, to reduce the number of franchises. This trend has continued in more recent franchise awards including through the removal of many of the overlaps between the Northern Franchise and the TransPennine Express franchise and the combination of Thameslink, Southern and Great Northern services into a single franchise.

Open access operators

2.10 OAOs operate passenger rail services on a commercial basis on routes authorised by the ORR for a specified time. OAOs compete with franchised TOCs where their services overlap.

2.11 There are currently just two OAOs, Grand Central and First Hull Trains, both of which are owned by larger companies with franchise operations in Great Britain.[16] These operate a small number of services on specified routes in competition to the franchisee on the East Coast main line. Together they represent less than 1% of passenger miles.

2.12 In August 2015, ORR approved an application by Alliance Rail to operate six off-peak services between London and Blackpool and in May 2016 ORR approved an application by FirstGroup to run five off-peak return services per day between London and Edinburgh.[17]

2.13 The scale of 'open access' operations is currently limited by ORR's assessment criteria. ORR needs to achieve an appropriate balance between

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[16] Grand Central is owned by Arriva (see paragraph 3.6).
[17] ORR (2015), *Application for access to the West Coast Main Line*; ORR (2016), *Application for access to the East Coast Main Line*. Alliance Rail is majority owned by Arriva UK Trains.

its 24 statutory duties, which include not only an obligation to promote competition in the provision of railway services for the benefit of users, but also duties to act so as not to render it unduly difficult for network licence holders (ie Network Rail) to finance regulated activities and to have regard to the funds available to the government for its functions in relation to railways and railway services.[18]

2.14 In practical terms, ORR balances its duties through the application of a 'not primarily abstractive' (NPA) test, under which ORR would not expect to approve open access applications unless they generate at least 30 pence of new revenue for every £1 abstracted from existing operators.

2.15 In March 2016, the CMA published a policy document setting out the benefits that greater on-rail competition could deliver, including lower fares, service quality enhancements, innovation and greater efficiency.[19] The CMA recommended that government allows OAOs to have a significantly increased role on key intercity routes subject to certain conditions. The policy document also highlighted the benefits that greater competition between franchised TOCs could deliver on intercity routes, although the benefits would be more limited than through competition with OAOs due to franchise specification.

Freight operating companies

2.16 Freight operating companies operate freight train services in Great Britain on an entirely open access basis, ie there is full competition 'in' the market, rather than 'for' the market. Services are not specified by government.

2.17 Freight operators may either own or lease locomotives and wagons. They are allocated train paths on the network by Network Rail, alongside franchised TOCs and OAOs. Rail freight serves sectors including bulk (eg coal, construction and petrochemicals), intermodal (eg shipping containers) and automotive.

2.18 There are currently seven separate freight operators in Great Britain: Colas Rail, DB Schenker, Devon & Cornwall Railways, Direct Rail Services, Europorte, Freightliner and GB Railfreight.[20]

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[18] Railways Act 1993, section 4.
[19] CMA (2016), *Competition in passenger rail services*.
[20] Freight operators do not compete directly with the Parties.

Network Rail

2.19 Network Rail owns and manages the main rail network infrastructure in Great Britain, including the track and related infrastructure and the vast majority of railway stations.[21]

2.20 Network Rail is regulated by ORR under its network licence.[22] ORR has a range of statutory powers to set the contractual and financial framework within which Network Rail operates. On 1 September 2014, Network Rail was reclassified as a public sector body.

Rolling stock leasing companies

2.21 Rolling stock leasing companies (ROSCOs) own fleets of trains and lease them to franchised TOCs, OAOs, freight operators and train building companies.[23] The three major ROSCOs operating in Great Britain are Angel Trains, Eversholt and Porterbrook. When rolling stock is replaced by newer stock on a given route, it is often re-let to other routes operated by different companies and ROSCOs work with train operators to determine the sorts of rolling stock required to deliver the desired customer services.

2.22 Although constrained by the availability of rolling stock and the rolling stock's interoperability with train operators' requirements, there is a degree of competition between ROSCOs. A new competitor, QW Rail Leasing, entered the market in 2008 and currently leases trains to London Overground.

The funding of the rail industry

2.23 The funding of the rail industry is complex, with the costs of funding being met by passengers and government, with government funding being provided through a number of mechanisms. In 2014-15, ORR analysis indicates that the combined industry income in Great Britain from franchised TOCs and Network Rail was £13.5 billion. 71% of this income was derived from passengers, with government providing another 26%. Other sources of income, such as property, provided the remaining 3%.[24]

2.24 Compared with 2013-14, industry income from passenger fares has increased by £0.4 billion (5%), to £8.8 billion in 2014-15, primarily due to a 4% rise in the number of passenger journeys. Another £0.8 billion of income

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[21] Network Rail operates 19 stations itself and leases all the others to the franchised TOCs.
[22] Network licence granted to Network Rail Infrastructure Limited.
[23] The main companies involved in building existing passenger trains for the market in Great Britain are Alstom Power, Bombardier Transportation, Hitachi Europe Ltd and Siemens Transportation Systems Ltd.
[24] ORR (2016), *GB rail industry financial information 2014-15*.

from passengers was derived in 2014-15 from on-train catering and other services.

2.25 The comparable cost to Network Rail and franchised TOCs of running Great Britain's railways was £13.6 billion in 2014-15, with 54% of these costs incurred on train operations and 46% on rail infrastructure. At an aggregate level, franchised TOCs contributed significantly more to government than in previous years. Whereas in 2013-14 franchises received net support of £0.1 billion, in 2014-15 they made net payments of £0.7 billion to government.[25] Some franchises paid premiums to government, whilst others were in receipt of subsidies.

2.26 Net funding from government for rail infrastructure increased by 12% from £3.7 billion in 2013-14 to £4.2 billion in 2014-15. Industry costs increased by £0.9 billion (7%) in 2014-15, largely due to Network Rail's maintenance and renewals costs rising, as well as an increase in train operator costs.

The role of government and the industry regulator

Office of Rail and Road

2.27 ORR is an independent regulator, which operates within the framework set by UK and EU legislation and is accountable through Parliament and the courts. It is the main safety regulator of railways in Great Britain and is responsible for the economic regulation of railway infrastructure (namely Network Rail and High Speed 1).[26] In exercising its functions under the principal legislation, the Railways Act 1993, ORR must consider and achieve an appropriate balance between its 24 statutory duties.

Department for Transport

2.28 The DfT, acting under the authority of the Secretary of State, is responsible for preparing the government's long-term strategy for the rail industry, defining the level of passenger services expected to run and specifying the level of funding required.

2.29 The DfT, through its Rail Group, is the franchising authority responsible for the majority of franchise agreements entered into with respect to services on

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[25] The government paid £4.2 billion in grants to Network Rail in 2014-15 and the net contribution by TOCs to government reduced overall net government expenditure to £3.5 billion (ie 26% of the rail industry's income).
[26] High Speed 1 Ltd has a 30-year concession to operate and manage the railway between London St Pancras and the Channel Tunnel.

the rail network in England, Wales and cross-border routes.[27] In addition, it is responsible for fare regulation and other consumer protection aspects such as safeguarding the provision of services for disabled people.

Devolution of rail franchises

2.30 Scotland's rail strategy is determined by Scottish ministers and includes responsibility for defining the level of public expenditure required to support Network Rail's operations and the ScotRail and Caledonian Sleeper franchises.

2.31 The Welsh government was given more powers with respect to passenger services in Wales under the Railways Act 2005. In November 2014, agreement was reached to devolve rail franchising functions to the Welsh government effective from 2017. This will enable the Welsh government to specify and award the next Wales & Borders franchise, for which the invitation to tender will be issued in August 2017 so that the new franchise may commence in October 2018.

2.32 A number of regional rail franchises are expected to be devolved in the coming years. In March 2015, the Secretary of State signed a partnership agreement with Rail North for the management of the Northern and TransPennine Express franchises from 1 April 2016.

2.33 Rail North is a government body based in Leeds, which was set up to support railways in the North of England and represents 29 LTAs from across the region.[28] Although there remain a number of 'reserved matters' for the Secretary of State, the responsibilities of Rail North include developing the TSRs and train plans for franchises in the region, implementing changes to the train fleet, undertaking performance management and enforcement, while, also, applying fare increases to fare baskets.

2.34 In addition to this, and as part of the 'Northern Powerhouse' programme,[29] the government entered into a devolution agreement with Greater Manchester in November 2014, outlining the powers to be transferred to the area as it moves towards having a directly elected mayor in 2017.[30] The

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[27] The franchising authorities for the London Overground and Merseyrail operations are Transport for London and Merseytravel respectively.
[28] For further information on the Rail North – DfT Partnership, see Rail North's website. Available at: www.railnorth.org.
[29] The aim of the 'Northern Powerhouse' programme is to close the north-south economic divide by investing in infrastructure, including major transport projects.
[30] The Greater Manchester devolution agreement was supplemented by a further agreement in July 2015. See House of Commons (7 October 2015), *Devolution to local government in England (SN07029)*.

powers and resources that the mayor will receive include a devolved transport budget as well as responsibility for franchised bus services, railway stations and 'smart ticketing' (following the example of London's Oyster card) in Greater Manchester.[31] Furthermore, Greater Manchester will work closely with the DfT and Rail North in order to contribute to rail franchising policy.[32]

2.35 The Cities and Local Government Devolution Act 2016 puts in place the legal framework to enable other areas to follow the lead of Greater Manchester.[33]

Bus services

Background to the industry

2.36 Buses are the most widely used form of public transport in England. There were around 5.2 billion bus journeys made in Great Britain in 2014/15, with over half being in London. This generated a total of £3.3 billion from passenger fares.[34]

2.37 The provision of local bus services is now largely in private ownership since the industry was deregulated in 1986. The five largest bus operators in England are Stagecoach (19%), Arriva (17%), FirstGroup (13%), Go-Ahead (13%) and National Express (5%). Other large operators of local bus services account for 22% of services in England, with smaller operators accounting for the remaining 12%.[35]

2.38 Bus usage declined from the 1970s until the 1990s, although passenger numbers have slowly increased at a national level since 1998-99 at an annual rate of 1%. However, in the North and West of England, bus usage has continued to decline in recent years, falling by 9.4% between 2008-09 and 2013-14.[36]

2.39 LTAs review the network of commercially registered services, identify additional services which they consider to be socially necessary and then seek providers through a tendering process. Such tenders may, depending on the circumstances, provide that the revenue risk passes to the service

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[31] Ibid.
[32] See HM Treasury and Great Manchester Combined Authority (November 2014), *Greater Manchester Agreement: devolution to the GMCA & transition to a directly elected mayor*, paragraph 15.
[33] Cities and Local Government Devolution Act 2016. Devolution deals have been announced for Sheffield (December 2014 and October 2015), West Yorkshire (March 2015) and Cornwall (July 2015), which contain elements of control over transport policy being devolved to these regions.
[34] DfT, *Transport Statistics Great Britain 2015*.
[35] DfT (2014), *Annual bus statistics: England 2013/14*.
[36] DfT (2014), *Annual bus statistics: England 2013/14*.

provider or remains with the LTA.[37] Tendered bus services typically fall into one of two categories: day services that provide links to employment, education and local services; and evening and Sunday services which support shift workers as well as leisure travel. In both cases, insufficient demand and local geography typically combine to make these routes commercially unattractive.[38]

2.40 In London, bus services are franchised by Transport for London. Outside London, bus operators have the ability to operate commercial services. However, approximately 20% of bus services, which would not be offered by commercial operators, are financially supported and tendered by LTAs. In larger urban areas, passenger transport executives (PTEs) are responsible for public transport, reporting to integrated transport authorities or combined authorities.

2.41 Although bus services outside London are largely commercial operations there are, in addition to the financial support of tendered services, two other key sources of revenue support from public funds:

(a) Concessionary fares, where the LTA will subsidise bus travel for particular groups (eg the elderly).

(b) The Bus Service Operators' Grant (BSOG) which allows operators of local bus services and community transport schemes to reclaim some of their fuel costs.[39] This grant was reformed in 2014, and further changes continue to be considered.[40]

2.42 In 2011, the Competition Commission (CC) published its final report into the local bus industry.[41] The report identified a number of factors that restrict competition between operators and the level of entry and expansion into local areas by rivals. The CC imposed a package of remedies including increasing the number of effective multi-operator ticketing schemes, introducing restrictions on bus operators making changes to service frequency and measures designed to ensure that entrants and competing operators are able to secure access to bus stations.

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[37] LTAs may be a county council in England, a council of a non-metropolitan district in England comprised in an area for which there is no county council, a passenger transport authority for a passenger transport area in England or a county council or county borough council in Wales. Under the Transport Act 2000, LTAs must develop policies for the promotion and encouragement of safe, integrated, efficient and economic transport facilities. LTAs are also required to prepare a local transport plan and bus strategy document.
[38] DfT (2016), *Value for money of tendered bus services*.
[39] The BSOG is designed to keep costs down, as well as enabling operators to run services that might not otherwise be unprofitable and might otherwise be cancelled.
[40] DfT (2016), *Bus services: grants and funding*.
[41] CC local bus services market investigation.

Regulation of the bus industry

2.43 Although the majority of bus services outside London are commercial in nature, all bus operators are subject to a number of regulations.

Fares

2.44 Outside London, fares are set for commercial services by operators based on operating costs and market conditions. For supported services based on gross cost contracts they are set by the LTA.[42] Within London, fares are set by the Mayor.

2.45 LTAs now have statutory powers to create, and require operators to participate in, bus multi-operator ticketing schemes, including network tickets. Multi-operator tickets can also be set up on a voluntary basis, and such agreements between competing operators are excluded from Chapter I of the Competition Act 1998 (this is the UK law prohibiting anti-competitive agreements) through the public transport ticketing schemes block exemption (assuming they meet certain necessary criteria).[43]

2.46 The block exemption was renewed by the Secretary of State in February 2016.[44] The CMA has consulted on updated guidance on the application of the block exemption.

Services

2.47 Traffic Commissioners are responsible for the licensing and regulation of those who operate heavy goods vehicles, buses and coaches, and the registration of local bus services. There are eight Traffic Commissioners in Great Britain. They are assisted by deputy Traffic Commissioners, who preside over a number of public inquiries.[45]

2.48 Bus operators are required to notify new services or a change in their timetables to the Traffic Commissioner, giving 56 days' notice of changes. The same notice period is required if a route is being discontinued.

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[42] Under gross cost contracts, the tendering authority pays an operator to provide services, retaining the passenger revenue and often setting the routes and specifying the types of vehicles.
[43] *Public transport ticketing schemes block exemption: OFT439*, 1 November 2006.
[44] See Competition Act 1998 (Public Transport Ticketing Schemes Block Exemption) (Amendment) Order 2016 (SI 2016/126). This order came into force on 29 February 2016. The order makes certain amendments to the block exemption and extends the duration for ten years.
[45] Traffic Commissioners can call a formal public inquiry in a court to get more evidence to help them decide if they should grant or refuse licences for heavy goods vehicle or public service vehicle operators or take action against a vehicle operator, bus service operator or driver of a bus, minibus or lorry.

2.49 Tendered bus services have more stringent obligations set by LTAs than commercial services, including in relation to fares, routes and service frequencies, with the specification varying on a case-by-case basis.

2.50 LTAs may also adopt commercial partnerships with bus operators. We set out the key partnership schemes in paragraph8.71. The nature of these partnerships may change in the future as a result of the Bus Services Bill currently passing through Parliament (see paragraph 8.72).

2.51 The regulatory constraints on bus and rail operators are considered further in Section 8.

3. The Parties

Arriva

3.1 Arriva is part of Deutsche Bahn AG and is one of the largest providers of passenger transport in Europe, operating 2.2 billion passenger journeys per year across 14 European countries.[46] Arriva's revenue in 2015 was €4.8 billion (£3.5 billion).[47]

3.2 Arriva originated in Sunderland in 1938 as a second hand motorcycle dealer. Arriva first began providing bus services in 1980 through the acquisition of the Grey-Green bus company. Arriva entered the passenger rail sector in 2000 through the acquisition of Merseyside Transport Limited.[48]

3.3 In the UK, Arriva provides passenger rail services (both heavy and light rail), bus services, non-emergency patient transport services and specialist education transport services.

3.4 Arriva is currently divided into three divisions, each with its own management teams and divisional directors:

(a) Arriva UK Trains.

(b) Arriva UK Bus.

(c) Mainland Europe.

[46] Deutsche Bahn AG is 100% owned by the Federal Republic of Germany.
[47] Deutsche Bahn (2015), Integrated Report, p137.
[48] Arriva website.

Arriva UK Trains

3.5 ARN is a wholly-owned subsidiary of Arriva UK Trains Ltd created for the purpose of bidding for, and operating, the Northern Franchise. ARN was dormant prior to becoming the franchisee for the Northern Franchise.

3.6 In addition to the Northern Franchise, Arriva UK Trains operates the following rail services:

(a) Three rail franchises:

(i) CrossCountry – services span the UK from Aberdeen in the north to Stansted Airport, Plymouth and Penzance in the south. The franchise agreement is due to expire in October 2016, [✄].

(ii) ATW – services are provided predominantly within Wales, with some services in the North of England. The franchise agreement is due to expire in October 2018.

(iii) Chiltern Railways – services are operated between Aylesbury, Birmingham Snow Hill, Kidderminster, Oxford, Stratford-upon-Avon and London. The franchise agreement is due to expire in December 2021.

(b) Two rail concessions:

(i) DB Regio Tyne and Wear Metro Limited (Tyne and Wear Metro) – operated under a concession agreement with Nexus, the PTE for the Tyne and Wear region. The concession agreement is due to expire in March 2017, although it could be extended to 31 March 2019.

(ii) London Overground Rail Operations Limited – a joint venture between Arriva and MTR Corporation (of Hong Kong) which operates the concession on behalf of Transport for London. The concession agreement is due to expire in November 2016.

(c) Open access rail services under the following:

(i) Grand Central Railway Company Limited (Grand Central) – provides high speed train services between London and Sunderland and between London and Bradford (calling at various intermediate stops). Grand Central's track access agreement with Network Rail will expire in November 2026.

(ii) Alliance Rail – not currently providing rail services but has received approval to operate passenger rail services between London and Blackpool from December 2017.[49]

3.7 In 2015, Arriva UK Trains generated €1.7 billion (£1.2 billion) of revenue, with an EBIT margin of 2.5%.[50,51]

Arriva UK Bus

3.8 Arriva UK Bus is a major bus operator in the UK. It is the third largest operator in the regional bus market, operating around 4,300 buses in the North East, North West and South East of England as well as in Yorkshire, The Midlands and Wales. Arriva UK Bus also operates 1,600 buses in London.

3.9 Arriva's UK bus services are run by individual operating companies within a divisional organisation split into the following regional management areas:

(a) Arriva North West and Wales;

(b) Arriva Yorkshire and North East;

(c) Arriva Midlands and Arriva The Shires;

(d) Arriva Southern Counties; and

(e) Arriva London.

3.10 The Parties told us that each of these regional management areas had its own leadership team reporting to Arriva UK Bus divisional leadership.

3.11 Arriva North West and Wales and Arriva Yorkshire and North East operate bus services in the Northern Franchise area though the following operating companies:

(a) Arriva Durham County Limited;

(b) Arriva North West Limited;

(c) Arriva Northumbria Limited;

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[49] [✂]. Additional overlaps may arise between Northern Franchise services and Alliance Rail services once Alliance Rail begins operating these services.
[50] Earnings Before Interest and Tax.
[51] Deutsche Bahn (2015), Integrated Report, p138.

(d) Arriva Tees & District Limited;

(e) Arriva Yorkshire Limited; and

(f) Yorkshire Tiger Limited.

3.12 In some regions, premium services are operated under the Sapphire brand and inter-urban express services are operated under the MAX brand.

3.13 In 2015, Arriva UK Bus generated a total €1.3 billion (£1.0 billion) of revenue, with an EBIT margin of 11.2%.[52] However, the level of profitability differed significantly between regions (most notably in [✄]).

Arriva Mainland Europe

3.14 Arriva Mainland Europe operates a mixture of bus, coach and rail services in Croatia, Czech Republic, Denmark, Hungary, Italy, Netherlands, Poland, Portugal, Serbia, Slovakia, Slovenia, Spain and Sweden.

3.15 In 2015, Arriva's Mainland Europe division generated €1.9 billion (£1.4 billion) of revenue, with an EBIT margin of 8.0%.[53]

The Northern Franchise

3.16 The Northern Franchise is currently the largest rail franchise in Great Britain in terms of the number of services operated, serving 526 stations and operating over 15,000 local and regional services per week.

3.17 The Northern Franchise provides inter-urban, commuter and other services across the whole of the North of England. The Northern Franchise operates over most rail routes in North of England, from Chathill in the north to Stoke-on-Trent and Nottingham in the south of the region, and from Liverpool in the west to Hull in the east. Services provided by the Northern Franchise include:

(a) longer-distance regional services that connect major urban centres (eg Nottingham–Leeds; York–Blackpool and Sheffield–Doncaster–Hull);

(b) urban services (eg commuter services around the main northern cities such as Leeds, Liverpool, Newcastle, Sheffield and Manchester); and

[52] Deutsche Bahn (2015), Integrated Report, p138.
[53] Deutsche Bahn (2015), Integrated Report, p138.

(c) rural services (eg routes along the Cumbrian coast from Carlisle to Barrow-in-Furness and the route from Hull to Scarborough in the east).

3.18 Between December 2004 and March 2016, the Northern Franchise was operated by Serco-Abellio.[54] The Northern Franchise was awarded to ARN following a competitive tendering process in which ARN, Abellio and Govia were shortlisted bidders.

3.19 The Northern Franchise currently receives the highest government subsidy, which stood at £365 million in 2015, although this is expected to reduce during the life of the franchise (as discussed further in Appendix C).

3.20 The Northern Franchise generated £568 million in 2014 with EBIT margins of [✂],[55] whilst Arriva targeted a [✂] EBIT margin in designing its franchise bid.

3.21 Additional details on the historical and forecast financial performance of the Northern Franchise are provided in Appendix C.

4. The transaction and relevant merger situation

The transaction

4.1 On 9 December 2015, the DfT announced that ARN was the successful bidder for the Northern Franchise. On 22 December 2015, the Secretary of State and ARN entered into a franchise agreement and associated agreements confirming the award of the Northern Franchise to ARN. The operation of the Northern Franchise commenced on 1 April 2016 for a term of nine years (subject to a possible extension of up to one year).

The rationale for the transaction

4.2 The Parties told us that Arriva's rationale for bidding for and acquiring the Northern Franchise was to:[56]

(a) develop its rail operations in Great Britain, in particular as a number of the rail franchises currently operated by Arriva in Great Britain were due for re-tendering in the next few years;

[54] Serco-Abellio was a joint venture between Serco and Abellio in which each company owned a 50% share.
[55] Based on Northern Rail statutory accounts for year ending 3 January 2015.
[56] Arriva initial submission, paragraph 5.1.

(b) end a period of relatively unsuccessful franchise bidding and enhance its reputation as an operator and bidder;

(c) deliver value through a much improved travelling environment and customer experience for passengers; and

(d) balance its risk portfolio [✂].

4.3 [✂]. Arriva told us that there was no involvement by its UK Bus division in the decision to bid for the Northern Franchise and that it was at no point any part of Arriva's strategy in bidding for the Northern Franchise to benefit from reduced competition on existing rail or bus services overlapping with Northern Franchise services.[57]

Jurisdiction

4.4 The Merger met the thresholds under Council Regulation (EC) 139/2004 (the EC Merger Regulation) for review by the European Commission (the Commission). The Parties submitted a reasoned submission to the Commission on 18 December 2015 requesting pre-notification referral to the CMA under Article 4(4) of the EC Merger Regulation. The CMA informed the Commission that it agreed with the referral request and considered the Merger capable of being reviewed in the UK under the Act. On 27 January 2016, the Commission announced its decision to refer the Merger to the CMA for review.[58]

4.5 On 20 May 2016, the CMA, in the exercise of its duty under section 22(1) of the Act, referred the Merger to the inquiry group for further investigation.

4.6 Under section 35 of the Act and pursuant to our terms of reference (see Appendix A), we are required to investigate and report on certain statutory questions, the first being whether a 'relevant merger situation' has been created.

4.7 Section 23 of the Act provides that a relevant merger situation has been created if:

(a) two or more enterprises have ceased to be distinct within the statutory period for reference;[59] and

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[57] Arriva initial submission, paragraph 5.2.
[58] Case M.7897 – Arriva Rail North/Northern Franchise.
[59] As set out in section 24 of the Act.

(b) either the ‘turnover test’ or the ‘share of supply test’ (as specified in that section of the Act) is satisfied, or both are satisfied.

4.8 Firstly, we consider whether the structure of the Merger transaction involves enterprises that cease to be distinct. The award of a rail franchise constitutes an acquisition of control of an enterprise by virtue of section 66(3) of the Railways Act 1993. The Northern Franchise and Arriva have therefore ceased to be distinct.

4.9 Secondly, we consider whether the transaction has a sufficient nexus within the UK to merit the investigation. This is the case if the ‘turnover test’ or the ‘share of supply test’ is satisfied. The turnover test in section 23(1)b is satisfied where the value of the turnover in the UK of the enterprise being taken over exceeds £70 million. The turnover of the Northern Franchise was £568 million in the year ended 3 January 2015.[60]

4.10 We therefore provisionally conclude that a ‘relevant merger situation’ has been created.

5. The counterfactual

5.1 Before we turn to the effects of the Merger we need to determine what we would expect the competitive situation to be absent the Merger. This is called the ‘counterfactual’.[61] The counterfactual is a benchmark against which the expected effects of the merger can be assessed. The counterfactual takes events and their consequences into account to the extent that they are foreseeable.[62]

5.2 The CMA will normally select the counterfactual that is most likely to have existed absent the merger, based on the facts available to it and the extent of foreseeable future events.

5.3 In non-rail franchise cases the CMA will normally examine several possible scenarios to inform its judgement on the likely future situation in the absence of the merger, one of which may be the continuation of the pre-merger situation.[63]

5.4 However, rail franchise cases raise a particular issue because the existing rail franchise expires and a new franchise must be awarded to one of a

[60] Statutory accounts for Northern Rail Limited, 3 January 2015.
[61] *Merger Assessment Guidelines*, paragraph 4.3.1.
[62] *Merger Assessment Guidelines*, paragraph 4.3.2.
[63] *Merger Assessment Guidelines*, paragraph 4.3.6.

shortlist of bidders.[64] Thus in the case of a rail franchise award the pre-merger situation cannot be the appropriate counterfactual. This is recognised in the Merger Assessment Guidelines. We have therefore to identify a counterfactual which allows the CMA to make a comparative assessment of the rail franchise where the status quo ante, or some development of it, is not open to us.

5.5 The Merger Assessment Guidelines[65] state that in rail franchise cases:

> The Authorities will therefore treat the appropriate counterfactual to the merger as the award of the franchise either to a firm that raises no competition concerns, or, if there is no alternative bidder that does not raise competition concerns, to a hypothetical bidder, with any competition concerns being remedied through behavioural remedies.[66]

The views of the Parties

5.6 The Parties told us that the other shortlisted bidders in the present case, namely Govia and Abellio, would both raise potential competition concerns given overlaps with the Northern Franchise.[67] They argued that there was therefore no other bidder in this case which would not raise at least some competition concerns and the appropriate counterfactual was therefore the award of the rail franchise to 'a hypothetical bidder, with any competition concerns being remedied through behavioural remedies'.

5.7 The Parties then told us that the effects of the two counterfactuals in the Merger Assessment Guidelines are not the same given that the Merger Assessment Guidelines identify two separate situations.[68] The Parties said that we should assume that a hypothetical bidder would give rise to one or more SLCs and that, while the SLC would be remedied, this would not entirely restore competition to the pre-award state because behavioural remedies are subject to a proportionality assessment.[69]

5.8 The Parties concluded that the effect of the Merger Assessment Guidelines was to acknowledge the counterfactual could not be one of 'perfect

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[64] *Merger Assessment Guidelines*, paragraph 4.3.28. See, for example, Office of Fair Trading (OFT) (2008), *Stagecoach/East Midlands passenger rail franchise*.
[65] *Merger Assessment Guidelines*, paragraph 4.3.29 and footnote 50: CC case (2006), *Greater Western Passenger Rail Franchise*.
[66] *Merger Assessment Guidelines*, paragraph 4.3.29.
[67] Arriva initial submission, paragraph 14.2.
[68] *Merger Assessment Guidelines*, paragraph 4.3.29.
[69] Arriva response to issues statement, paragraph 3.3.1.

competition' but involved some degree of compromise to competition on individual flows.[70]

CMA assessment

5.9 Our starting point is the Merger Assessment Guidelines which reflect previous decisions of the CC and OFT. The guidelines state that the counterfactual in rail franchise cases is either that the franchisee raises no competition concerns or that such competition concerns as there are have been remedied. It is apparent from paragraph 4.6 of the decision in FirstGroup/Great Western, on which paragraph 4.3.29 of the Merger Assessment Guidelines is based, that those two scenarios – either that the alternative franchisee does not raise competition concerns or that any competition concerns have been remedied through behavioural remedies – are intended to have the same effect. This is not, as the Parties suggest, to say that the benchmark is one of 'perfect competition' but rather that the counterfactual franchisee is assumed not to create any competition concerns.

5.10 Examples of previous decisions, in phase 1 and phase 2, in which this approach has been adopted include:[71]

(a) *FirstGroup/Great Western* (2006);[72]

(b) *National Express/Intercity East Coast* (2007);[73] and

(c) *Stagecoach/South Western* (2007).[74]

5.11 We have not identified any reason to depart from this approach in the present case. The approach in the Merger Assessment Guidelines is consistent with the CMA's general approach to cases in which there are multiple bids.

5.12 First, it would not be feasible and practicable within the time limits to assess the bids of all alternative bidders whose bids might give rise to competition problems as part of the assessment of the franchise award.

[70] Arriva response to issues statement, paragraph 3.4.
[71] See also cases: *Stagecoach group plc/East Midlands Passengers rail franchise*, paragraphs 7 & 8; *Govia Limited/West Midlands Passenger rail franchise*, paragraphs 9, 10 & 11; *Abellio Greater Anglia Limited/Greater Anglia Franchise*, paragraphs 6 & 7; *Govia Limited of South Central passenger Rail Franchise*, paragraphs 9 and 10; *Arriva plc through Arriva Trains Cross Country Limited/Cross Country Passenger Rail Franchise*, paragraphs 6 & 7.
[72] CC, FirstGroup/Great Western final report, paragraph 4.6.
[73] OFT, National Express/ICEC final report, paragraph 9.
[74] OFT, Stagecoach/South Western, paragraph 16.

5.13 Secondly, as previously said, whether an alternative franchisee would raise no competition concerns or whether any competition concerns would be remedied are, and are intended to be, different scenarios but with the same effect.[75] While the Parties submit that we should assume that a hypothetical bidder gives rise to one or more SLCs we note that, contrary to the Parties' submission, the hypothetical bidder identified in the Merger Assessment Guidelines is not assumed to raise competition concerns. The assumption is that if it does they will be resolved. It is difficult to see why we would assess the Merger against a hypothetical bidder with hypothetical SLCs that lead to competition being compromised, as suggested by the Parties, when the Merger Assessment Guidelines direct us away from actual bidders with actual competition concerns.

5.14 Thirdly, that behavioural remedies, like any other remedy, are subject to the requirements of proportionality does not require us to conclude that competition may be 'compromised', as suggested by the Parties. The CMA's obligation to adopt proportionate remedies does not prevent it from selecting effective remedies. In practice, the CMA will assess the effectiveness of any remedy first and only then consider its proportionality.

5.15 Accordingly, in so far as the operation of the Northern Franchise is concerned, the CMA provisionally concludes that the Merger should be assessed against a counterfactual whereby the Northern Franchise is awarded to a TOC that raises no competition concerns.

6. Market definition

6.1 The purpose of market definition in a merger inquiry is to provide a framework for the analysis of the competitive effects of the merger.[76] Market definition is a useful analytical tool, but not an end in itself, and identifying the relevant market involves an element of judgement.

6.2 The boundaries of the market do not determine the outcome of the CMA's analysis of the competitive effects of the merger in any mechanistic way. In assessing whether a merger may give rise to an SLC the CMA may take into account constraints outside the relevant market, segmentation within the relevant market, or other ways in which some constraints are more important than others.[77]

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[75] See CC (2006), *Greater Western Passenger Rail Franchise*, paragraph 4.6.
[76] *Mergers: Guidance on the CMA's jurisdiction and procedure (CMA2)*, paragraph 5.2.1.
[77] *Merger Assessment Guidelines*, paragraph 5.2.2.

6.3 In this section, we set out the relevant markets in which we have assessed the effects of the Merger. We first define the product markets. Then we define the geographic markets.

Product market definition

Competition for the market

6.4 Rail franchises are awarded by the DfT through tender competitions, which are a form of competition for the market. Transport companies bid to become the operator of the franchise for the term specified in the DfT's invitation to tender. Competition in passenger rail services currently takes place primarily through the competitive award of franchises and the process of competition for the market delivers significant benefits for passengers.

6.5 Each invitation to tender for a franchise invites bids from interested parties and sets out the minimum specifications that bidders must be able to deliver. The bidders submit a combined price and service specification offer, which may go beyond the minimum specification, and the DfT then assesses each bid against its preferred criteria. Given that each franchise is different from others and that parties submit bids to run a specific franchise, the competitive constraint in franchise tenders is derived from the ability of the DfT to award the franchise to other bidders. Therefore, it is appropriate to aggregate franchise contracts into the same product market as a way of assessing competition for the award of franchises.[78]

6.6 This is consistent with the approach adopted in recent cases.[79] The Parties told us that they saw no reason to depart from this approach in the present case.

6.7 We provisionally conclude that the relevant product market is the award of rail franchises.

Competition in the market

6.8 The Parties overlap in the provision of public transport services, including bus services and rail services.

6.9 Passengers make choices between various modes of transport that are available for a particular journey. Where passengers face multiple travel

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[78] *Merger Assessment Guidelines*, paragraph 5.2.18.
[79] See, for example, CMA (2014), *First TransPennine Express/TransPennine Express* (ME/6586/16), paragraph 3; CMA (2014), *Intercity Railways Limited/ICEC Franchise*, (ME/6506/14), paragraph 34 and European Commission (11 August 2010), *Deutsche Bahn/Arriva* (M.5855).

options, either of the same mode or different modes of transport, their choices are driven by a range of factors, including:

(a) the cost of the journey;

(b) journey time;

(c) in the case of public transport, time spent travelling to the starting rail station or bus stop and time taken travelling from the end rail station/bus stop to the passenger's ultimate destination;

(d) frequency and any waiting time including that due to an interchange; and

(e) other factors such as personal preferences, punctuality, variance in journey time compared to the timetabled journey time, the reliability of different modes, general service quality and whether the passenger is travelling alone or in a group.

6.10 A passenger's choice of mode of transport and their ability to substitute between different options (within the same mode or across modes) depends on these factors, which may collectively be measured in terms of cost by calculating GJC.[80]

6.11 The Parties told us that it was not necessary to reach a general conclusion on the scope of the relevant product markets as it would be possible to undertake detailed individual analysis of overlaps raising potential competition concerns.[81]

Competition between different modes of transport

6.12 We consider a reasonable starting point for analysis is that, other things being equal, a service competes more closely with another service of the same mode of transport on a flow/route than with a service using a different mode of transport.[82]

6.13 The Parties told us that they generally agreed with this starting point.[83] For example, the Parties noted that their bus businesses generally assessed competitive conditions by considering competitors within the same mode of

[80] Passengers trade-off the various factors in their choice of preferred travel option and seek to minimise the overall 'cost' of their journey, which includes the fare and the time elements. For example, passengers may be willing to trade-off a longer journey time on a slow/stopping service if it serves a stop closer to their ultimate destination.
[81] Arriva response to issues statement, paragraph 2.2.
[82] This could, for example, be because services of the same mode of transport are more likely to offer a similar set of GJCs.
[83] Arriva initial submission, paragraph 6.4.

transport. However this could vary according to the particular local circumstances and a range of factors could influence passenger choice including distance, price, journey time and frequency and directness of service.

6.14 A number of transport operators, PTEs and passenger groups also told us that this was a reasonable starting point for our assessment.

6.15 The Parties told us that the data from the National Travel Survey (NTS), which is a national survey carried out by the DfT, showed that passenger preferences for a particular mode of transport varied with the length of the journey.[84] For example, for journeys between two and five miles, bus journeys account for around 11% of journeys, compared to 1% for rail. However, for journeys of 25 miles of more, rail journeys account for 14% of total passenger journeys compared to only 1% for bus.

Private transport

6.16 The Parties also told us that private transport (eg taxis/private hire vehicles, private car and cycling) was an increasingly important constraint on public transport.[85] A number of competing transport operators and PTEs also told us that private transport may compete with bus and rail services.[86]

6.17 The Parties said that the majority of travel across the North of England was primarily undertaken by car and for journeys of more than two miles it accounted for 78 to 82% of total journeys.[87]

6.18 In relation to competitive interaction between rail and the private car, the Parties submitted internal Arriva analysis based on census data, which suggested that across 15 urban centres in the Northern Franchise area, rail's share of journeys had increased from [5-10%] to [10-15%] between 2001 and 2011.[88] The Parties said that this was not a result of increasing passenger commuting distance, since the growth in rail's modal share was stable across different commuting lengths (ie the share of rail had not increased faster for longer commutes). The Parties said that this analysis indicated an increase in mileage per passenger, which in turn implied a modal shift to rail taking place at longer distances and that Arriva's view was

[84] [✂].
[85] The Parties noted that Uber was now available across much of the area covered by the Northern Franchise and had significant capabilities to disrupt existing transport models, for example by launching its bus style service, UberHop. The Parties also told us that a variety of new models that spanned the public/private divide such as car clubs, cycle hire schemes and ride sharing schemes should be considered.
[86] [✂] told us that the private car competed with public transport. This view was also shared by the [✂].
[87] [✂].
[88] [✂].

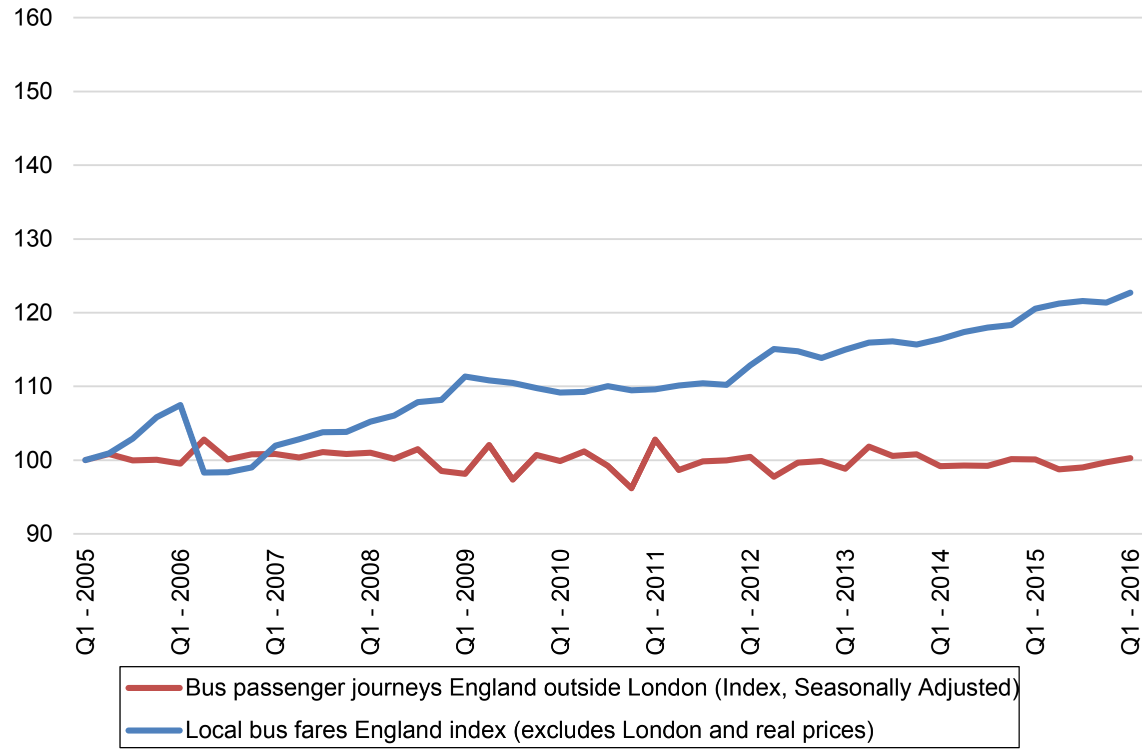
that such modal shift was likely to have come from the car. The Parties also said that the share of rail could vary significantly across rail routes. For example, the Parties' analysis showed than on the Aire Valley to Leeds Northern Franchise route, rail's share of journeys was significantly higher than in other areas. On the Ilkley to Leeds section, rail had a share of [60-70%] of all journeys. Arriva submitted that this was a result of the significant investment on the Aire Valley to Leeds route, which had benefited from the introduction of frequent and modern electric trains.

6.19 In relation to competitive interaction between bus and the private car, the Parties submitted survey evidence commissioned to understand perceptions and passenger choices following the introduction of its Sapphire range of bus services, which showed that the improvements had led to significant switching from car. For example [20-30%] of respondents had made the journey by car before the introduction of the Sapphire services.

6.20 We note that bus fares have increased in real terms since 2005, whilst passenger demand has been relatively stable over this period (see Figure 1 below).[89,90] In particular bus fares have risen significantly faster than petrol prices, without any significant impact on bus passenger demand (see Figure 2 below).[91] This suggests that switching from bus to car usage in response to a small change in the relative costs of the two modes may be limited.[92]

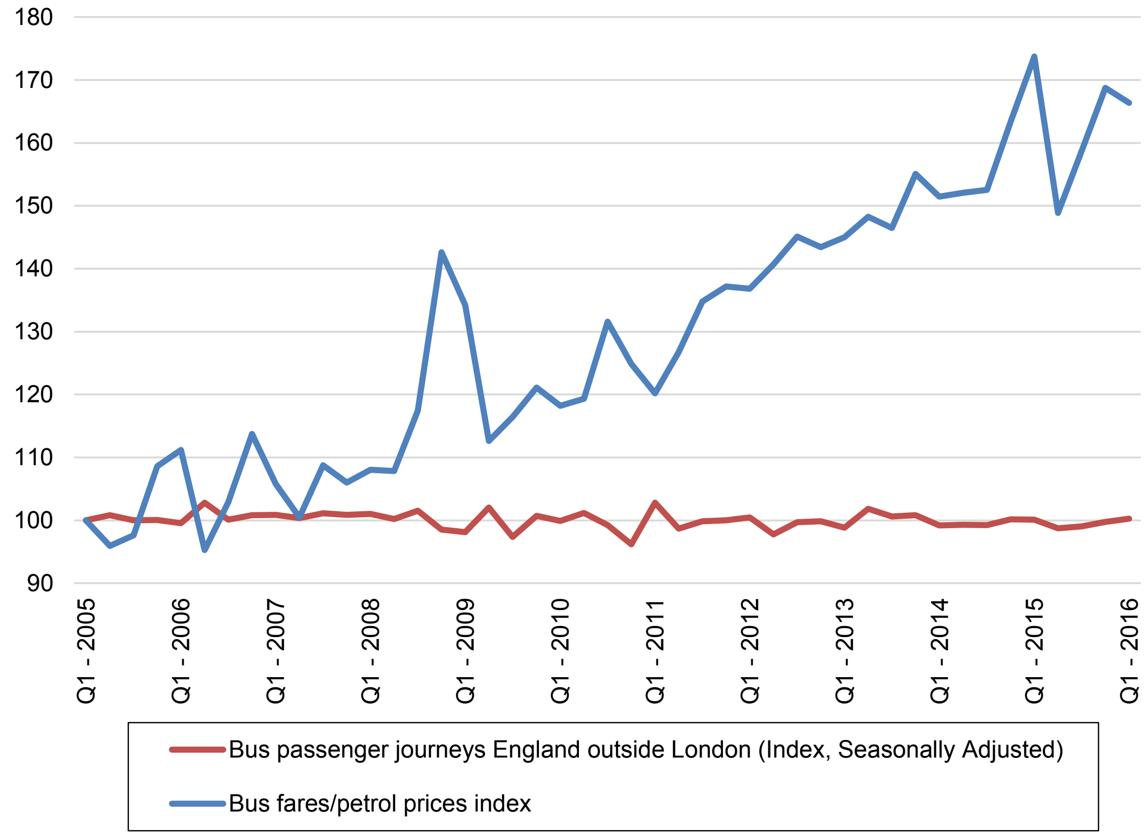
[89] DfT (2016), Bus statistics.
[90] OECD, Inflation data.
[91] Department for Business, Energy & Industrial Strategy (2016), *Monthly and annual prices of road fuels and petroleum products*.
[92] The comparison does not control for other factors which might affect journey numbers over time.

Figure 1: Real bus fares and passengers – England excluding London (Q1 2005 to Q4 2015)



Source: DfT bus statistics/CMA calculations.

Figure 2: Index of bus fares vs petrol prices and bus passenger demand – England excluding London (Q1 2005 – Q4 2015)



Source: DfT bus statistics and petrol prices/CMA calculations.

6.21 In our review of Arriva's internal documents, we found a small number of examples of benchmarking between modes of transport, including instances where Arriva noted significant changes in the price of petrol and the impact on the cost of private transport.[93] The Parties also cited an example of [✂].[94]

6.22 Private transport may in some instances be one of the factors that Arriva may consider in setting its overall offer. However, the extent to which private transport is an actual constraint would vary on a flow-by-flow basis. In addition to variations in relative prices on a flow-by-flow basis, other factors such as relative journey times, accessibility and personal preferences will also vary on a flow-by-flow basis.

6.23 We note that the evidence submitted by the Parties in relation to competition from private transport does not directly consider whether it would be profitable for the Parties to increase the prices of their bus or rail services

[93] [✂].
[94] [✂]

given the presence of private transport.[95] As such, it does not fit within the hypothetical monopolist framework that the CMA employs to define the boundaries of the relevant market in merger inquiries.[96]

6.24 We also note that in differentiated markets, as in the case of transport services, the CMA is mindful of asymmetric constraints. The evidence we have seen indicates that there has been a user shift from private transport to public transport. However, we have not seen any quantitative evidence which suggests that a significant proportion of passengers would switch from public transport to private transport in response to a small change in the offerings (relative prices and service quality) such that a hypothetical monopolist of public transport would find it unprofitable to increase prices or reduce service quality.

6.25 As noted above, the extent of competition between public and private transport may vary by flow. We considered submissions by the Parties in relation to potential constraints from private transport, where relevant, in the competitive assessment of overlapping flows. However, we did not see any evidence that private transport exercises a constraint on the Parties that would be sufficient to prevent fare increases on specific flows.

6.26 We also note that evidence from the Parties' survey of certain overlapping bus and rail flows suggests that in response to a 10% fare increase on buses, more passengers would divert to rail than to bus (see paragraph 11.46).

6.27 In our competitive assessment of the overlapping rail flows, we note that the MOIRA model we use to test the similarity of overlapping rail services (see paragraph 10.9) takes into account competition from other modes of transport, including private transport.

Passenger journey purpose

6.28 The extent of substitution between transport modes may also be considered by journey purpose.[97] For example, leisure passengers may generally be more sensitive than other types of passenger to changes in prices and

[95] In applying the hypothetical monopolist test, the CMA assesses whether the hypothetical monopolist could profitably raise the price of at least one of the products in the candidate market by at least a small but significant amount over a non-transitory period of time (ie by a 'SSNIP' – a small but significant and non-transitory increase in price).
[96] *Merger Assessment Guidelines*, paragraphs 5.2.9–5.2.20.
[97] The CC previously considered the extent to which leisure travel could be segmented from business travel and commuting due to different sensitivities in price, journey time and duration (CC, *Review of methodologies in transport inquiries*, paragraphs 16 & 17. See also CMA (2014), *Intercity Railways Limited/ICEC Franchise* (ME/6506/14), paragraph 34).

therefore might be more likely to substitute between different services. The Parties told us that leisure passengers also have the option of staying at home instead of travelling. In contrast, commuters and business passengers generally need to travel at specific times of day and are likely to be less price sensitive.

6.29 We consider whether the market should be further segmented, eg between leisure travel and business travel and commuting. The relevant market segmentation is, however, not always straightforward. For example, the type of ticket purchased by a passenger (eg off-peak) may not reveal the journey purpose and some passengers might shift between ticket types in response to a price rise in circumstances where the purpose of their journey has not changed. We therefore consider different sensitivities of customer groups to price, journey time and journey duration, where relevant evidence is available, in the flow-by-flow competitive assessment.

Geographic market definition

Competition for the market

6.30 Rail franchises are awarded across Great Britain and attract a range of domestic and international bidders. We provisionally conclude that competition for the award of rail franchises takes place on a national basis.

Competition in the market

6.31 Passengers travel between a specific point of origin to a specific point of destination (ie a point-to-point journey) and, as such, demand is for travel between two points. We described these journeys between start and end points as ‘flows’. A flow may constitute an entire bus or train route or it may be only part of a longer route.

6.32 As a starting point for analysis, we identify overlaps between the Parties’ services and assess competition between transport options on a flow-by-flow basis.

Route and flow level assessment

6.33 We note that certain aspects of the offer to both bus and rail passengers are set at the route rather than flow level (for example, timetables and service quality). Flows therefore cannot always be fully distinguished from the routes of which they are a part. Furthermore, flows can be part of more than one route, particularly on ‘main corridors’ where a number of routes converge from a number of termini. These factors may limit the ability of operators to vary offerings at the flow level but competition at the flow level can impact offerings at the route level.

6.34 We therefore consider the possible effects on competition of the Merger on routes as well as flows.

Identifying overlaps between existing (pre-Merger) Arriva and Northern Franchise services

6.35 We identify overlaps between (i) Arriva rail services and Northern Franchise services and (ii) between Arriva bus services and Northern Franchise services as follows:

(a) Rail services providing journeys between the same two rail stations.[98]

(b) Bus and rail services where the catchment area of a bus (rail) service contains rail (bus) stations (stops).[99]

6.36 In relation to paragraph 6.35(b) above, we consider the appropriate catchment area to adopt in identifying overlapping services and the implementation of the relevant catchment areas into our analysis of the competitive effects of the Merger.

6.37 In previous inquiries, the CMA's predecessor bodies have typically adopted a 1,200-metre catchment area for identifying overlaps between bus and rail services and have flexed the distance to take account of differences in the availability of transport options (for example distinguishing between urban and rural services).[100]

6.38 The Parties told us that adopting a 1,200-metre catchment area around rail stations was likely to overstate the degree of overlap between its bus services and the Northern Franchise. The Parties told us that this was particularly relevant for intra-urban flows, which had relatively short journey times and where a 1,200-metre catchment area could therefore yield counter-intuitive results (such as the journey taking the passenger further away from the flow destination than at the flow origin).[101] The Parties noted

[98] Rail-rail overlaps are identified on a settlement to settlement basis. In instances where a settlement has more than one station, the stations are combined. For example, Wakefield includes Wakefield Kirkgate station, Wakefield Westgate station and journeys to/from Wakefield BR (which is a ticket that is valid for all Wakefield rail stations).
[99] In practice this means identifying bus stops which are within the catchment area of the relevant rail stations, since rail services generally have a wider catchment area (see paragraphs 6.40–6.45).
[100] See, for example, CC (2006), *Greater Western Passenger Rail Franchise*, Appendix E, paragraph 8.
[101] Arriva response to issues statement, paragraph 2.16.

that in previous inquiries, the CMA and its predecessors had adopted a 300-metre catchment area for bus-rail overlaps.[102]

6.39 Several third parties also told us that a catchment area of 1,200 metres may overstate the degree of substitutability between bus and rail services.[103] This was likely to be particularly true for services in urban areas with a dense transport network and where passengers would not be willing to walk significant distances in response to variations in fare or other aspects of the offer.

6.40 In order to test the appropriate catchment areas around bus and rail stations, we consider evidence from the NTS, which is a national survey run by the DfT.[104] The NTS includes face-to-face interviews and asks respondents to complete a weekly travel diary, providing details of all trips carried out during the survey week. The NTS collects information on how, why, when and where people travel as well as factors affecting travel. It asks respondents to identify journeys they have made, including those using multiple modes. This includes information on journeys preceding or following a bus or rail journey.[105] Therefore the NTS is useful in identifying the appropriate catchment areas for bus and rail stations.

6.41 We examine NTS data on walking distances involving bus and rail services in the areas of the Northern Franchise.[106] Table 1 below shows average 80th percentile and 90th percentile walking distances for rail and bus services in the areas of the Northern Franchise. Across these measures, rail catchment areas are generally significantly larger than bus catchment areas. The 80th percentile catchment area for walks preceding a bus journey is around 160 metres, whereas for rail journeys it is just under 1,300 metres.[107]

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[102] In particular, the CC noted that 'within Glasgow, reflecting the much denser provision of public transport, FirstGroup listed bus services and rail routes as overlapping where broadly speaking rail stations are within 300 metres of a bus stop.' (CC (2006), *Greater Western Passenger Rail Franchise,* paragraph 5.4).
[103] See, for example, FirstGroup response to issues statement.
[104] DfT (2016), *NTS Statistics*.
[105] For the purposes of the catchment area analysis we consider walks preceding or following a bus or rail journey. However some passengers may be combining different transport options, which would effectively widen the catchment area of the services. For example, a passenger may travel by bus to a rail station in order to travel on the rail service.
[106] Yorkshire, North-East and North-West England.
[107] We also test the sensitivity of the results to the journey distance, since passenger willingness to walk to transport options could vary with the journey length (eg passengers may be willing to walk further to a rail station if they are making a longer journey).

Table 1: NTS walking distances for bus and rail services

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	Mean	*80th percentile*	*90th percentile*
Bus	167	161	483
Rail	674	1,287	1,609

Source: NTS data/CMA calculations.
Note: The NTS data asks respondents to complete the diary on one of seven days for walks of less than one mile and walks of less than 50 yards are not recorded. We therefore adjust the NTS data by assuming that unrecorded walks are all equal to 50 yards. We note that the DfT published research in 2015 on the collection of short walks data and that the NTS will adjust its methodology to ensure that short-walks are better recorded in future years.

6.42 In previous inquiries we identified overlaps where the 80% catchment area of a bus service overlapped with the catchment area of the nearest rail station. This was a cautious approach and was designed to capture situations where a substantial proportion of marginal passengers were located at the edges of the 80% catchment areas. We did not adopt this approach in the present inquiry, as it could lead to over-estimating the distances over which the majority of passengers are likely to switch over (ie we would be implicitly assuming that passengers are willing to walk further than they would in most cases).[108]

6.43 We base the size of our catchment areas on NTS data set out in paragraphs 6.40 to 6.41. On the basis of our analysis we use a catchment area of 1,200 metres around rail stations for identifying overlapping services.[109]

6.44 We considered whether a smaller catchment area would be appropriate for intra-urban journeys as passengers may walk shorter distances to bus stops or railway stations for short intra-urban journeys. We considered possible definitions of intra-urban flows and whether data was available from NTS in relation to intra-urban flows.[110] However, the level of aggregation of NTS data to which we currently have access does not allow us to carry out the analysis for urban areas separately. We discuss intra-urban flows in our consideration of filters at paragraph 9.46.

6.45 We note that the choice of catchment area does not have a significant impact on the number of bus and rail flows and routes that were identified as overlapping. 179 bus-rail routes were identified as overlapping using a

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[108] We consider whether catchment areas should overlap (as opposed to just touching each other). This argument was made by FirstGroup in its response to the CMA's issues statement. However, we consider that this approach is only justified where such overlaps capture a sizeable number of passengers.
[109] As noted in the *Merger Assessment Guidelines*, we note that catchment areas are a pragmatic approximation for candidate markets and we therefore test the sensitivity of our findings, see paragraph 5.2.25.
[110] For example, flows which begin or end in the same town and where the flow has a journey time of less than 15 minutes by rail might be defined as intra-urban.

1,200-metre catchment area for all areas as compared to 177 when distinguishing urban services using a 400-metre catchment area.

Supply-side substitution

6.46 We note that on the supply side, bus operators may switch their services to or from the overlapping bus and rail flows and routes.[111] Substitution conditions are likely to vary across the overlap areas and we therefore consider supply-side substitution, where relevant, on a flow-by-flow basis.

Network competition

6.47 Bus and rail operators run a series of interconnecting services. On the demand side, some passengers may purchase network tickets rather than route or flow-specific tickets. For these passengers, the relevant market may be the network rather than the route or flow. As above, we consider supply-side substitution, where appropriate, when assessing the relevant networks.

6.48 We consider the effects of the Merger on transport networks in our competitive assessment (see Section 12).

7. The effect of the merger on competition for rail franchises

7.1 We consider whether the creation of the relevant merger situation in this case has resulted or may be expected to result in an SLC in the award of rail franchises.

The views of the Parties

7.2 The Parties told us that the Merger would not reduce the number of bidders for future franchises and would not confer any incumbency advantages on Arriva for future franchise awards.[112]

Third party views

7.3 Third parties did not express concerns that the Merger would result in a more advantageous position for Arriva in future franchise competitions.

7.4 The DfT told us that even when incumbent operators had been successful in winning rail franchise competitions, there had been aggressive competition

[111] Subject to being required to give 56 days' notice of changes to routes to the Traffic Commissioner (see the discussion of bus regulation in Section 8).
[112] Arriva initial submission, paragraphs 10.5.1 & 10.5.2.

between high quality bidders. The DfT also told us that it was currently working to increase the pool of bidders for rail franchises.

CMA assessment

7.5 We consider whether the Merger would reduce competition for the award of future rail franchises.

7.6 We examined the number of bidders for rail franchises and considered whether the Merger would create any incumbency advantages for Arriva which could reduce competition for future franchise awards.

7.7 We considered evidence from published literature on tender competition, submissions from the DfT and evidence of outcomes from previous rail franchise awards.

7.8 The rail franchise tendering process is designed to minimise incumbency advantages such that bidders are not expected to enjoy significant incumbency or scale advantages as a result of previous franchise bids or awards. We reviewed the identity of successful bidders in previous franchise awards, which suggested that incumbency advantages were not material. No evidence suggests that the Merger would reduce the number of bidders for rail franchises.

7.9 We therefore provisionally conclude that the Merger has not resulted or may not be expected to result in an SLC in the award of rail franchises.

8. Regulatory constraints on rail and bus services

8.1 As described in the industry background section, passenger rail and bus services are subject to varying forms of regulation. In order to provide a framework for assessing the competitive effects of the Merger, we consider in this section the extent to which regulation and contractual obligations restrict the Parties' ability and incentives to change fares and adjust non-price aspects of their rail and bus services (such as service quality and frequency).

8.2 Regulation of rail and bus services over many years has played an important role in shaping the dynamics of the industry today. For example, the Parties told us that regulation of rail fares since privatisation had maintained differentials in fare levels between the North of England and some other parts of Great Britain. The Parties also told us that there remained some significant anomalies in rail fares on the Northern Franchise according to whether a service was operating inside or outside a PTE area because, for some 20 years prior to privatisation, PTEs had been setting rail fares.[113] This may affect the competitive dynamics between bus and rail services in the Northern Franchise area.

Regulatory constraints on passenger rail operators

Fare regulation

8.3 The Parties' franchised rail operations are subject to fare regulation which sets the maximum price that franchised TOCs can charge for certain fares. Around 45% of fares are regulated (by the Secretary of State in England and Wales and Scottish Ministers in Scotland).[114] Regulated fares are set by a formula based on the RPI figure for the previous July, and for many years with a degree of flexibility (called the 'fares basket' or 'flex'). All other fares are set commercially by train operators. Only certain fares are regulated, but at least one fare available on a flow is generally regulated.

8.4 The fare types subject to regulation are set out in Table 2.

Table 2: Fare regulation

Types of fares		*Description*	*Regulated?*
First class	Single	Premium, anytime	No
First class	Return	Premium, anytime	No
Standard (anytime)	Single	Standard, anytime	No
Standard (anytime)	Return	Standard, anytime	Yes
Saver (off-peak)	Single	Off-peak, valid for a specific date	No
Saver (off-peak)	Return	Off-peak, valid for a specific date	Yes*
Advanced	Single	Booked in advance, train-specific	No
Season ticket	Weekly	Multi-period ticket	Yes*
Season ticket	All others	Multi-period ticket	No
Network tickets	All	Valid on multiple routes/flows	No

Source: House of Commons briefing paper on rail fares and ticketing, March 2016, Arriva website.
*When there was an equivalent fare available in 2003.

Ability to increase regulated fares

8.5 The previous Northern franchise agreement specified a cap on regulated fares which required that the price of a basket of these regulated fares could not increase above RPI+1%. Furthermore, the price of any individual fare could not increase above RPI+3% (commonly referred to as a 'flex of 2%').

8.6 The Parties told us that this regulation was being tightened as the Conservative government's election winning manifesto pledged to cap all franchise regulated fares to RPI+0% for a period of five years from the

[113] [✂].
[114] House of Commons library briefing paper (2016), *Rail fares and ticketing* (SN01904).

general election.[115] It also pledged to abolish the ability to flex individual regulated fares (without stated limit of time).

8.7 The DfT confirmed this policy change, which has been publicly announced.[116] The new rules will be implemented by the Secretary of State as a change to franchise agreements. [✂].[117]

8.8 We consider whether the Parties would have the ability to deviate from the fare regulation policy set by the DfT. The Parties told us that [✂]. They also told us that [✂].[118] The DfT confirmed that franchised TOCs are obliged to follow fare regulation policy.

8.9 We therefore provisionally conclude that the Parties do not have the ability to flex regulated fares under the current policy framework.

Constraints on unregulated fares

8.10 We consider the extent to which unregulated fares are constrained by the level of regulated fares.

8.11 The Parties told us that a number of unregulated fares would be effectively capped by the level of regulated fares.[119] In particular, the Parties told us that a number of fares were now at levels just below the regulated fare. More generally, the Parties told us that regulated fares created a perception amongst passengers about what constituted a 'fair' amount to pay for a fare where regulated and non-regulated tickets were both available for a particular journey.

8.12 The DfT confirmed that unregulated off-peak single tickets are often priced just below the level of off-peak regulated return tickets, limiting the ability for franchised TOCs to increase off-peak single fares.

8.13 Some other unregulated fares may effectively be 'quasi-regulated' as they are directly linked to the level of regulated fares. For example, the DfT told us that the price of unregulated monthly and annual season tickets was linked to the price of regulated weekly season tickets.[120] Where this is the case, the regulated fares will act as a constraint on certain unregulated fares, for example where unregulated fares are set just below the regulated

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[115] Arriva response to issues statement, paragraph 6.1.1.
[116] DfT press release (2015), 'Earnings outstrip rail fare increases for first time in a decade'.
[117] As part of the process of [✂].
[118] [✂].
[119] Arriva response to issues statement, paragraph 6.3.3.
[120] A monthly season ticket is typically priced at four times the level of a weekly ticket and an annual ticket at forty times the level of a weekly ticket.

fare or linked to the level of the regulated fare. We consider the constraint that regulated fares impose on unregulated fares on a flow-by-flow basis as the mix of regulated and unregulated fares available to passengers varies by flow.

8.14 The Parties also told us that unregulated fares which were not constrained directly by fare regulation would be constrained by other commercial factors. The Parties highlighted previous decisions by the CMA's predecessor bodies which noted that:

(a) significant increases in the standard class 'turn-up-and-go' single and open return fares or cheap day returns would probably result in most passengers switching to regulated saver tickets whenever possible;

(b) significant increases in first class fares might give incentives to business passengers to switch to travel standard class;[121] and

(c) increases in low-price advanced-purchase return fares would defeat their purpose as yield management tools were designed to transfer peak loads to off-peak services and fill unused seats.[122]

8.15 We note that off-peak unregulated fares such as cheap day returns are unlikely to be constrained by fare regulation. However, we consider whether unregulated fares which are not constrained by the level of regulated fares may instead be constrained by commercial factors on a flow-by-flow basis in the competitive assessment.

Inter-available, dedicated and routed fares

8.16 Inter-available fares allow passengers to use services operated by any TOC, including both franchised TOCs and OAOs. For example, a passenger with an inter-available ticket travelling from London to Birmingham could choose to travel on services with Chiltern Railways (from London Marylebone), or with London Midland or Virgin (from London Euston). Similarly, passengers can purchase a 'through' ticket that allows them to travel across the network using a single ticket for a journey using multiple different trains by different operators.

8.17 The approach to revenue allocation between TOCs is supported by the Ticketing and Settlement Agreement (TSA). For franchised TOCs, participation in the TSA will generally be a requirement of their franchise

[121] In practice there is limited first class provision on the Northern Franchise.
[122] CC (2004), *National Express Group plc and Greater Anglia franchise*, Appendix C (paragraph 47).

agreements. The TSA is overseen by the Association of Train Operating Companies (ATOC) and the Retail Settlement Plan (RSP).

8.18 Inter-available fares are (by definition) accepted across multiple TOCs. Therefore, there needs to be a mechanism to set a price which is acceptable to the individual TOCs. The TSA addresses this through the specification of a 'lead operator' on each route, which is typically the operator with the greatest commercial interest on that route.

8.19 The lead operator then sets the fares for any inter-available tickets on each route, and all TOCs are required to accept passengers using these tickets. Many of these fares will also be regulated. However, some will be unregulated and it is on these fares where the lead operator will have commercial flexibility, depending on the relevant competitive position on the flow.

8.20 Any operators that are not the lead operator on a route have the option of offering a 'dedicated ticket' which is only available on their own services, at a lower price than the inter-available fare. The price for these dedicated tickets can therefore in some circumstances provide competitive pressure on the price of the inter-available ticket. Both the lead operator and secondary operators are able to offer dedicated advance tickets that are valid for travel on particular trains.[123]

8.21 If the fare for a journey shows no route or is described as 'any permitted', a customer may use any of the routes listed in the national routeing guide to travel between their origin and destination, subject to any time and/or operator restrictions that apply to the ticket held. On some routes, TOCs may offer 'routed' tickets which are only valid on the services operated via a particular route (eg 'via Altrincham').

8.22 We examine the extent to which inter-availability of tickets constrains the Parties' ability and incentive to set fares. Our analysis shows that:

(a) when the Parties are the lead operator on a route, they have some control over the inter-available ticket prices within the constraints imposed by fare regulation. However, dedicated ticket prices (or even the threat of the introduction of dedicated tickets) from other operators could act as a competitive constraint on this;

[123] The Parties told us that the short distance nature of many of the flows on the Northern Franchise limits the opportunity for introducing advance fares, although [✂].

(b) when the Parties are not the lead operator on a route, they have no control over the price of inter-available fares on that route. However, in these circumstances, the Parties have the option of changing the level of their dedicated fares, if any, or adding or removing dedicated fares. Should they do so, these fares will be constrained by the degree of competition and the inter-available ticket price; and

(c) when the Parties set the price of 'routed' fares (ie fares valid for travel on TOCs via a particular route), they have some control over ticket prices within the constraints imposed by fare regulation.

8.23 Where the Parties are not the lead operator on a flow, we considered whether the identity of the lead operator could be changed. The DfT told us that any TOC that received income from a route may at any time request a change in the identity of the lead operator, but a lead operator itself may not request a change from its designation as the lead operator. The TOC requesting a change of lead operator must serve a notice on the existing lead operator, other operators receiving income from the route and the DfT. The Secretary of State does not have a role in approving the change under the TSA; any disputes between operators over the ownership of a route are resolved by the ATOC Disputes Resolution Committee. However, under the Northern Franchise agreement, ARN cannot agree to a request that it cease to be the lead operator without the Secretary of State's approval.

8.24 On flows with more than one operator, we also note that revenue from inter-available fares must be allocated between the different operators serving the flow. As it is not currently possible to track the actual route that passengers use (and hence the share which should be allocated to each operator), the industry relies on an ATOC-operated estimation system called ORCATS. The ORCATS system allocates the revenues according to a number of factors (eg the service frequency, route, journey times and rolling stock capacity of the operators). The Parties told us that approach meant that operators may only receive a proportion of the additional revenue from any increase in passenger volumes that used inter-available fares. Alternatively, Arriva may benefit if other operators were able to increase inter-available fare volumes on these flows.

8.25 We consider whether the Parties are a lead operator on a flow, the role of dedicated tickets and other fares, including routed fares, and revenue allocation on a flow-by-flow basis as part of our competitive assessment of overlapping rail flows in Section 10.

Profit sharing

8.26 The Northern Franchise agreement includes a profit sharing clause such that any profit generated above certain thresholds is shared with the Secretary of State, effectively reducing the level of taxpayer subsidy.

8.27 We consider the effect of the profit sharing clause within the Northern Franchise agreement on the incentive for the Parties to increase rail fares, on the basis that any benefit to the Parties of fare increases could be offset, in whole or in part, by a lower subsidy.

8.28 We examined the profit sharing thresholds and the extent to which the Parties would have to outperform their profit forecasts for the Northern Franchise in order to be subject to profit sharing. Although profit sharing does not restrict the Parties' behaviour directly, it may affect the incentives on Arriva to increase the patronage of the Northern Franchise over and above its projected levels. However, this is only likely to be the case in circumstances where ARN is delivering significant passenger growth above the levels included in its plans.

Franchise specification and other regulations

8.29 As set out in the industry background section (paragraph 2.5), the rights and obligations of franchised TOCs are specified through TSRs as part of the franchise agreement negotiated between the franchising authority and the franchisee.

8.30 We consider below the extent to which franchise specifications and other regulations constrain the Parties' ability to adjust non-price aspects of their rail service offering, including service quality, timetables, operational performance and rolling stock.

Timetabling

8.31 Railway timetables are largely fixed in advance in order to comply with the TSR defined as part of the Northern Franchise agreement.[124] The timetable is required to be approved by the Secretary of State as meeting its obligations which include (but are not limited to) providing sufficient

[124] The Northern Franchise agreement includes three TSRs (TSR1, TSR2, and TSR3) which apply for April 2016 – December 2017; December 2017 – December 2019; and December 2019 – the end of the franchise, respectively.

passenger capacity;[125] minimising journey times;[126] and running at evenly spaced intervals where possible.[127]

8.32 The DfT will scrutinise proposed timetable changes to ensure that they comply with TSRs and any timetable changes which the Parties propose would require the prior consent of the Secretary of State.[128]

8.33 The slot allocation process prioritises existing access rights allocated within the franchise agreements. Once any additional service applications (either from OAOs or franchised TOCs) have been successful and resulted in a track access agreement (subject to ORR approval and guidance), the access rights set out in the track access agreement are converted into the working timetable through the process outlined in Part D of the Network Code.

8.34 The timetabling and timetable recasts are managed by Network Rail and based on demand traffic forecasts which are carried out following a transparent process that includes public consultations.[129] In the case of conflicting requests with equal priority, Network Rail decides which train slot to include into the timetable plan according to the criteria set in Part D of the Network Code, eg to make journey times 'as short as reasonably possible' and 'enabling operators of trains to utilise their assets efficiently'. Network Rail can modify either or both train slots if timetable capacity exists.[130]

8.35 OAOs do not have any franchise agreements and therefore have greater commercial flexibility. However, they are still bound by track access agreements with Network Rail. Although the original design of an OAO timetable is not specified in any franchise agreement, it still needs to be approved by ORR and codified in a track access agreement. The agreement will specify the routes and timings that the operator can run, which would restrict the changes the Parties could make to open access schedules, station calls and journey times.[131]

8.36 It is possible for OAOs to apply to make changes to their scheduling, although applications need to be assessed and approved by ORR. In doing

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[125] Northern Franchise agreement, Schedule 1.1, paragraph 7.1.
[126] Northern Franchise agreement, Schedule 1.1, paragraph 5.11(b).
[127] Northern Franchise agreement, Schedule 1.1, paragraph 5.11(a).
[128] Northern Franchise agreement, Schedule 1.2, paragraph 4.1.
[129] The Long Term Planning Process identifies capacity requirements and interventions to meet them. This process has been designed to enable Network Rail and industry stakeholders to respond flexibly to growing demand for rail services (including entirely new services), while planning for the network's long-term capability up to 30 years ahead.
[130] The Network Code also contains rules for access dispute resolution, either through mediation or a determinative process, such as the timetabling panel, for which ORR is the final appeal body.
[131] *Grand Central Railway Limited Track Access Contract*, Schedule 5, 27 May 2016.

so, ORR would be particularly aware of capacity constraints, and abstraction of value from existing franchise holders who will have generally based their bids on the assumption of no OAO competition. This would imply that although it is difficult to increase the number of services an OAO is operating, OAOs may be able to reduce or remove services for commercial reasons subject to approval by ORR.

8.37 We therefore provisionally conclude that the Parties have limited flexibility to change the timetables of their rail operations following the award of a franchise or open access rights.

Operational performance

8.38 The Northern Franchise agreement includes an operational performance framework with financial bonuses/penalties in order to imitate the incentives associated with competition.[132]

8.39 In particular, the operator will be fined where cancellations, delays, or short formations (ie lower capacity on a train) fall below specified benchmarks.[133] The value will depend on performance levels, and is capped at a maximum penalty of £[✄] (adjusting for inflation).[134] This framework provides a direct financial incentive against the Parties degrading their rail services in favour of overlapping bus services.

Rolling stock

8.40 The Northern Franchise agreement includes a list of the rolling stock which the operator is permitted to use. The starting point for this is the fleet already operating on the franchise.[135] However, it recognises that due to a combination of higher capacity obligations and existing leases expiring, new trains will be required.

8.41 For new trains, the franchise agreement segments these into proportions which are ‘specified’ and ‘unspecified’. For both sets, the Northern Franchise agreement defines the configuration (ie number of cars/carriages) and number of seats, but for the ‘specified’ segment, it also defines the class (ie

[132] Northern Franchise agreement, Schedule 7.1.
[133] Note that the operator can also earn a financial bonus if it outperforms on cancellations and/or delays.
[134] Northern Franchise agreement, Schedule 7.1, paragraph 3.6.
[135] Northern Franchise agreement, Schedule 1.7, Table 1.

the specific vehicle type) and lessor,[136] whilst for 'unspecified' it merely requires certain characteristics (eg fuel type, top speed, etc).[137]

8.42 Furthermore, the deployment of this fleet is included in the Northern Franchise agreement. This is because it will need to be consistent with scheduled capacity, speed requirements, and fuel limitations (eg areas of electrification). Therefore, the Parties may not be able to change which trains are supporting which specific flows/routes.

8.43 The rolling stock used by Grand Central is specified in its track access agreement.[138]

8.44 We therefore provisionally conclude that the Parties have limited ability to adjust their rolling stock in response to competitive pressures.

Staff levels

8.45 The majority of operational staff for ARN (around [✄]) have been retained from the previous Northern Franchise operator via a transfer of undertakings (protection of employment), commonly known as TUPE. This approach means that these employees retain certain rights and controls based on their previous contracts. This limits the Parties' ability to vary contracts for these employees. Moreover, staffing levels are governed by the Northern Franchise agreement.

Committed obligations

8.46 Commitments made by franchised TOCs as part of the franchise bidding process are formally included in franchise agreements as 'committed obligations'. There are a large number of other committed obligations which are specified in the Northern Franchise agreement, some examples of which include providing Wi-Fi on all trains by 2020, maintaining secure stations and car parks, increasing the diversity of the workforce, implementing a 'Proud to be Northern' employee cultural change campaign and replacing all lights in stations and depots with LEDs.[139]

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[136] Northern Franchise agreement, Schedule 7.1, Table 2.
[137] Northern Franchise agreement, Schedule 7.1, Table 3.
[138] *Grand Central Railway Limited Track Access Contract*, Schedule 5, 27 May 2016.
[139] These committed obligations are set out in Schedule 6 of the Northern Franchise agreement.

Ability to deviate from the franchise agreement

8.47 Where enforcement of the agreement may be required, it is the DfT which is responsible for monitoring the delivery of franchise agreements on behalf of the Secretary of State. Breaches due to force majeure events (eg adverse weather conditions) are not penalised. Franchised TOCs are required to submit performance management reports on a regular basis and the DfT has a dedicated team responsible for monitoring compliance.

8.48 In the case where a franchise agreement is contravened, the Secretary of State has the power under the Railways Act 1993 to make an enforcement order or impose a financial penalty.[140] The Secretary of State is not required to issue an enforcement order, for example where the relevant operator has taken steps to achieve compliance with the franchise agreement or where he considers that the contravention is trivial (s55(1), Railways Act 1993).[141]

8.49 In the event of a contravention, an enforcement order may require the operator to pay a financial penalty of up to 10% of the TOCs' turnover (s55(7A), Railways Act 1993). The Secretary of State is able to agree with the operator whether, instead of paying the penalty, it will make an investment in passenger services, in which case, the franchise agreement would be amended to include this commitment.

8.50 In most cases, the franchise agreement itself also provides the Secretary of State with additional means of enforcement, in particular where performance benchmarks in relation to capacity, cancellations and punctuality are not met. This may include the requirement that the franchise operator produce a plan to remedy the breach, to enter into an agreement giving such a plan contractual force or, in some cases, to terminate the franchise.

Reputational considerations

8.51 The Parties told us that their relationship with the DfT was of fundamental importance both in terms of current and future franchises.[142]

8.52 We note that reputational considerations may be important to TOCs in bidding for future franchises. Although reputation may be an important consideration for franchised TOCs, we have not seen any evidence that

[140] DfT (2008), *Enforcement Policy: Rail Franchise Agreements and Closures*.
[141] The legislation does not define what constitutes a 'trivial contravention' but certain aggravating features would prevent a contravention from being classified as such (eg where steps are not taken to remedy a contravention after it has been identified).
[142] Arriva initial submission, paragraphs 7.10 & 7.11.

reputational considerations are sufficient to restrict the Parties' ability and incentive to adjust their commercial behaviour on individual flows and routes.

Time limitations on franchises

8.53 The Parties also told us that the nature of the rail franchising model in Great Britain meant that there was no certainty that a franchise operator would hold a particular franchise beyond the short to medium duration of the relevant franchise agreements.[143]

8.54 The Northern Franchise was awarded to ARN for up to ten years. Although the ATW franchise expires in 2018 and the CrossCountry direct award in 2019 (see paragraph 3.6), we cannot exclude the possibility that Arriva will win the franchises in the next bidding round. In any event, the Parties have the ability to adjust rail fares at least twice per year prior to franchise expiry (subject to fare regulation). The time limitation on the franchises is therefore not sufficient to remove the incentive for the Parties to raise rail fares.

Summary of CMA assessment – rail

8.55 We provisionally conclude that the Parties do not have the ability to flex regulated fares under the current policy framework.

8.56 We note that regulated fares may constrain the level of some unregulated fares, but examine this on a flow-by-flow basis given that the mix of regulated and unregulated fares available to passengers and the level of competition faced by TOCs will vary on a flow-by-flow basis.

8.57 We examine the extent to which inter-availability of tickets constrains the Parties' ability and incentive to set fares and find that:

(a) when the Parties are the lead operator on a route, they have some control over the inter-available ticket prices within the constraints imposed by fare regulation;

(b) when the Parties are not the lead operator on a route, they have no control over the price of inter-available fares on that route but have the option of changing the level of their dedicated fares, if any, or adding or removing dedicated fares; and

[143] Arriva initial submission, paragraphs 7.10 & 7.11.

(c) when the Parties set the price of unregulated 'routed' fares (ie fares valid for travel on TOCs via a particular route), they have some control over ticket prices within the constraints imposed by fare regulation.

8.58 We provisionally conclude that the Parties have limited ability to change non-price aspects of their franchised rail service offering, including in relation to timetables, rolling stock and service levels.

8.59 The Parties may have greater ability to change some non-price aspects of their open access services, such as service quality, although track access agreements restrict the timetables of open access services and the rolling stock used.

Regulatory constraints on bus operators

8.60 In this section we consider the extent to which bus fares and service/quality levels are restricted by the regulatory environment.

Commercial bus services

Fares

8.61 Fares on commercial bus services are unregulated. However, some local authorities do impose forms of regulation on the choice of fares offered by bus operators, in particular in order to promote the use of bus services in a multi-operator market.

8.62 LTAs now have statutory powers to create, and require operators to participate in, bus multi-operator ticketing schemes, including network tickets.[144]

8.63 Multi-operator schemes have a limited impact on most aspects of a service, as they do not dictate specific requirements for a particular route. However, they can provide a constraint on fares. This is because the fares on the scheme will usually be decided by a separate management committee. The exact structure of this committee will differ depending on the circumstances, but will usually include representatives of the operators, the LTA, and sometimes a passenger representative.[145]

[144] Multi-operator tickets may be extended to provide a multi-modal ticket offer (eg such that they are valid on bus and rail services in a local area). The DfT has encouraged LTAs to offer multi-modal tickets (see, for example, DfT (2013), *Building better bus services: multi-operator ticketing*). Some multi-modal tickets may only be valid on the services of a single transport operator, although the Parties told us that Arriva did not offer any Arriva-only multi-modal network tickets [✄].
[145] DfT (2013), *Building better bus services: multi-operator ticketing*.

8.64 Therefore, for services where a multi-operator ticket is available, this acts as a reference point which may constrain the Parties' dedicated bus fares or 'Arriva only' network tickets, and so limit price rises. The extent of the constraint may vary for different areas depending on:

(a) the difference in price between dedicated and multi-operator tickets;

(b) the amount of control Arriva has on the multi-operator management committee (and hence how much it can influence the price of these tickets); and

(c) whether the scheme is voluntary or mandatory (and so whether Arriva can choose to leave.

8.65 We consider the extent of multi-operator tickets as a constraint, where relevant, in our assessment of overlapping bus-rail flows in Section 11.

Constraints on timetables and scheduling

8.66 Any changes to a commercial bus route, including cancelling a service outright, need to be notified to the Traffic Commissioner, generally 56 days in advance of the change. In some circumstances, a shorter period is possible, but this is at the Traffic Commissioner's discretion.[146]

8.67 The requirement to give notice of changes to a commercial bus route to the Traffic Commissioner may not act as a constraint on an operator's commercial behaviour. In particular, the Traffic Commissioner is not required to consider the implied impact on either service quality or the competitive environment.

Bus licensing

8.68 Operating any for-profit local bus service requires a Public Service Vehicle licence issued and monitored by the relevant Traffic Commissioners for the area. A separate licence is required for each of these areas where the services operate.[147] Breaching any of the licence conditions can result in the licence being suspended or revoked.[148]

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[146] Change or cancel a bus service, 4 August 2016.
[147] VOSA (2011), *Public Service Vehicle Operator Licensing Guide for Operators*.
[148] How to apply for a PSV licence, 4 August 2016.

Operating performance

8.69 All bus operators are expected to maintain reasonable levels of punctuality, and can be fined for non-compliance. The Traffic Commissioner has previously set this target at 95% (based on running up to 1 minute earlier to 7 minutes later than timetabled), although it recognises that a lower figure may be appropriate in some circumstances.[149]

8.70 The Traffic Commissioner has recognised that fear of regulatory action has resulted in many operators being unwilling to publicly release their actual performance levels, which implies that a number of services may be missing these targets.[150]

Partnership schemes with LTAs

8.71 As noted in the industry background section (paragraph 2.50), LTAs may partner with commercial bus operators by way of:

(a) Voluntary partnership agreements (VPAs) – a voluntary agreement between an operator and at least one LTA covering a range of issues, but usually specifying an expected level of service to be delivered by each party.

(b) Quality partnership schemes (QPSs) – the LTA agrees to provide particular facilities in their area, such as improved bus stops or new bus lanes, and operators wishing to use those facilities undertake to provide services of a particular standard (eg using new buses).[151]

(c) Quality contract schemes (QCSs) – the LTA controls the provision of bus services through a tendering process. The QCS shares similarities with the franchising approach in London, although there are currently none in operation.

8.72 The House of Lords is currently debating the introduction of a new Bus Services Bill, which aims to 'drive up bus use, help cut congestion and deliver economic growth'.[152] In particular, it intends to introduce a number of changes to the current mechanisms and powers of LTAs:[153]

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[149] Senior Traffic Commissioner, guidance and direction on local bus services: statutory document no.14.
[150] Senior Traffic Commissioner, guidance and direction on local bus services: statutory document no.14, paragraph 37.
[151] The Local Transport Act 2008 expanded the terms of the QPS model to allow a local authority to specify requirements regarding frequencies, timings or maximum fares as part of the standard of service to be provided, in addition to quality standards.
[152] DfT (2016), *Bus Services Bill to help deliver more regular services for passengers*.
[153] DfT (2016), *The Bus Services Bill: an overview*.

(a) QPSs will be extended to 'advanced quality partnerships' which will allow for the LTA to introduce measures (eg traffic policies) as well as, or instead of, facilities. It will also broaden the requirements that can be placed on operators to include their marketing approaches.

(b) New powers will be introduced which will allow LTAs to propose 'enhanced partnerships' on geographic areas. These proposals require the support of a majority of operators in the area in order to be implemented. The partnership will then work to set standards and timetables/frequencies within the area, although it cannot determine fares, or compel operators to run services that they do not wish to.

(c) New franchising powers will be provided to certain local authorities[154] to introduce franchising to their local areas (similar to those in London). The decision needs to be assessed by the local Mayor (or equivalent), and other key elements of the cost-benefit analysis will need to be assured by an independent auditor, however, the local Mayor/LTA makes the final decision on whether the franchising scheme should be introduced.

(d) LTAs will be provided with additional data gathering powers, particularly when a commercial route is being cancelled.

8.73 Where VPAs, QPSs or QCSs are in operation, they may have implications for Arriva's incentives in these geographic areas. The strength of this incentive will vary from being strong regulatory constraint (for QCSs) to weaker incentives based on reputational risks (for VPAs).

8.74 The Parties told us that Arriva had a VPA in the Tees Valley [✂]. Arriva's existing VPAs specify a certain level of service, but there are no specified consequences of breaching such agreements. Therefore, the incentives are primarily due to the risk of reputational damage with the LTA, with any associated consequences of this.

8.75 Arriva's existing QPSs are contractually binding agreements, which are therefore likely to have financial repercussions from any breach, as well as the reputational risks associated with breaching a VPA. It is possible that Arriva could vary or exit some of these schemes, but this could have reputational implications with the LTA too. We are not aware of any QPSs with Arriva in the Northern Franchise area.

[154] DfT (2016), *The Bus Services Bill: an overview*, p15.

8.76 Although Arriva has no QCS agreements in place, it is possible that the threat of introduction could restrict Arriva's actions. However, although a number of LTAs have considered this approach, and some have even attempted to do so (for example, Nexus in the North East),[155] none have been shown to meet the necessary statutory requirements. Given that the likelihood that a QCS will be implemented may now be relatively low given the progress of the Bus Services Bill, it appears more likely that Arriva would be influenced by the prospective franchising proposals within the Bus Services Bill (see paragraph 8.72).

8.77 In this regard, the Parties told us that most changes in fares and services were discussed with PTEs before implementation and that it was essential that cordial relationships with PTEs were maintained, particularly now that the Bus Services Bill gave them a potential legislative tool in franchising.[156]

8.78 More generally, the Parties told us that LTAs were a key stakeholder in Arriva's bus business and that [✂].[157] The Parties also said that LTAs were a customer of Arriva (eg where subsidised or tendered bus services existed or for fixed-term arrangements for the provision of travel under the English National Concessionary Travel Scheme). As such, the maintenance of good relationships with LTAs was considered of paramount importance.

8.79 The importance of relationships between LTAs and bus operators was also emphasised by a number of LTAs and transport operators.[158] At least one LTA stated that it would discuss major service or fare changes with operators before their introduction.[159] However, a number of LTAs stated that they had no direct influence, and limited influence in practice, over commercial bus operators.[160]

Summary of CMA assessment

8.80 Commercial bus services are subject to relatively few regulatory constraints compared to rail services. The requirement to notify changes to the Traffic Commissioner could introduce a delay in the Parties implementing changes to services on overlapping flows, but is unlikely to constrain such behaviour. Passenger Service Vehicle licence requirements also appear unlikely to limit

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[155] QCS Board report on Proposal for a Quality Contracts Scheme in Tyne & Wear.
[156] [✂].
[157] The Parties told us that the importance of maintaining relationships with PTEs was a reason why their bus businesses were managed at a local level.
[158] [✂].
[159] [✂].
[160] For example, [✂] and [✂].

the Parties' ability to change their commercial behaviour on specific flows routes.

8.81 Operational performance targets may limit the range of actions that the Parties might undertake in response to commercial changes, although the Parties retain the ability to change their bus timetables on commercial services.

8.82 Partnership schemes may impose a stronger constraint on the Parties' commercial behaviour, although the constraint will depend on the nature of the schemes in place in different geographic areas. We have therefore examined the impact of partnership schemes, where relevant, at the route level.

8.83 It is not yet clear which of the Parties' geographic regions or services will be affected by the Bus Services Bill and the extent to which this will constrain the Parties' commercial behaviour. LTAs told us that they needed both greater clarity over the exact legislation and to review the circumstances over time.[161]

8.84 We have therefore taken these reputational considerations and the threat of regulation into account as a potential countervailing factor in coming to our overall analytical framework for bus-rail. Where relevant, we consider whether there is any evidence to suggest that LTAs and PTEs may constrain Arriva's commercial behaviour in assessing the overlapping bus and rail flows in Section 11.

Tendered bus services

8.85 There are two types of tendered bus services:

(a) *minimum cost* – the local authority receives the revenue and the contractor tenders for the whole cost of operating the contract (ie revenue risk is taken by the authority); and

(b) *minimum subsidy* – the operator retains the revenue and tenders for the cost of operating the service less the estimated revenue (ie revenue risk is taken by the operator).

8.86 Both types of services operate in the regions associated with the Northern Franchise. For tendered services, the LTA will usually specify the timetable for the services, and sometimes the specifications of the fleet used as part of

[161] For example, [✂].

the tender. Fares may be either defined in the tender agreement and set by the LTA or, alternatively, the tender agreement may impose certain parameters on fares set by the operator. Tendered services will normally have a specified length (eg one or three years), although there may also be clauses to allow for early termination where circumstances have changed.

8.87 The reputation and relationship between operators and LTAs will often have weight when considering the award of tendered services. Given the relatively high level of importance of tendered routes in the industry, the risk of damaging this reputation may act to constrain an operator's behaviour. However, this may differ by area and operator, depending on the operator's specific strategy.

8.88 Where a proportion of bus services are tendered on overlapping bus and rail flows, we consider the extent to which the Parties' commercial behaviour is constrained by the tendered nature of the services in the flow-by-flow analysis in Section 11.

9. Filtering of bus and rail overlap flows

The role of filters and prioritisation in the competitive assessment

9.1 In many previous transport inquiries, the CMA and its predecessor bodies have applied filters to the overlapping flows in order to focus analysis on the areas that are most likely to raise competition concerns. Where there are a limited number of overlapping flows, the CMA has not applied filters and has instead examined each overlapping flow.[162]

9.2 The Merger creates 167 overlaps between the Parties' rail services and 1,068 overlaps between the Parties' bus and rail services based on the geographic catchment areas that we adopt (see paragraphs 6.35 to 6.45). We therefore apply a series of filters for prioritisation purposes in order to focus our analysis on the flows most likely to raise competition concerns. Where other evidence, such as internal documents, suggests competition concerns may arise on a deprioritised flow, we examine the relevant flow in detail in our competitive assessment.

[162] CMA (2015), *Anticipated acquisition by Inter City Railways Limited of the ICEC Franchise - full text decision* (ME/6506/14), paragraph 63.

Overlaps between the Parties' rail services

9.3 We consider a number of filters in relation to the Parties' overlapping rail services based on the Parties' submissions, the approach taken by the CMA and its predecessor bodies and our own assessment.

Tyne and Wear services

9.4 We exclude flows between York and the Tyne and Wear as we consider that using a Northern Franchise rail service would not be a plausible alternative to the other (direct) Arriva TOCs and third party rail services. Using a Northern Franchise rail service would involve a significant diversion via the West Coast and Carlisle or involve using third party operators such as Virgin Trains East Coast (VTEC) for part of the journey. Ten overlapping flows are filtered out from further analysis on this basis.

De minimis filter

9.5 We exclude flows where either the Northern Franchise or other Arriva TOCs (ie ATW, CrossCountry or Grand Central) generated annual revenues of below £10,000 as we consider that the incentives to flex fares or service quality are likely to be diluted on such flows as they carry very few passengers and due to the potential impact that this could have on the rest of the route.[163]

9.6 The Parties told us that the threshold for the *de minimis* filter should be at least £5,000 as this amount of revenue accounted for only three passenger journeys on average per day and such flows were unlikely to be of sufficient importance that they would raise SLC concerns.[164]

9.7 We consider this threshold together with higher thresholds at £10,000 or £20,000 per annum. We examine the number of flows that would be excluded on each basis, the characteristics of the remaining flows and the number of passengers involved. A threshold of £10,000 would, based on an average fare on the overlapping flows of £[✂], only exclude flows that carry an average of [✂] passengers per day or less and would exclude an additional nine flows from the analysis as compared to a £5,000 threshold. We also note that the CMA's predecessor bodies have adopted a £10,000 threshold in a number of cases.[165] We consider this threshold to be appropriate in assessing the competitive effects of the Merger as it only

[163] For example, in relation to consistency of fares across the route and in relation to service quality.
[164] [✂].
[165] See, for example, CC (2004), *National Express Group plc and Greater Anglia franchise*.

excludes flows with low passenger numbers and allows us to focus on the more material overlaps.

9.8 We note that increasing the threshold to £20,000 would exclude another 14 flows. We are cautious about applying a threshold of £20,000 in the assessment of the Merger as it may exclude routes on which there are a number of flows each with a revenue below £20,000 but where the total overlap revenue on the route, and potential harm to passenger interests, could be significant.

9.9 One further flow was excluded on the basis that incremental revenues were just above £10,000 per annum, with the Northern Franchise having a market share of less than [0-5%] on the flow.

9.10 Applying the *de minimis* filter with a threshold of £10,000 excludes 109 flows.[166]

Effective competitor filter

9.11 We initially exclude flows where third party operators have a significant share of passenger revenue, as the Parties' incentives to increase fares or worsen non-price factors are likely to be diluted if a significant proportion of passengers have alternative rail operators to which they may divert in the event of a fare increase or degradation of the Parties' rail services.

9.12 We apply a threshold of 50% to the filter, meaning that flows are initially excluded from further analysis where third party rail operators have a revenue share of at least 50%.[167] 19 flows are deprioritised on this basis. However, the threshold adopted may result in the Parties having a combined rail share of up to 50% on a flow. In order to ensure that we do not exclude any flows on which there is a risk of competition concerns arising as a result of the Merger, we consider whether any of these 19 flows should be examined in more detail, for example by reviewing internal documents discussing these flows.[168]

[166] This includes the [✄] flow where Northern Franchise revenues are just over £10,000 and the increment from the Merger is less than [0-5%].
[167] We considered applying the effective competitor filter based on third party share of frequency in addition to third party share of revenue as this would only filter out one additional flow. We also note that a filter which is based on frequency shares may exclude flows where there is significant differentiation on other factors (such as journey times, fares and other service aspects) and potentially where the competitive constraints between the Northern Franchise and Arriva TOCs are stronger than suggested by a share of frequency filter.
[168] In differentiated markets the CMA has typically interpreted market shares with caution as these may not accurately represent the strength of competitive constraint. That is, market share may not be a good approximation of diversion ratios. See *Merger Assessment Guidelines*, paragraph 5.3.2.

Inter-available and regulated fares

9.13 As set out in Section 8 above, inter-available fares allow passengers to use services operated by any TOC, including both franchised TOCs and OAOs. Inter-available fares are set by the lead operator and all TOCs are required to accept passengers using these tickets. Secondary operators may offer dedicated tickets.

9.14 In relation to inter-available fares, the Parties told us that where a high proportion of tickets were inter-available, existing price competition between TOCs on a flow was either non-existent or extremely limited as there was little, if any use of dedicated fares.[169] The Parties also told us that whilst, in theory, the mere threat of a rival introducing a dedicated ticket could constrain the price of the inter-available tickets set by the lead operator, in this case the low average ticket price on flows that had a high proportion of inter-available fares may mean that dedicated fares did not act as a significant constraint (ie the cash savings were limited relative to the loss of flexibility). The Parties suggested that it would be appropriate to exclude flows where the proportion of inter-available revenue on a flow is greater than 95% and Arriva is not the lead operator on the flow.

9.15 The Parties told us that flows should be excluded where the proportion of regulated fares is greater than 90%.[170]

9.16 We consider that it is appropriate to filter out flows from further analysis where a high proportion of tickets are inter-available and where a high proportion of tickets are regulated as there is little scope on these flows for TOCs to compete on price.

9.17 We examine the appropriate threshold for filters in relation to inter-available fares and regulated fares. In relation to inter-available fares, we are mindful of the fare setting decisions of the lead operator and, in particular, where the Northern Franchise or another Arriva TOC is the lead operator. In circumstances where the Northern Franchise is the lead operator and the other Arriva TOCs are significant operators on the flow (for example, the second largest), the threat of introducing dedicated fares may have constrained the previous operator of the Northern Franchise in its setting of inter-available fares pre-Merger. Therefore, we consider that an appropriately cautious threshold should be adopted.[171] We note that there

[169] Arriva response to issues statement, paragraph 4.2.
[170] Arriva response to issues statement, paragraph 4.2.
[171] A number of competing transport operators and PTEs stated that dedicated fares were an important way of increasing revenues including in competition with other TOCs. [✂].

remains scope for certain unregulated fares to be increased by the Northern Franchise (see paragraph8.19).

9.18 We therefore exclude flows where inter-available fares account for 100% of revenues and regulated fares for more than 80% of revenues on a flow. However, where other evidence, such as internal documents, suggests that the Merger may significantly affect competition on flows excluded by this filter we consider those flows in greater detail in the assessment of competitive effects.[172] This filter excludes ten flows.

Revenue increment filter

9.19 The Parties told us that a filter which excluded flows where the revenue increment from the pre-Merger to the post-Merger situation is less than 5% should be applied as it would exclude flows where the Merger would not materially change the nature of structure of competition on the flows or route in question.[173]

9.20 We already consider the increments to revenue by applying the *de minimis* plus filter to both the Northern Franchise revenue and the revenue of the Parties' other rail services.[174] We therefore do not adopt a revenue increment filter.

Flows prioritised for detailed assessment

9.21 Table 3 and Figure 3 summarise the filters applied to rail overlaps.

Table 3: Filters applied to rail overlaps

Filter	*Flows excluded*	*Flows remaining*	*Revenues excluded (£m)*	*Revenues remaining (£m)*
York – Tyne & Wear	10	157	[✂]	[✂]
De minimis*	109	48	[✂]	[✂]
Effective competitor filter	19	29	[✂]	[✂]
Regulated and inter-available fares filter	10	19	[✂]	[✂]
Total	148	19	[✂]	[✂]

*Includes [✂] where Northern Franchise revenues are just over £10,000 and the increment is [✂].

Source: The Parties/CMA analysis.

[172] In considering which flows to examine in greater detail, we consider whether the Northern Franchise is the lead operator and other Arriva TOCs are the second largest operator, whether third parties indicate there is pre-Merger competition between the Parties and with third party TOCs in evidence from internal documents. We place more weight on the inter-available fare filter on flows where the second largest operator is not one of the Parties, where internal documents suggest that a third party is a significant secondary operator, where the Parties have no plans to introduce dedicated fares and where the Parties are the lead operator but did not take into account the threat of dedicated fares when setting inter-available fares.
[173] Arriva response to issues statement, paragraph 4.2.
[174] Given that only 19 flows remain for further analysis after applying our filters, there is little incremental benefit for prioritisation purposes in adopting a revenue increment filter.

Figure 3: Summary of rail filters

Filter	Description – why flows are filtered out	Number of flows excluded
York – Tyne & Wear	Northern services are not a plausible alternative to Arriva or third party services on 10 flows between York and the Tyne & Wear	10 flows excluded leaving 157
De minimis	The incentive to flex fares or quality is low on flows with few passengers (annual revenue below £10, 000)	109 flows excluded leaving 48
Effective competitor	Flows where third party rail operators had ≥50% of passenger revenue the incentive on the Parties to flex fares is diluted	19 flows deprioritised leaving 29
Regulated & inter-available fares	Flows where inter-available fares account for 100% of revenues and regulated fares for more than 80% of revenues there is little scope for price competition	10 flows excluded leaving 19 for analysis

9.22 Following the application of filters, 19 flows are prioritised for detailed competitive assessment. These are considered in the Section 10.

Overlaps between the Parties' bus and rail services

9.23 We also consider filters in relation to overlaps between the Parties' bus and rail services.

Significance of overlap filter

9.24 The Parties told us that it would be appropriate to apply a filter to exclude flows where the sum of bus revenue on the overlapping bus-rail flows accounts for less than 10% of total bus route revenue, consistent with the approach taken in previous cases by the CMA and its predecessors.[175,176]

9.25 Operators are likely to have greater incentives to increase fares and/or reduce service quality (for example, by reconfiguring routes) following the Merger if the overlap flows on the route account for a significant proportion of route revenue. Therefore, we consider that routes where overlap flows account for a small proportion of revenue could be filtered out of the detailed analysis as Arriva is unlikely to have an incentive to change fares or non-price aspects of its services on these flows. In particular, we note that changes to non-price aspects of services, such as changes to service frequency and quality, may affect the whole route and that the flow would therefore have to account for a significant proportion of route revenue for Arriva to have the incentive to change non-price aspects of its services.

9.26 We therefore exclude overlapping bus-rail flows where the combined revenue derived from the bus service on those flows accounts for less than 10% of the overall bus route revenue (or passengers on the route). This excludes 450 flows from further analysis.

De minimis plus filter

9.27 The *de minimis* filter excludes flows with low revenues on the basis that on flows which generate relatively small revenues, the incentives to increase fares or reduce service quality are likely to be diluted. In particular, if no SLC were to be found on flows with revenue above the minimum threshold, then it would not have been expected on flows below the threshold.

9.28 We consider the appropriate threshold for the *de minimis* filter. The Parties told us that the average yield per passenger on the flows that did not pass the significance of overlap filter was approximately £[✂]. A £10,000 and £20,000 *de minimis* threshold would equate to approximately [✂] and [✂] passengers per day, respectively.

9.29 In deciding the threshold to adopt we are mindful of the need to protect the interests of passengers who regularly use local bus services and the fact

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175 [✂].

176 See, for example, CC (2011), *Local bus services market investigation*, Appendix 11.2; OFT (2008), *Stagecoach/East Midlands rail franchise* (ME/3291/07), paragraph 28; and OFT (2014), *First Finglands* (ME/6229/13), paragraph 46.

that an element of judgement is required in the filtering approach. We consider a *de minimis* threshold of £10,000 to be appropriate as the Parties would have only limited incentives to increase fares or reduce service quality on flows of this size. We do not adopt a £20,000 threshold as a filter, which would exclude a further 32 flows, but consider the level of flow revenue as part of the competitive assessment of overlapping bus and rail flows.

9.30 There is a risk that the *de minimis* filter may exclude routes where there are a number of flows each with revenues below the *de minimis* threshold, but where the combined revenues of these flows and the potential for harm to passenger interests could be significant. We therefore supplement the *de minimis* filter to allow flows to pass the filter only if the cumulative revenue share is below 10%.[177]

9.31 The Parties told us that this approach might be overly cautious as:[178]

(a) In some cases Arriva made decisions regarding its fares and fare structure [✂].

(b) In many areas, Arriva was part of a multi-operator ticket scheme, which limited Arriva's ability to increase fares on individual flows and routes as the multi-operator ticket price was effectively an upper limit on the fare which Arriva could charge for its own services for equivalent ticket types.

(c) There were a number of practical constraints on Arriva's ability to degrade its service offering including QPS schemes in Merseyside, Halton and Wirral and VPA schemes in the Tees Valley and Liverpool City Region.

9.32 We allow flows to pass the filter only if the cumulative revenue share is below 10% in order to avoid excluding routes where the combined revenues of flows below £10,000 of annual revenue is high and the potential for harm to passenger interests could be significant. This excludes 250 flows from further analysis. We instead examine the arguments made by the Parties in relation to the restrictions on Arriva's ability and incentive to increase its fares and reduce its service offering on flows as part of the competitive assessment in Section 11.

[177] The cumulative revenue share is the sum over all the revenues from the flows passing the *de minimis* filter relative to the total route revenue and is calculated based on all flows that pass the *de minimis* filter. The 10% cut-off for the cumulative share filter is consistent with that applied in the 'significance of overlap' filter.
[178] [✂].

Revenue increment filter

9.33 The Parties told us that flows on which the Northern Franchise revenue is less than 5% of the Arriva bus revenue or Arriva bus revenue is less than 5% of the Northern Franchise revenue should be excluded.[179] The Parties argued that if Arriva bus and Northern Franchise rail revenues on a flow were very different, this suggested that bus and rail were not good substitutes, taking into account different features of the journey which may differ between bus and rail.

9.34 On flows where the Merger does not materially change the Parties' share of bus and rail services on overlapping bus-rail flows, competition issues are less likely to arise as the Merger may not significantly affect the incentives to increase fares or reduce service quality.

9.35 We sensitivity check the threshold at which to apply the revenue increment filter by examining the number of flows that would be excluded at different levels. We exclude flows from further analysis where the increment to the Parties' revenue from the Merger is 5% or less (comparing revenues from the Northern Franchise rail flows to the Parties' pre-Merger bus and rail revenue). This excludes 130 flows.

Effective competitor filter

9.36 The Parties told us that we should apply an effective competitor filter in order to remove flows where there is significant competition from a third party bus operator.[180] As the Parties do not have access to competitors' revenue or passenger data, the Parties proposed that the filter should be based on the frequency of competing service, excluding flows where the largest competitor (in terms of frequency) has at least 50% as many services as Arriva on the flow.[181]

9.37 We use the effective competitor filter to prioritise flows for further analysis. We exclude flows where third party bus operators offer a similarly frequent service to the Parties, as the Parties' incentives to increase fares or reduce service quality are likely to be diluted if a significant proportion of passengers have alternative operators to which they can switch in the event of degradation of the Parties' offer post-Merger.[182]

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179 [✂].
180 Arriva response to issues statement, paragraph 4.2.
181 The Parties proposed comparing the number of Arriva bus services on a route in the weekday peak hours to the frequency of the competitor with the largest number of bus services in the weekday peak for each flow.
182 In our flow-by-flow assessment we also consider the potential for new entrants to become effective competitors.

9.38 We consider the appropriate threshold at which a competitor is 'effective'. The Parties told us that a 50% frequency threshold was appropriate, referring to previous cases.[183] We sensitivity test this frequency threshold and sensitivity check the effect of aggregating frequencies of all competitors and using non-peak frequencies instead of peak frequencies. This does not significantly affect the number of flows filtered out.[184]

9.39 We therefore adopt a 50% peak frequency threshold for identifying third party services as sufficiently similar in frequency to be effective competitors. This excludes 77 flows.

Tendered bus routes

9.40 The Parties told us that [✂].[185] We therefore do not apply a tendered bus route filter, although we consider whether competitive conditions differ for tendered or partially tendered bus routes in the competitive assessment in Section 11.

Rail de minimis

9.41 The Parties told us that in addition to the bus *de minimis* filter, flows on which the Northern Franchise revenue on a flow is below £10,000 should be excluded, as in the rail-rail analysis.[186] The Parties said that on overlapping bus-rail flows where the Northern Franchise revenue is below £10,000, the Northern rail service may not be a viable option for many passengers travelling between the origin and destination points.

9.42 Data submitted by the parties indicated that on [70-80%] of such flows, there are one or fewer Northern Franchise rail services in the weekday peak and on [80-90%] of flows there is less than one service in the weekday off-peak.

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[183] The CMA previously adopted an effective competitor filter in rail-coach overlaps based on the frequency of the most relevant competitor, ie the competitor offering the same mode of transport with the most number of weekday services on the overlapping flow. Where the relevant competitor had a frequency of less than 50% of the merging parties' frequency flows were considered more closely on the basis that the competitor would not be effective (see CMA (2015), *Anticipated acquisition by Inter City Railways Limited of the ICEC Franchise - full text decision* (ME/6506/14)).
[184] In calculating the frequency of competitors' services, the Parties considered bus operators within 400 metres of an Arriva bus stop. We examined the distances between the Arriva bus stops and competitor bus stops for the flows that are excluded on the basis of the effective competitor filter (and which are not excluded on the basis of any other filter). For the majority of flows, at least one of the origin or destination bus stops of the competitor was the same as the Arriva bus stop.
[185] [✂].
[186] [✂].

9.43 We consider that on such flows, the Parties will have limited incentives to increase fares or degrade service quality on bus services in order to divert passengers to the Northern Franchise.

9.44 We consider the appropriate threshold for the rail *de minimis* threshold. Consistent with the bus *de minimis* threshold, we use £10,000 revenue per annum (equivalent to [✄] passengers per day) as a starting point and sensitivity checked a threshold of £20,000. We find that the higher threshold excludes a number of flows and, in turn, routes with revenue £[✄]. We therefore retain the filter at £10,000. This excludes 72 flows.

Intra-urban flows

9.45 The Parties told us that it would be appropriate to define a smaller catchment area for intra-urban flows than the 1,200 metre catchment area adopted.[187]

9.46 As we note in our consideration of the relevant geographic market (see paragraph 6.44), we consider whether this would be appropriate on the basis that passengers may walk shorter distances to bus stops or railway stations for short intra-urban journeys. We consider possible definitions of intra-urban flows and whether data is available from NTS in relation to intra-urban flows.[188] However, the level of aggregation of NTS data available does not allow us to carry out the analysis for urban areas separately. In view of the number of overlaps remaining for detailed assessment, we therefore consider arguments in relation to intra-urban flows as part of the competitive assessment of bus-rail overlaps in Section 11.

Flows prioritised for detailed assessment

9.47 Following the application of filters (and before any further prioritisation based on analysis of GJC, see paragraph 6.10), 89 flows remain for further analysis based on a £10,000 *de minimis* threshold.

9.48 Table 4 and Figure 4 summarise the filters applied to rail and bus overlaps.

[187] See the discussion of the relevant geographic market in Section 6.
[188] For example, flows which begin or end in the same town and where the flow has a journey time of less than 15 minutes by rail might be defined as intra-urban.

Table 4: Filters applied to rail-bus overlaps

Filter	*Flows excluded*	*Flows remaining*	*Revenues excluded (£m)*	*Revenues remaining (£m)*
Significance of overlap filter	450	618	[✂]	[✂]
De minimis plus filter	250	368	[✂]	[✂]
Revenue increment filter	207	238	[✂]	[✂]
Effective competitor filter	130	161	[✂]	[✂]
Rail de minimis	72	89	[✂]	[✂]
Total	979	89	[✂]	[✂]

Source: The Parties/CMA analysis.

Figure 4: Summary of bus filters

Filter	Description – why flows are filtered out
	Number of flows excluded
Overlap significance	Bus flows where the sum of bus revenue on the overlapping bus-rail flow accounts for <10% of the total bus route revenue is excluded as operators are unlikely to have the incentive to adjust fares or reconfigure routes
	450 flows excluded leaving 618
De minimis plus	On flows which generate relatively small revenues, the incentives to flex fares or quality are likely to be diluted
	250 flows excluded leaving 368
Revenue increment	Where the increment to the Parties' revenue from the Merger is 5% or less the Merger does not materially change the Parties share of services
	207 flows deprioritised leaving 238
Effective competitor	Where a competitor offers a similar frequency to the Parties those flows are excluded as an effective competitor exists
	130 flows deprioritised leaving 161
Rail de minimis	Where the Northern Franchise revenue on an overlap flow is below £10,000 the flow is excluded as the Parties have limited incentives to alter services
	72 flows excluded leaving 89 for analysis

10. The effect of the merger on overlapping rail services

10.1 In this section, we set out the competitive effects of the Merger on the overlapping rail services, ie we examine whether the Merger may result in an increase in fares and/or a reduction in service quality on rail flows where services operated by other Arriva TOCs, namely ATW, CrossCountry and Grand Central overlap with the Northern Franchise.

Initial assessment of overlapping flows

10.2 The filtering approach set out in Section 9 identified 19 overlapping rail flows for detailed assessment. As set out in paragraph 9.12, we consider as part of the competitive assessment whether it is necessary to examine any of the 19 flows deprioritised on the basis of the effective competitor filter, for example by reviewing internal documents.

10.3 Following a review of internal documents produced by the Parties we identified a further four flows for detailed assessment where these documents suggested a degree of pre-Merger competitive interaction between Arriva TOCs and Northern Rail.[189]

10.4 On the 23 flows identified for detailed assessment (ie the 19 flows from the filters and four from the review of internal documents) we consider whether the Merger has resulted or may be expected to result in an SLC as a result of the common ownership of overlapping rail services on flows or routes. This could arise where this common ownership provides the Parties with the ability and incentive to raise fares following the award of the Northern Franchise.

The Parties' ability and incentive to raise fares as a result of the Merger

10.5 We focus our competitive assessment on the Parties' ability and incentive to raise fares. As set out in Section 8, franchised TOCs are generally limited in their ability to flex non-price factors, such as service levels (for example, in relation to timetabling, performance and rolling stock) as they are required to meet detailed committed obligations in their TSRs which were set at the time of the award of their franchises. This was confirmed by our review of internal documents and submissions from third parties.

10.6 As set out in our review of regulatory constraints in Section 8 (see paragraphs 8.55 to 8.58), we provisionally conclude that the Parties do not

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[189] Northern Rail operated the Northern Franchise prior to ARN.

have the ability to flex regulated fares under the current policy framework and that regulated fares may constrain the level of some unregulated fares.

10.7 In relation to the Parties' ability and incentive to raise fares, we observe three broad categories of fare flexing from our assessment of fare regulation (see paragraphs 8.55 to 8.58), review of internal documents and from third party submissions on rail services:

(a) Changes to inter-available fares (which include regulated fares) by the lead operator on its flows (these are 'any permitted' fares). Such changes are typically made on an annual basis (and at most quarterly basis) and are typically applied as a blanket across a franchise area rather than in relation to individual flows. Revenues from such tickets are allocated according to the ORCATS system in line with passenger journeys on the flow services.

(b) Changes to dedicated tickets which are restricted to the services of individual TOCs. Dedicated fares may be introduced by a secondary operator in competition with the lead operator's inter-available fares or introduced as yield-management products targeted at specific customer segments (for example off-peak leisure customers to fill spare capacity or encourage a shift from capacity-constrained peak services). Many dedicated fares are advance tickets valid on specific services, with a limited number being available for purchase on each individual service.[190] Because the operator setting the dedicated ticket derives 100% of revenues on such tickets, the operator may use these tickets to encourage greater use of its own services in competition with other operators on the flows.

(c) Changes to dedicated tickets which are restricted to some services (including multiple TOCs) but which are not fully inter-available (for example routed tickets showing 'via permitted route'). Such tickets are used to segment passenger journeys, for example offering cheaper journeys on services which travel via a particular route as an alternative to the inter-available fare which offers access to the full range of services on the flow for a premium. These tickets can be thought of as hybrids of the first two, since they offer some (but not full) service flexibility and revenues are allocated according to the ORCATS system. We therefore focused our competitive assessment on the extent to which the Merger may result in horizontal effects in relation to

[190] Both lead and secondary operators are permitted to offer advance purchase dedicated tickets valid on specific services.

unregulated fares and, in particular, the availability and price of dedicated and routed fares. We consider this on a flow-by-flow basis.

Assessing the closeness of competition between overlapping rail services

10.8 We consider the closeness of competition between overlapping rail services operated by the Parties on the flows prioritised for detailed assessment. Rail services operated by different TOCs are more likely to be substitutes for passengers where they are similar in terms of destinations, access/egress times, fares, frequencies, journey times and other quality aspects of the offer (for example the level of comfort provided on the services).[191]

10.9 In order to test the similarity of overlapping rail services we use the rail industry standard 'MOIRA' model, which is used to estimate the effects of changes to services.[192] MOIRA relies on timetable information, passenger preferences and estimates of generalised journey time (GJC).

10.10 GJC is particularly relevant to our assessment as it combines the important service factors (journey time, frequency and interchanges) and allocates demand to specific services based on these factors.

10.11 We therefore use MOIRA as the next step in our assessment in order to identify flows where the Northern Franchise and other Arriva TOCs are particularly close alternatives. Where MOIRA analysis indicate that the Parties' services are likely to be close alternatives for passengers we examine additional flow-specific information.

MOIRA approach to modelling diversion

10.12 In order to model the incentives to increase fares on individual flows, we simulate a number of scenarios on MOIRA. These scenarios simulate a timetable degradation of Northern Franchise services on the 23 flows.[193,194]

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191 Rail services may still be substitutes when there are differences in some of these factors, for example lower fares on one service may offset longer journey times on the other service.
192 MOIRA is an industry accepted best practice model for assignment of rail demand to train services on the rail network in Great Britain. Further details are set out in Appendix E.
193 We used changes to timetables as a proxy for fare increases, which is a more likely scenario, given the regulatory constraints on non-price aspects. Fares are not modelled in MOIRA, which limits its effectiveness in modelling potential responses to service changes. That is, fare differences are not accounted for in MOIRA, which may have otherwise reduced or increased the scale of the response. Given that inter-available fares are a relatively small share of flow revenues on the remaining flows, we do not consider this is a significant issue in relation to the flows that we examined.
194 Timetable flexing may involve different scenarios, such as deleting whole train services on the route; deleting a sample of trains serving the particular flow(s); changing the stopping patterns of the train services, or other aspects of timetables. In most cases we modelled the removal of either the origin or destination station from the relevant Northern Franchise timetable.

10.13 We then calculated a revenue retention (RR) ratio as follows:

$$Revenue\ retention\ ratio = \frac{Total\ Revenue\ Gains\ to\ Arriva}{Total\ Revenue\ Gains}$$

10.14 We consider that this RR ratio provides a useful indicator of the post-Merger incentives to increase fares. In particular, flows where the RR ratio is high, the incentives to increase fares are likely strongest. This is because prior to the Merger, in the event of fare increases, a proportion of revenues would have diverted to other TOCs, including Arriva TOCs. Following the Merger, Arriva re-captures a proportion of revenues on its other TOCs, such that the fare increase is not as costly. On flows where the re-captured revenues (proxied by our RR ratio) are a significant proportion of diverting revenues, the incentives to increase fares following the Merger are likely to be stronger.

10.15 On several flows, the RR ratio is below 50%, indicating that third party TOCs are likely to be good alternatives to Northern Franchise services. We therefore focus our analysis on flows where the RR ratio is above 50% and consider the remaining 11 flows in greater detail. These flows are set out in Table 5 below.

Table 5: Overlapping rail flows prioritised for detailed analysis

Origin	*Destination*	*Lead operator*	*Flow total revenues (£000)*	*Northern revenues (%)*	*ATW revenues (%)*	*CrossCountry revenues (%)*	*Grand Central revenues (%)*	*Competitor revenues (%)*	*RR ratio (%)*	*Regulated fares (%)*	*Inter-available fares (%)*
Leeds	Sheffield	VTEC*	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Wakefield	Sheffield	Northern	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
York	Wakefield	VTEC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Bradford	Halifax	Northern	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Chester	Manchester Airport	Northern	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Chester	Stockport	ATW	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Chester	Manchester	Northern	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Earlestown	Manchester	Northern	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Newton-le-Willows	Manchester	Northern	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Manchester	Wilmslow	Northern	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Manchester	Stoke-on-Trent	WCML†	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: The Parties and CMA calculations using MOIRA model.
* Virgin Trains East Coast.
† West Coast main line.

Framework for the detailed competitive assessment of overlapping rail flows

10.16 In this section, we set out the detailed assessment of the 11 overlapping rail flows. We consider additional evidence regarding the extent to which the Northern Franchise competes with other Arriva TOCs and third party TOCs where MOIRA analysis indicates that Northern Franchise and other Arriva rail services may be close alternatives for passengers.

10.17 We set out the views of the Parties and third parties on competition between overlapping rail services before setting out our approach to the detailed competitive assessment.

The views of the Parties and third parties

10.18 The Parties told us that on some flows where multiple TOCs operated services, there was scope for competition between TOCs. However, the Parties said that the scope for such competition was limited by the franchising model and played a subsidiary role to competition for the market (ie competition for the award of rail franchises). In the Parties' view, effective competition was not present on every flow where there was more than one operator and the flow-by-flow assessment should consider the following factors:[195]

(a) Passengers had a preference for specific journey times and shorter journeys, meaning that choices were determined by timetable and route options (which could not be changed unilaterally by the franchised TOCs).

(b) Flows where a significant proportion of revenues were derived from regulated fares were unlikely to see significant price competition.

(c) The assessment should identify flows where competition actually existed and drove benefits for passengers above those secured by the franchise model.

(d) Consideration of passenger preferences and the impact on TOCs' incentives were important to identifying any potential effects on competitive interactions.

10.19 Third party submissions on the potential for competition between rail flows were broadly consistent with the views of the Parties.[196]

[195] Arriva initial submission, paragraphs 1.10–1.12.
[196] See, for example, FirstGroup response to issues statement.

10.20 The broad considerations set out above are important in the flow-by-flow assessment and we have considered these factors in our filtering and flow-by-flow assessment. For example, we identify flows where passengers had a choice between Northern Franchise and other Arriva TOC rail services and focus our analysis on flows where there is potential for competition between the Northern Franchise and the Arriva TOCs (for example, because there are limited services operated by third party TOCs). Furthermore, we consider passenger choices at a disaggregated level (including detailed timetable information) through the use of MOIRA, which specifically models passenger timetable choices and the impact of changes to services factors.

CMA assessment of evidence considered in relation to individual flows

10.21 In our flow-by-flow assessment we consider the following factors in the round in assessing whether the Merger has resulted or may be expected to result in an SLC on the overlapping rail flows:

(a) The impact of the Merger on the share of services and revenues on the flow. This is because we consider a lessening of competition to be more likely on flows where the Merger leads to a significant increment in the Parties' share of services on a flow.

(b) The similarity of Northern Franchise and other Arriva TOC services in terms of frequency, hours of operation, journey times (including interchange penalties) and fares. We also consider, where relevant, the services provided by third party TOCs as well as inter-modal options such as coach or car journeys. We note that a lessening of competition is more likely on flows where the Northern Franchise and Arriva TOCs services are similar and (jointly) differentiated from third-party services.

(c) Evidence of pre-Merger competition on dedicated fares, for example where both Northern Franchise and other Arriva TOCs offer dedicated fares (which may or may not be restricted to their own services) and the fares of third party rail services. In this assessment we are mindful of drawing inferences from fare differentials alone, since ticket types may be differentiated (eg in relation to the level of flexibility they offer).

(d) Other constraints on the Parties' ability to flex fares post-Merger such as fare regulation or where the incentives to do so appear limited (for example because the flow generates relatively small revenues).

Entry and expansion in passenger rail services

10.22 We also consider the scope for entry or expansion to prevent an SLC. We consider whether such entry or expansion would be timely, likely and sufficient:[197]

(a) **Timely**: whether entry or expansion can be 'sufficiently timely and sustained to constrain the merger firm.' The Merger Assessment Guidelines note that: 'The Authorities may consider entry or expansion within less than two years as timely, but this is assessed on a case-by-case basis, depending on the characteristics and dynamics of the market, as well as on the specific capabilities of potential entrants.'[198]

(b) **Likely**: whether firms have the 'ability and incentive to enter this market'.[199]

(c) **Sufficient**: whether the scope or scale of entry or expansion would be sufficient to act as a competitive constraint.[200]

10.23 For an SLC to be prevented, all three of these criteria would have to be met; that is entry or expansion would have to be timely, likely and sufficient.

Franchised services

10.24 Franchised TOCs may, with consent from the DfT, apply to ORR for approval to enter into a track access agreement with Network Rail to operate additional services. In order to obtain approval, an applicant must demonstrate that sufficient capacity is available to operate the additional services, that the services would not create operational performance issues and the impact on the revenues of other TOCs. Other TOCs have the right to raise objections during the process. The application process may take at least a year.

10.25 To date, such applications have typically come from franchised TOCs seeking to extend their existing routes to serve additional destinations. Entry on specific flows in response to changes in competitive conditions is therefore only likely to be feasible if the flow is adjacent to the route of another TOC. Moreover, in designing franchises, the DfT allocates available

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[197] *Merger Assessment Guidelines*, paragraph 5.8.3.
[198] *Merger Assessment Guidelines*, paragraph 5.8.11.
[199] *Merger Assessment Guidelines*, paragraph 5.8.8.
[200] *Merger Assessment Guidelines*, paragraph 5.8.10.

network capacity for passenger services to franchised TOCs and very little spare capacity exists on many parts of the network.

Open access services

10.26 As discussed in the industry background section, an OAO may apply to ORR to operate open access services on a route. Applicants must demonstrate that there is sufficient capacity to operate the new services and that they satisfy the NPA test (ie that the new services are not primarily abstractive from franchised TOCs' revenues). A number of recent open access applications have taken over two years to determine.

10.27 Only two OAOs have successfully started operating services and these run with limited frequency, focusing on connecting northern towns to London where they lacked direct services.

The views of the Parties and third parties

10.28 Neither the Parties nor third parties argued that barriers to entry and expansion in passenger rail services were sufficiently low to act as a timely, likely and sufficient constraint on ARN's commercial behaviour.

Provisional conclusion

10.29 We therefore provisionally conclude that entry or expansion in passenger rail services is unlikely to be timely, likely, or sufficient to prevent an SLC.

Assessment of overlapping flows

10.30 In this section, we set out our assessment of the 11 overlapping rail flows prioritised for assessment.

10.31 Table 6 summarises the data on the four assessment criteria set out at 10.21(a) to (d).

Table 6: Summary statistics on 11 flows

	(a) Share of revenues				*(b) Closeness of services*			*(c) Fare competition*			*(d) Constraints on fares*	
Flow	*Total revenues (£000s)*	*Northern % of flow revenues*	*Arriva % of flow revenues (ATW, XC, GC)*	*Other TOCs % of flow revenues*	*RR ratio*	*Northern weekly services*	*Arriva weekly services*	*Proportion inter-available fares*	*Proportion routed*	*Proportion dedicated*	*Proportion regulated*	*SLC/key clearance factor*
Leeds-Sheffield	[✂]	[✂]	[✂]	[✂]	[✂]	101	100	[✂]	[✂]	[✂]	[✂]	SLC
Wakefield-Sheffield	[✂]	[✂]	[✂]	[✂]	[✂]	104	99	[✂]	[✂]	[✂]	[✂]	SLC
York-Wakefield	[✂]	[✂]	[✂]	[✂]	[✂]	31	87	[✂]	[✂]	[✂]	[✂]	(a) Low increment
Bradford-Halifax	[✂]	[✂]	[✂]	[✂]	[✂]	340	24	[✂]	[✂]	[✂]	[✂]	(a) Low increment / (b) Northern frequency / (c) IA fares
Chester-Manchester	[✂]	[✂]	[✂]	[✂]	[✂]	71	178	[✂]	[✂]	[✂]	[✂]	SLC
Chester-Stockport	[✂]	[✂]	[✂]	[✂]	[✂]	84	71	[✂]	[✂]	[✂]	[✂]	SLC
Chester-Manchester Airport	[✂]	[✂]	[✂]	[✂]	[✂]	11	8	[✂]	[✂]	[✂]	[✂]	(c) All fares set by ATW
Earlestown-Manchester	[✂]	[✂]	[✂]	[✂]	[✂]	112	105	[✂]	[✂]	[✂]	[✂]	(c) All fares set by Northern
Newton Le Willows-Manchester	[✂]	[✂]	[✂]	[✂]	[✂]	170	105	[✂]	[✂]	[✂]	[✂]	(c) All fares set by Northern
Manchester-Wilmslow	[✂]	[✂]	[✂]	[✂]	[✂]	190	101	[✂]	[✂]	[✂]	[✂]	(c) No fares set by ATW
Manchester-Stoke-on-Trent	[✂]	[✂]	[✂]	[✂]	[✂]	71	164	[✂]	[✂]	[✂]	[✂]	(c) Very few fares set by Northern (competition is between CrossCountr y and VTWC)

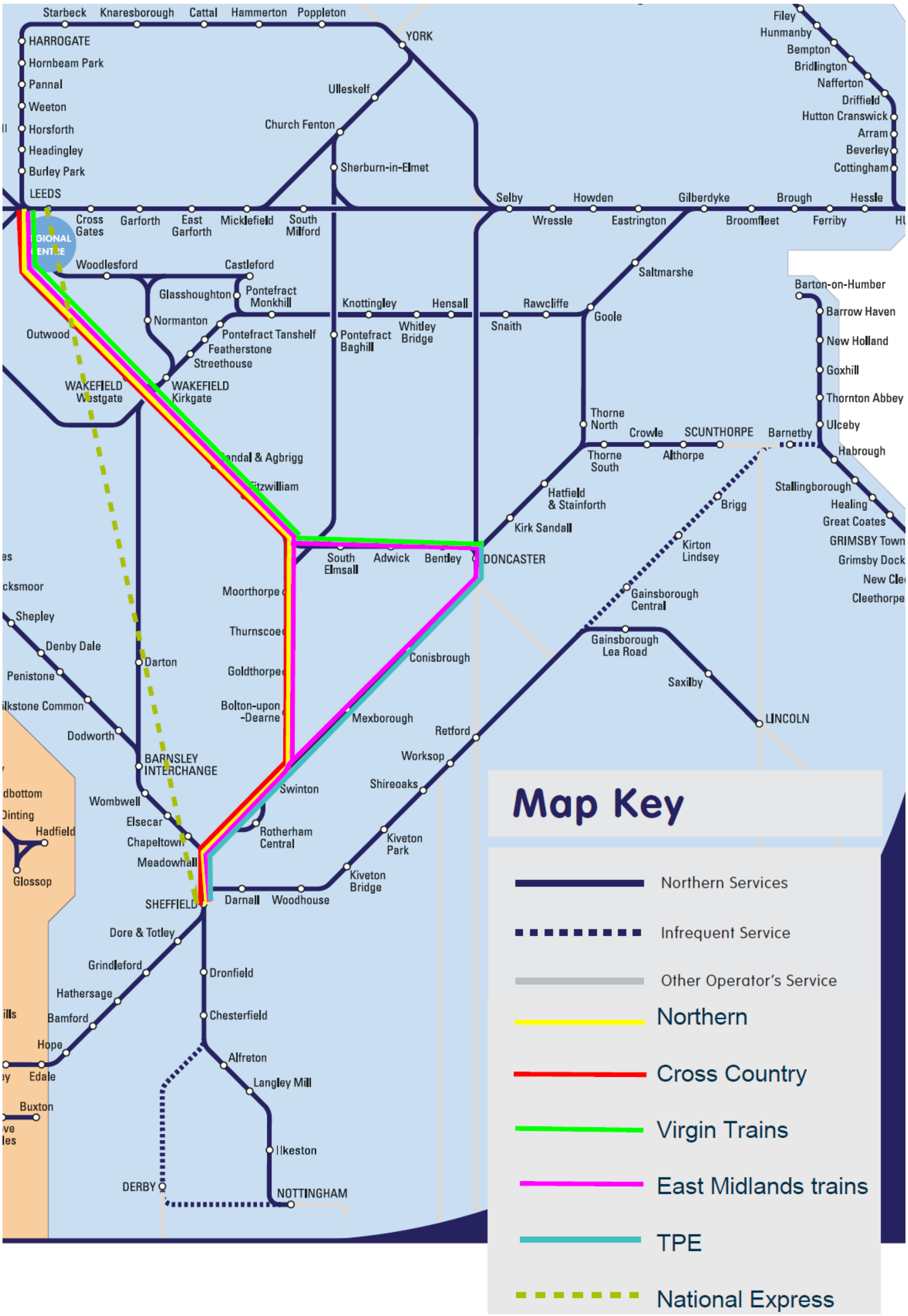
Source: The Parties, CMA analysis using MOIRA and CMA assessment.

10.32 We set out below our detailed assessment of the four overlapping flows on which we provisionally conclude that the Merger has resulted in or may be expected to result in an SLC. The detailed assessment of the remaining seven flows is set out in Appendix E.

Leeds to Sheffield

10.33 Figure 5 shows the overlap between CrossCountry and Northern Franchise rail services on the Leeds to Sheffield flow.

Figure 5: Map of Leeds to Sheffield flow



Source: The Parties.

10.34 This flow is predominantly served by the Northern Franchise and CrossCountry, which operate almost all of the direct services (see Table 7). Third party TOCs provide very limited (direct or indirect services), with East Midlands Trains (EMT) offering the only third party direct rail service on the flow.[201] VTEC and some EMT trains operate via Doncaster, but using VTEC requires a change to another TOCs service (CrossCountry, TransPennine Express (TPE) or EMT) to complete the journey.

Table 7: Number of weekly services on the Leeds to Sheffield flow

	Direct				*Indirect*			
	Weekday Peak	*Weekday Off Peak*	*Saturday*	*Sunday*	*Weekday Peak*	*Weekday Off Peak*	*Saturday*	*Sunday*
Northern	13	26	34	22	0	0	1	5
Cross Country	14	21	35	30	0	0	0	0
ATW	0	0	0	0	0	0	0	0
Arriva/Northern + Other					8	14	3	5
Other TOCs	1	4	4	6	1	1	0	2

Source: The Parties.

The views of the Parties

10.35 The Parties told us that the CrossCountry services offered a significantly faster journey time when compared to Northern Franchise and that CrossCountry revenues on this flow were nearly [✂] those of the Northern Franchise.[202] The Parties said that there was little competition pre-Merger as [90-100%] of revenue was derived from inter-available fares.[203]

10.36 The Parties also told us that the differences in dedicated fares between TOCs indicated that there was limited competition on the flow and EMT dedicated fares acted as a constraint on Northern Franchise dedicated fares. The Parties said that a significant proportion of fares ([70-80%]) were regulated and that Arriva would not be able to increase these fares by more than that permitted by regulation post-Merger. The Parties said that the proportion of inter-available fares and the proportion of regulated fares on this flow meant that the flow was close to being filtered out on the basis of the thresholds for the inter-available and regulated fares filter adopted by the CMA.

10.37 The Parties said that National Express coach services offered 16 services per weekday on the flow (six at peak times) with lower fares (£4.00 to £6.10) than the rail services but comparable journey times to Northern Franchise services (with a minimum journey time of 50 minutes). The Parties also said that passengers could make the journey between Leeds and Sheffield by car

[201] VTEC and some EMT trains operate via Doncaster, but VTEC services require a change to another TOCs service (CrossCountry, TPE or EMT) to complete the journey.
[202] [✂].
[203] This figure includes inter-available fares and Northern Franchise set fares routed as 'not via Doncaster'.

in around 70 minutes, which was comparable to the rail journey time if travel to/from the rail stations was included.

CMA assessment

10.38 Table 8 sets out details of the key data on the Leeds to Sheffield flow.

Table 8: Leeds-Sheffield Summary Data and Analysis

Flow characteristics	*Northern*	*Arriva (Other)*	*Third party*
Minimum in-vehicle journey time (minutes)	55	39	41‡
Third-party competitors	VTEC, EMT, TPE		
Lead operator (fare-setter on the Any Permitted tickets): VTEC			
Inter-available fare (£)*			15.30§
Routed fare (£)*	10.80		
Dedicated fare price (£)†	4.83	8.51	7.22
Share of total flow journeys (%)	[✂]	[✂]	[✂]
Share of flow revenue (%)	[✂]	[✂]	[✂]
TOC overlap flows revenue as % of route revenue (includes filtered out flows)	[✂]	[✂]	
TOC flow revenue as % of route revenue	[✂]	[✂]	
Total flow revenue (all operators)	[✂]		
Regulated revenue on flow (%)	[✂]		
Inter-available fares (%)	[✂]		
MOIRA analysis at flow level	**All TOCs (£000)**	**RR ratio (%)**	
Total gains	[✂]	[✂]	

Source: The Parties and CMA calculations using MOIRA.
* This is the minimum-priced relevant fare on the flow.
† Dedicated fare price here is a journey-weighted average (ie ratio of total revenue from advanced purchases and total journeys undertaken on these tickets).
‡ Estimated by Arriva. EMT.
§ The inter-available fare is set by VTEC as the lead operator on the flow. The prices of the 'not via Doncaster' tickets are set by Northern Franchise.

Share of services and revenues

10.39 The Northern Franchise and CrossCountry account for approximately [90-100%] of revenues on the flow, with the Merger resulting in a [20-30%] increment from the Northern Franchise services in addition to CrossCountry's [70-80%] share.

Closeness of competition

10.40 Journey times are shorter on the CrossCountry and EMT services at 39 and 41 minutes, respectively, as compared to 55 minutes on the Northern Franchise.

10.41 The RR ratio from the MOIRA analysis on this flow is [✂], which indicates that the Northern Franchise and CrossCountry services are close alternatives for passengers (in terms of their non-price offer).

10.42 Leeds to Sheffield is one of the flows on which the previous Northern Rail franchise and CrossCountry both monitored each other's fares. The Parties told us that [✂]. [✂]. This indicates that there was competition between the previous Northern Rail franchise and CrossCountry on this flow, notwithstanding differences in journey times.

Fare setting

10.43 VTEC is the lead operator on this flow, setting the inter-available fare which allows travel on all services including the Northern Franchise and CrossCountry services.[204] In addition, ARN sets the fare on an inter-available ticket which allows travel on all services except via Doncaster on the VTEC services, which is generally priced below the ‘any permitted’ ticket set by VTEC. These ‘not via Doncaster’ tickets account for the majority of tickets on this flow and are valid for travel on the Northern Franchise, CrossCountry and one daily EMT service. ARN also offers a dedicated advance ticket which is significantly cheaper than both the inter-available and the ‘not via Doncaster’ ticket. Sales of the Northern Franchise only dedicated advance tickets are limited and account for around [5-10%] of total revenues.[205]

10.44 The recent LENNON fare data downloads provided by the Parties and analysed by the CMA indicate that the [✂].

10.45 We also consider the scope for the Parties to increase unregulated fares post-Merger by examining the difference between unregulated fares and regulated fares (see Table 9). The inter-available off-peak return and the routed peak day returns are regulated on this flow.

Table 9: Leeds to Sheffield constraint from fare regulation

	Ticket type						
Leeds-Sheffield	Open return	Peak day return	Peak single	Off-peak return	Off-peak day return	Off-peak single (Savers)	Off-Peak single (CDS)
Inter-available fare - flex	-24%	25%	33%	0%*	NA	NA	NA
Routed fare - flex	-4%	0%*	19%	NA	14%	NA	NA
Actual price (£) - Inter-available	28.50	17.20	15.30	23.00*	NA		NA
Actual price (£) - Routed	13.90	13.40*	10.80	NA	£11.50	NA	NA

Source: CMA workings of Arriva data.
* Regulated fares.

[204] We understand this is because of historical reasons to ensure fare consistency on VTEC’s longer distance flows. [✂].
[205] This may be because passengers prefer the flexibility of the Northern set ‘not via Doncaster’ ticket which gives access to CrossCountry services and/or because the Northern Franchise dedicated tickets are advance yield management quota controlled products which are limited in availability.

10.46 We find that there is headroom for increases in the level of unregulated fares, including the inter-available peak single and peak day return and the routed peak single and off-peak day return.

Other factors

10.47 We also consider the proportion of route revenue accounted for by the flow and find that the Leeds to Sheffield flow accounts for a significant proportion of the Chesterfield–Sheffield–Leeds Northern Franchise route revenue, with [20-30%] of route revenue for the Northern Franchise derived from this flow.

10.48 Combining the flow revenues on all overlaps on the route, the Leeds to Sheffield revenues of the Northern Franchise and CrossCountry account for [30-40%] and [10-20%] of total route revenue, respectively.

10.49 We do not consider that the alternative transport mode options on this flow are particularly strong alternatives. For example, journey times on the coach services offered by National Express are longer than on Northern Franchise services, while fares are in line with dedicated fares on the Northern Franchise services. Frequency on the rail services of the Northern Franchise and CrossCountry is significantly higher than the coach services (which offer less than half of the weekday frequency of the rail services).

10.50 This suggests that Northern Franchise rail services are likely to be a stronger alternative to the CrossCountry services, than the coach services of National Express.[206] The difference in journey times is more significant when set against the CrossCountry services. Furthermore, we note that (all else being equal) competition between transport options is likely to be stronger within mode than across modes and passengers are likely to have a preference for the rail services over the car or coach as they are not prone to road congestion.

10.51 We also note that the proportion of fully inter-available fares, ie ‘any permitted’ route fares is [5-10%], which is significantly lower than that quoted by the Parties ([90-100%]). The difference between these two figures arises as a significant proportion of the fares described by the Parties as inter-available are routed (not via Doncaster) inter-available fares set by the Northern Franchise, which allow travel on Northern Franchise, CrossCountry and some EMT services, but not on services operated via Doncaster by VTEC. We find that there is scope for the Northern Franchise to increase these routed fares.

[206] The GJC of the rail services is likely to be much more similar than that between the rail and coach services.

Summary and provisional conclusion

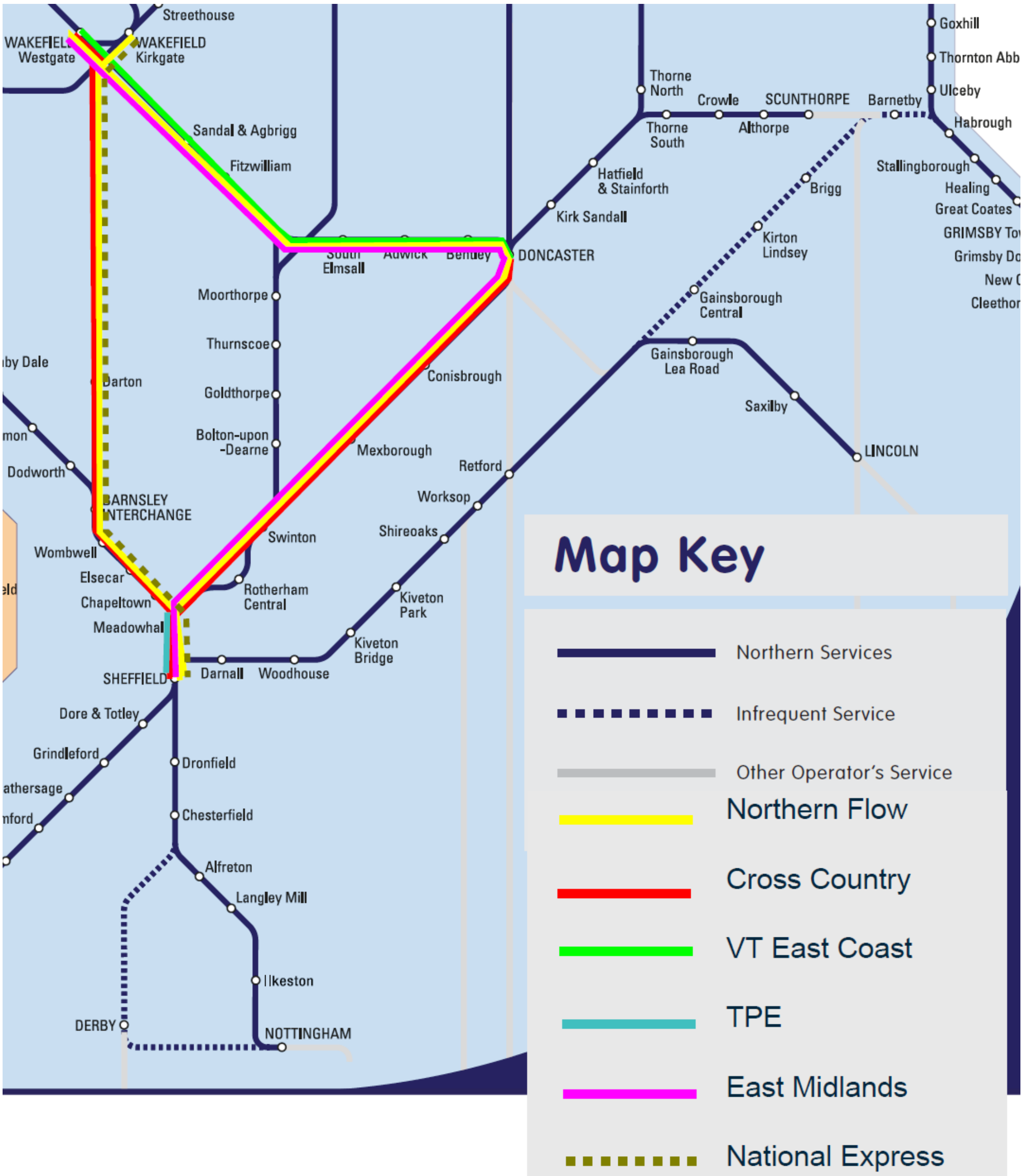
10.52 In summary, we note that the Northern Franchise and CrossCountry are the main TOCs on this flow, while the services via Doncaster appear to be a weak alternative for passengers. The Merger may lead to higher routed fares 'not via Doncaster' (which are set by the Northern Franchise) and higher dedicated fares or the removal of dedicated tickets on this flow.

10.53 We therefore provisionally conclude that the Merger has resulted in or may be expected to result in an SLC on the Leeds to Sheffield flow.

Wakefield to Sheffield

10.54 Figure 6 shows the overlap between CrossCountry and the Northern Franchise on the Wakefield to Sheffield flow. There is a significant similarity between this flow and the Leeds to Sheffield flow that we considered above.

Figure 6: Map of Wakefield to Sheffield flow



Source: The Parties.

10.55 Table 10 sets out service frequencies on the flow. The Northern Franchise and CrossCountry are the main providers of services on this flow, with some indirect services provided by other operators.

Table 10: Number of weekly services on the Wakefield to Sheffield flow

	Direct				*Indirect*			
	Weekday peak	*Weekday off-peak*	*Saturday*	*Sunday*	*Weekday peak*	*Weekday off-peak*	*Saturday*	*Sunday*
Northern	15	28	33	28	0	0	0	0
Grand Central	0	0	0	0	0	0	0	0
Cross Country	15	20	35	29	0	0	0	0
ATW	0	0	0	0	0	0	0	0
Arriva/Northern + Other					4	8	0	4
Other TOCs	1	4	4	6	0	0	0	0

Source: The Parties.

The views of the Parties

10.56 The Parties told us that the Northern Franchise and CrossCountry did not compete closely on this flow given that the Northern Franchise journey times were often significantly longer and the significant disparity on the share of revenues when set against the share of frequencies (ie the Northern Franchise and CrossCountry had comparable frequency, but the Northern Franchise had significantly lower share of revenues on the flow).[207]

10.57 The Parties said that for both the Northern Franchise and CrossCountry, the flow accounted for a small share of route revenue ([✂]), suggesting that Arriva was unlikely to alter fares on the flow. The Parties told us that their GJC analysis indicated that the Northern Franchise and CrossCountry services did not compete closely. For example, the Parties said that the Northern Franchise peak time GJC was [10-20%] than the CrossCountry GJC.

10.58 The Parties also said that there appeared limited pre-Merger price competition on the flow and that Arriva was restricted in increasing fares post-Merger (with [90-100%] of fares being inter-available and [70-80%] regulated). The Parties said that the dedicated fares would be constrained by the price of regulated fares. Furthermore, the Parties submitted that there was competition on this flow from National Express (which operates a direct coach service taking 70 minutes and costing £6.60). The Parties said that the car journey took between 40 and 55 minutes.

CMA assessment

10.59 Table 11 sets out details of the key data on the Wakefield to Sheffield flow.

[207] [✂].

Table 11: Wakefield to Sheffield summary data and analysis

Flow characteristics	*Northern*	*Arriva (Other)*	*Third party*
Minimum in-vehicle journey time (minutes)	36	23	24
Third-party competitors			TPE, VTEC
Lead operator (fare-setter) on the Any Permitted tickets: Northern Franchise			
Inter-available fare (£)*	10.20		
Routed fare*	9.70		
Dedicated fare (£)†	4.82	4.69	6.67
Share of total flow journeys (%)	[✄]	[✄]	[✄]
Share of flow revenue (%)	[✄]	[✄]	[✄]
TOC overlap flows revenue as % of route revenue (includes filtered out flows)	[✄]	[✄]	
TOC flow revenue as % if route revenue	[✄]	[✄]	
Total flow revenue (all operators)	[✄]		[✄]
Regulated revenue on flow (%)	[✄]		
Inter-available fares (%)	[✄]		
MOIRA analysis	**All TOCs (£000)**		**Arriva TOCs' share (%)**
Total gains	[✄]		[✄]

Source: The Parties and CMA calculations using MOIRA.
* This is the minimum-priced relevant fare on the flow.
† Dedicated fare price here is a journey-weighted average (ie ratio of total revenue from advance purchases and total journeys undertaken on these tickets).

Share of services and revenues

10.60 The Northern Franchise and CrossCountry account for around [✄] of revenues on the flow, a [✄] increment from the Northern Franchise services to CrossCountry's [✄] share.

Closeness of competition

10.61 The CrossCountry journey time is 23 minutes and the Northern Franchise journey time is 36 minutes as the latter calls at more intermediate stations. However, the RR ratio of [✄] from the MOIRA analysis on this flow indicates that the Northern Franchise and CrossCountry services may be close alternatives for passengers (in terms of their non-price offer).

Fare setting

10.62 The Northern Franchise is the lead operator on this flow, setting the inter-available fare. The Northern Franchise, CrossCountry and EMT all offer dedicated advance purchase fares at a significant discount to the inter-available (all 'any permitted' and 'not via Doncaster') fares set by the Northern Franchise. The dedicated advance purchase fares account for [10-20%] of overall flow revenues (similar to the Leeds to Sheffield flow). On this flow, the CrossCountry average dedicated fare is slightly lower at £4.69 than on the Northern Franchise where the average dedicated fare is £4.82.

10.63 We consider the extent of inter-availability of tickets. The proportion of fully inter-available fares is [0-5%], which is significantly lower than that quoted by the Parties ([90-100%]). The difference between these two figures predominantly arises from routed inter-available fares ([80-90%]), which are set by the Northern Franchise and allow travel on the Northern Franchise, CrossCountry and EMT ‘not via Doncaster’ and excluding other third party TOC services on the flow which run via Doncaster.

10.64 We also consider the scope for the Parties to increase unregulated fares post-Merger by examining the difference between unregulated fares and regulated fares (see Table 12). The inter-available peak day return and the routed peak day return are regulated on this flow.

Table 12: Wakefield to Sheffield constraint from fare regulation

	Ticket type						
Wakefield-Sheffield	*Open return*	*Peak day return*	*Peak single*	*Off-peak return*	*Off-peak day return*	*Off-peak single (Savers)*	*Off-peak single (CDS)*
Inter-available fare - flex	-39%	0%*	16%	NA	NA	NA	
Routed fare - flex	-4%	0%*	13%	NA	17%	NA	NA
Actual price (£) - Inter-available	16.80	12.10*	10.20	NA	NA		NA
Actual price (£) - Routed	12.20	11.70*	10.20	NA	9.70	NA	NA

Source: CMA workings of Arriva data.
* Regulated fares

10.65 We find that there is headroom for increases in the level of unregulated fares, including the inter-available peak single and the routed peak single and off-peak day return.

Other factors

10.66 The overlap flows combined account for a significant proportion of route revenues for both the Northern Franchise ([30-40%]) and CrossCountry ([10-20%]), indicating that the Merger may significantly affect the Parties’ commercial incentives on the flow. It should also be noted that this flow is nested within the Leeds to Sheffield flow where similar pricing and product arrangements exist.

10.67 We consider that the coach and private car are unlikely to act as significant constraints on the Parties’ rail services, given the significant difference in journey times. We also note that the coach service does not offer lower fares in comparison to the dedicated rail fares and that the coach services have significantly lower frequency than the overlapping rail services, offering just one service per day. Moreover, we note that (all else being equal) competition between transport options is likely to be stronger within mode than across modes and passengers are likely to have a preference for the rail services over the car or coach, since they are not prone to road congestion.

Summary and provisional conclusion

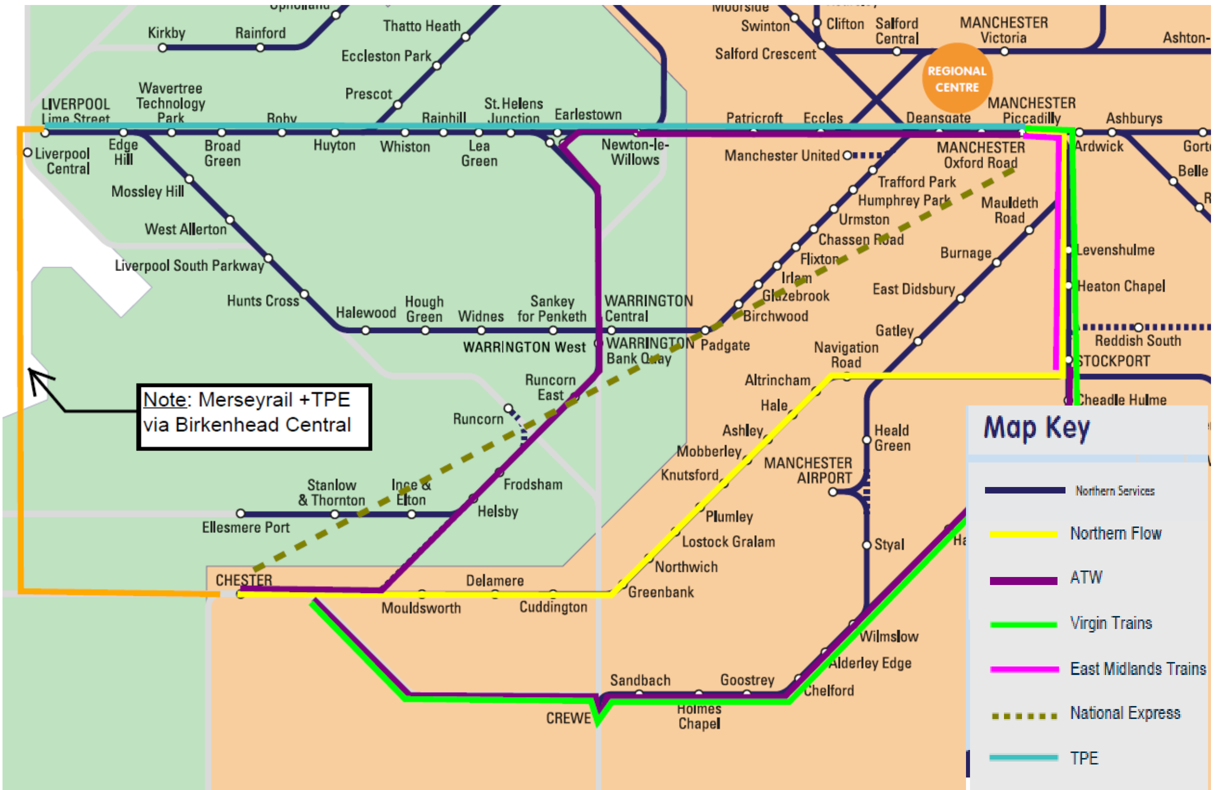
10.68 In summary, the Northern Franchise and CrossCountry are the main operators on this flow, while the 'via Doncaster' services appear to be a weak alternative. The Merger may result in to higher 'any permitted' or routed fares (as they are set by the Northern Franchise). The Merger may also lead to higher dedicated fares and/or the removal of dedicated tickets on this flow.

10.69 We therefore provisionally conclude that the Merger has resulted in or may be expected to result in an SLC on the Wakefield to Sheffield flow.

Chester to Manchester

10.70 Figure 7 sets out the overlap between the Northern Franchise and ATW on this flow.

Figure 7: Map of Chester to Manchester overlaps



Source: The Parties.

10.71 Table 13 shows train frequencies on the flow. This flow is predominantly served by ATW, but there are significant services provided by Northern Franchise and other indirect services combining Virgin Trains and EMT.

Table 13: Number of weekly services on the Chester to Manchester flow

	Direct				*Indirect*			
Number of weekly services	*Weekday peak*	*Weekday off-peak*	*Saturday*	*Sunday*	*Weekday peak*	*Weekday off-peak*	*Saturday*	*Sunday*
Northern	8	20	29	14	0	0	0	0
GC	0	0	0	0	0	0	0	0
XC	0	0	0	0	0	0	0	0
ATW	14	26	36	31	11	20	27	13
Arriva/Northern only					3	0	0	2
Arriva/Northern + Other					3	10	17	0
Other indirect					9	22	33	1

Source: The Parties.

10.72 The Northern Franchise and ATW are the only two operators offering direct services on this flow (the Northern Franchise via Stockport and ATW via Earlestown). EMT, Virgin Trains West Coast (VTWC), Merseyrail Electrics and TPE provide indirect services on parts of the flow, with VTWC being the only other TOC to offer indirect through services between Chester and Manchester (via Stockport).

The views of the Parties

10.73 The Parties told us that there was very little change to the pre-Merger situation.[208] ATW had a share of [80-90%] of the revenue on the flow and the increment from Northern Franchise was [10-20%]. The Parties also said that there were differences in the services offered by ATW and the Northern Franchise, including large journey time differences.

10.74 The Parties said that all fares were inter-available (including routed fares) and that a significant proportion of fares on this flow were regulated ([70-80%]), for which prices could not be increased by more than was permitted by regulation. In this regard, the Parties noted that the Chester to Manchester flow was close to being filtered out on the basis of the inter-available fares and regulated fares filter adopted by the CMA. The Parties said that unregulated fares would continue to be effectively constrained by the price of the regulated fare.

10.75 [✄]. Therefore, if the CMA were to conclude that the Northern Franchise and ATW were competing pre-Merger, the Parties said that there would be a greater degree of competition post-Merger.

10.76 The Parties also told us that there was competition from third parties on the flow, including from coach (National Express, 85 to 115 minutes priced at

[208] [✄].

£7.60 compared to inter-available prices on rail), and from private car (which took around 60 to 90 minutes).

CMA assessment

10.77 Table 14 sets out details of the key data on the Chester to Manchester flow.

Table 14: Chester to Manchester summary data and analysis

Flow characteristics	*Northern*	*Arriva (Other)*	*Third party*
Minimum in-vehicle journey time (minutes)	95	69	85
Third-party competitors			VT, EMT, TPE
Lead operator (fare-setter) of the Any Permitted fare: Northern Franchise			
Inter-available fare (£)*		16.70	
Routed fare*	12.60		
Dedicated fare (£)†			10.80
Share of total flow journeys (%)	[✂]	[✂]	[✂]
Share of flow revenue (%)	[✂]	[✂]	[✂]
Total overlapping flows revenues (combined) as % of route revenue	[✂]	[✂]	
TOC flow revenue as % of route revenue	[✂]	[✂]	
Total flow revenue (all operators)			[✂]
Regulated revenue on flow (%)			[✂]
Inter-available fares (%)			[✂]
MOIRA analysis at flow level	**All TOCs (£000)**		**Arriva TOCs' share (%)**
Total gains	[✂]		[✂]

Source: The Parties and CMA calculations using MOIRA.
* Northern Franchise-set routed fares are 'via Altrincham' peak day return = £14.90 and off-peak day return =£12.70. All via Altrincham services are operated by the Northern Franchise.
† VTWC dedicated off-peak day return.

Share of services and revenues

10.78 Post-Merger, the Parties have a [90-100%] share of revenues with an increment of around [10-20%] from the addition of Northern Franchise services.

Closeness of competition

10.79 ATW operates a frequent service on this flow with a journey time of 69 minutes. The Northern Franchise has a slightly lower frequency and a journey time of 95 minutes. The VTWC services are indirect but have an average journey time of 85 minutes.

10.80 MOIRA analysis conducted on this flow indicates that ATW is a significant constraint on the Northern Franchise services, with [✂] of the total gains to other operators likely to accrue to ATW.

Fare setting

10.81 The Northern Franchise is the lead operator and sets the inter-available fares on the flow. The Northern Franchise also sets the price of routed fares which are only valid for travel 'via Altrincham'.

10.82 The proportion of fully inter-available fares ([80-90%]) is lower than that quoted by the Parties ([90-100%]). The difference between these two figures arises as the Northern Franchise sets routed (via Altrincham) inter-available fares, which only allow travel on Northern Franchise services and, in this respect, are effectively Northern Franchise dedicated tickets.

10.83 VTWC also offers a dedicated walk-up fare which is £14.00.

10.84 We also consider the scope for the Parties to increase unregulated fares post-Merger by examining the difference between unregulated fares and regulated fares (see Table 15). The inter-available off-peak day return and the routed peak day return are regulated on this flow.

Table 15: Chester to Manchester constraint from fare regulation

	Ticket type						
Chester-Manchester	*Open return*	*Peak day return*	*Peak single*	*Off-peak return*	*Off-peak day return*	*Off-peak single (Savers)*	*Off-peak single (CDS)*
Inter-available fare - flex	NA	1%	6%	0%*	NA	NA	NA
Routed fare - flex	-5%	0%*	10%	NA	15%	NA	15%
Actual price (£) - Inter-available	NA	17.60	16.7	17.70*	NA		NA
Actual price (£) - Routed	15.70	14.90*	13.4	NA	12.70	NA	12.60
Actual price (£) - Dedicated		14.00	13.20		10.80		11.00
		West Coast	West Coast		West Coast		West Coast

Source: CMA workings of Arriva data.
* Regulated fare.

10.85 We find that there is headroom for increases in the level of unregulated fares, including the inter-available peak single and the routed peak single and off-peak day return.

10.86 We also note that an [✂], indicating that fare regulation was a limited constraint on their fare-setting.

Other factors

10.87 The overlap flow accounts for a small proportion of Northern Franchise route revenues ([5-10%]) and this is also the case when considering all overlap flows ([10-20%]).

10.88 We also note that the overlap flows (ie all the overlaps on a route combined) are [50-60%], particularly for ATW, for which the overlaps are around [✂] of route revenue, such that the award has a significant effect on the pricing incentives of the Northern Franchise and ATW.

10.89 We consider that the coach and car options are unlikely to act as significant constraints on the rail journey, given the significant variation in journey times on coach and car. The National Express services offer significantly lower frequency (three per day) than the overlapping rail services. Furthermore, the apparent preference for shorter journeys on this flow (evidenced by CrossCountry having a larger share of revenues and shorter journey times than the Northern Franchise) would suggest that the car and coach are likely to be weaker alternatives to the rail options on this flow.[209]

Summary and provisional conclusion

10.90 In summary, the Northern Franchise and ATW provide the majority of services on this flow. The Northern Franchise sets the fare for a routed 'via Altrincham' ticket only valid on its services, which may attract passengers from the indirect ATW (and other TOC) services via Crewe. VTWC offers a dedicated walk-up ticket, but the constraint on the Northern Franchise and ATW fares from these tickets is likely to be limited as VTWC accounts for only [0-5%] of revenue on the flow.

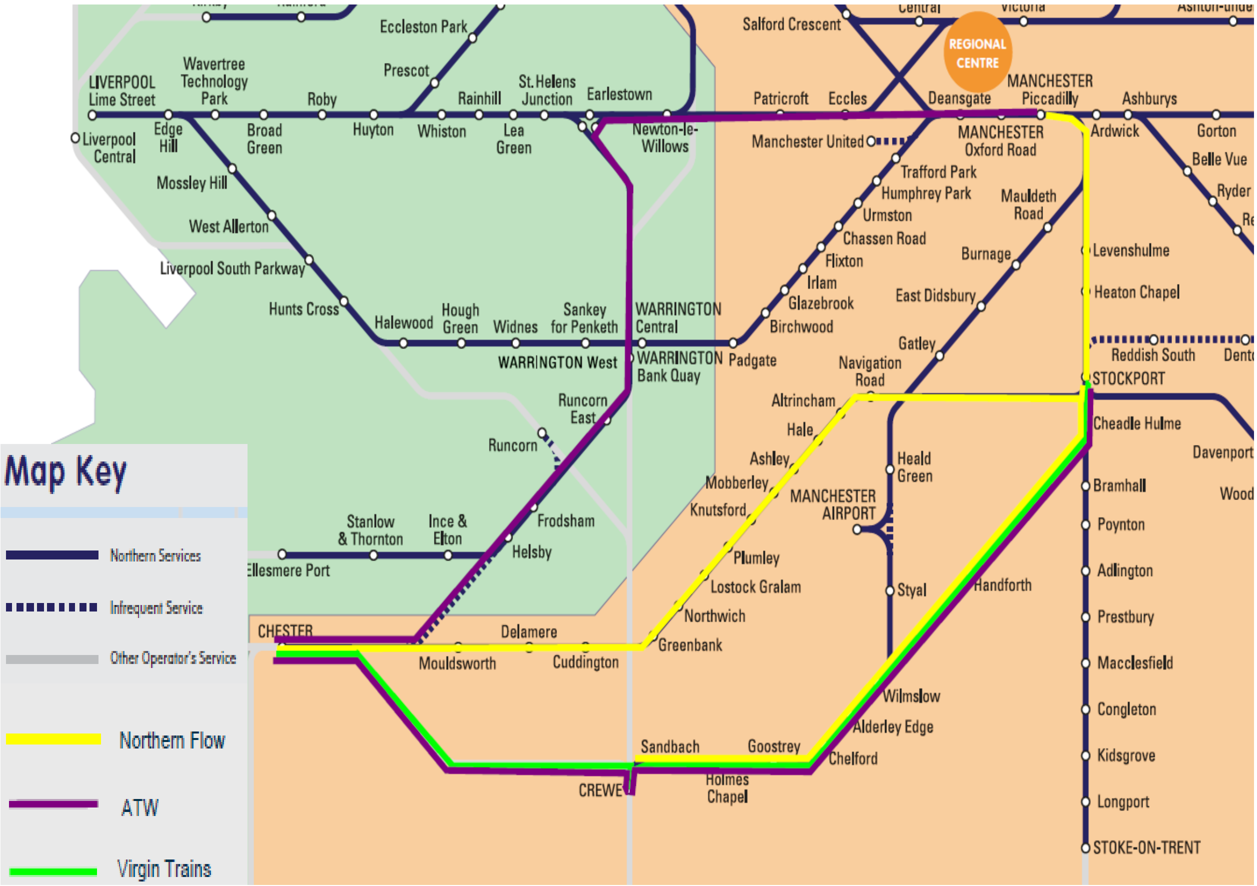
10.91 We therefore provisionally conclude that the Merger has resulted or may be expected to result in an SLC on the Chester to Manchester flow.

Chester to Stockport

10.92 Figure 8 illustrates the nature of the overlap between Chester and Stockport. The Northern Franchise is the only TOC offering direct services on the Chester to Stockport flow, via Altrincham. Indirect services between Chester and Stockport via Crewe are operated by ATW and VTWC.

[209] We also note that (all else being equal) competition between transport options is likely to be stronger within mode than across modes and passengers are likely to have a preference for the rail services over the car or coach, as they are not prone to road congestion.

Figure 8: Map of Chester to Stockport overlaps



Source: The Parties.

10.93 Table 16 sets out the frequency of rail services on the flow. The Northern Franchise provides all the direct services on this flow. Indirect services are provided by ATW and other operators especially on Saturdays.

Table 16: Number of weekly services on the Chester to Stockport flow

	Direct				*Indirect*			
Number of weekly services	*Weekday peak*	*Weekday off-peak*	*Saturday*	*Sunday*	*Weekday peak*	*Weekday off-peak*	*Saturday*	*Sunday*
Northern	15	23	32	14	0	0	0	0
GC	0	0	0	0	0	0	0	0
XC	0	0	0	0	0	0	0	0
ATW	0	0	0	0	11	21	28	11
Arriva/Northern only					4	3	4	12
Arriva/Northern + Other					0	4	3	23
Other indirect					9	16	22	11

Source: The Parties.

10.94 The Northern Franchise operates 38 weekday direct services on this flow (15 in peak hours) but with a longer in-vehicle time given its stopping patterns (taking 74 minutes compared to 61 minutes on ATW). ATW operates indirect services both in the peak and off peak (32 in total for weekdays). VTWC, EMT and TPE also offer indirect services on this flow, although EMT and TPE services require a change of TOC during the journey.

The views of the Parties

10.95 The Parties told us that Northern Franchise services operated on different tracks, as its services and those of Virgin Trains operated via the interchange at Crewe.[210] The Parties said that ATW and the Northern Franchise were not close competitors given the journey time difference between them (around 13 minutes) and the fact that there was an interchange involved on the ATW services. The Parties also said that passengers may overall have a preference for a direct journey on the Northern Franchise, even though it involved a longer journey time.

10.96 The Parties told us that their analysis of GJC indicated that VTWC was an effective competitor to the Northern Franchise and ATW. For example, the Parties said that the VTWC GJC was only [0-5%] higher than the direct Northern Franchise services. The Parties said that if the Northern Franchise were to increase fares on this flow, a significant proportion of passengers may divert to the VTWC services rather than ATW. In addition, the Parties said that there was competition from private transport (car journey times ranged from 50 to 80 minutes).

10.97 The Parties also argued that the flow accounted for a very small proportion of route revenues, for example accounting for [✂] of ATW route revenues and all overlap flows on the route accounting for approximately [0-5%] of ATW route revenues.

10.98 The Parties also said that there was competition from private transport (with the car journey time ranging from 50 to 80 minutes).

CMA assessment

10.99 Table 17 sets out details of the key data on the Chester to Stockport flow.

[210] [✂].

Table 17: Chester to Stockport summary data and analysis

Flow characteristics	*Northern*	*Arriva (Other)*	*Third party*
Minimum in-vehicle journey time (minutes)	74	61	61
Third-party competitors			VT, EMT, TPE
Lead operator (fare-setter) on the Any Permitted tickets: ATW			
Inter-available fare (£)*		16.50	
Routed fare†	12.00		
Dedicated fare (£)‡			£11.30
Share of total flow journeys (%)	[✂]	[✂]	[✂]
Share of flow revenue (%)	[✂]	[✂]	[✂]
Total overlapping flows revenues (combined) as % of route revenue	[✂]	[✂]	
TOC flow revenue as % of route revenue	[✂]	[✂]	
Total flow revenue (all operators)			[✂]
Regulated revenue on flow (%)			[✂]
Inter-available fares (%)			[✂]
MOIRA analysis	**All TOCs (£000)**		**Arriva TOCs' share (%)**
Total gains	[✂]		[✂]

Source: The Parties and CMA calculations using MOIRA.
* Peak single set by ATW. Peak return £17.70.
† Off-peak single. Regulated peak day return £14.10, set by Northern and 'via Altrincham'.
‡ VTWC set dedicated walk-up peak day return.

Share of services and revenues

10.100 The Northern Franchise accounts for [50-60%] of revenue on the flow and ATW for [10-20%]. Post-Merger, the Parties therefore account for [70-80%] of revenue on the flow.

Closeness of competition

10.101 The Northern Franchise direct journey time is 74 minutes and the ATW indirect journey time is 61 minutes. The RR ratio of [✂] from the MOIRA analysis on this flow indicates that the Northern Franchise and ATW services may be close alternatives for passengers (in terms of their non-price offer).

Fare setting

10.102 ATW is the lead operator on this flow, setting the inter-available peak single (£16.50) and the off-peak return (£17.70), with the latter fare being regulated. The Northern Franchise offers a routed 'via Altrincham' ticket only valid on its services, which may attract passengers from the indirect services via Crewe. The Northern Franchise derives a large share of its revenue on the flow from the sale of these routed tickets.

10.103 VTWC offers a dedicated walk-up ticket, which may provide some competitive constraint on the Northern Franchise and ATW services and fares.

10.104 We also consider the scope for the Parties to increase unregulated fares post-Merger by examining the difference between unregulated fares and regulated fares (see Table 18). The inter-available off-peak return and the routed peak day returns are regulated on this flow.

Table 18: Chester to Stockport constraint from fare regulation

	Ticket type						
Chester-Stockport	*Open return*	*Peak day return*	*Peak single*	*Off-peak return*	*Off-peak day return*	*Off-peak single (Savers)*	*Off-peak single (CDS)*
Inter-available fare - flex	NA	NA	7%	0%*	NA	NA	
Routed fare - flex	-9%	0%*	9%	NA	14%	NA	15%
Actual price (£) - Inter-available	NA	NA	16.50	17.70*	NA		NA
Actual price (£) – Routed	15.30	14.10*	12.90	NA	12.10	NA	12.00
Actual price (£) - Dedicated		11.30	13.00	14.10	10.40		9.50

Source: CMA workings of Arriva data. The dedicated fare is offered by VTWC.
* Regulated fares.

10.105 We find that there is headroom for increases in the level of unregulated fares, including the inter-available peak single and the routed peak single and off-peak day return. We also find that there is significant headroom between the price of the Northern Franchise set routed 'via Altrincham' flow and the inter-available fare.

10.106 VTWC offers a dedicated walk-up ticket, which may provide some competitive constraint on the Northern Franchise and ATW services and fares but their services, although comparable in journey times, are indirect.

Other factors

10.107 We consider that the private car may be a weak alternative on this flow, given the significant variation in journey times. Furthermore, we note that (all else being equal) competition between transport options is likely to be stronger within mode than across modes and passengers are likely to have a preference for the rail services over the car or coach, as they are not prone to road congestion.

Summary and provisional conclusion

10.108 In summary, the Northern Franchise and ATW provide the majority of services on this flow. The Northern Franchise offers a routed 'via Altrincham' ticket only valid on its services, which may attract passengers from the indirect ATW (and other TOC) services via Crewe. VTWC offers a dedicated walk-up ticket, which may provide some competitive constraint on the Northern Franchise and ATW services and fares.

10.109 We therefore provisionally conclude that the Merger has resulted in or may be expected to result in an SLC on the Chester to Stockport flow.

Provisional conclusion

10.110 We provisionally conclude that the Merger has resulted in or may be expected to result in an SLC on the following flows:

(a) Leeds to Sheffield;

(b) Wakefield to Sheffield;

(c) Chester to Manchester; and

(d) Chester to Stockport.

10.111 We set out our detailed analysis of the flows on which we provisionally conclude that the Merger has not resulted in or may not be expected to result in an SLC in Appendix E.

11. The effect of the merger on overlapping bus and rail services

11.1 In this section we set out the competitive effects of the Merger on the overlapping bus and rail services, ie examine whether the Merger may result in an increase in fares and/or a degradation of non-price aspects of the Parties' bus and rail services on flows where Arriva's bus services overlap with the Northern Franchise (including journey time, frequency of service and service quality).

11.2 We considered the Parties' ability and incentive to increase fares or degrade non-price aspects of Northern Franchise rail services as a result of the Merger as lost customers from the Northern Franchise could be re-captured by Arriva's local bus services. As set out in the assessment of regulatory constraints in Section 8, we provisionally conclude that the Parties have limited ability to change non-price aspects of their franchised rail service offerings (see paragraph 8.558.58). We also provisionally conclude that the Parties' ability to raise certain fares is limited by fare regulation (see paragraphs 8.55 to 8.58).

11.3 We therefore focus our competitive assessment on whether the Parties' may have the ability and incentive to increase fares or degrade non-price aspects of their local bus services as a result of the Merger given that customers lost from Arriva's local bus services may be captured by the Northern Franchise.

11.4 We focused our assessment of the competitive effects of the Merger on the 89 flows failing the filters set out in Section 9.

Framework for the competitive assessment

11.5 In this section we set out our approach to assessing the Parties' ability and incentive to increase bus fares or degrade bus services as a result of the Merger.

The Parties' ability to increase bus fares or degrade bus services post-Merger

11.6 There are a number of ways in which Arriva could attempt to increase the profitability of its bus services post-Merger or encourage bus passengers to switch to the Northern Franchise. For example:

(a) By selectively increasing fares on flows where there is scope to do so. For example, where the bus fare is below the rail fare on an overlap flow on a route but the bus and rail fares are the same on another overlap flow on the route, Arriva may be able to raise the bus fare on the flow on which there is a fare differential with rail.

(b) By reducing frequencies and/or the hours of operation of bus services, for example by changing the times of the first or last bus service.

(c) By diverting buses to bus stops outside the catchment area of the railway station in order to divert passengers onto rail services from bus services.

11.7 The Parties told us that Arriva had little ability to flex fares on individual flows because fares must be priced consistently across fare stages.[211] The Parties said that in other bus operations across the Northern Franchise area, the graduated fare structure meant that the ability to increase the fare on a particular sub-segment of a route, without broader consequential changes to the fare structure, was constrained by the next price point in the graduated structure.[212]

11.8 Fares on individual flows may be constrained by graduated fare structures. However, this may not mean that Arriva has no ability or incentive to adjust fares within a range determined by existing fare stages.

11.9 In relation to certain flows, the Parties told us that Arriva's ability to increase fares was limited as Arriva's area tickets (such as the 'All Yorkshire Zone'

[211] Arriva initial submission, paragraph 10.19.
[212] [✄].

Arriva network ticketing scheme), which have zonal pricing, act as an upper limit to Arriva's fares on individual flows and routes.[213]

11.10 The Parties also told us that Arriva's ability to flex fares was constrained on some routes by the availability of multi-operator tickets.[214] We consider that the availability of multi-operator tickets may be a constraint on Arriva's scope to adjust fares because passengers have the ability to switch to multi-operator tickets if those tickets are cheaper.[215]

11.11 We provisionally conclude that the existence of multi-operator tickets may only constrain Arriva's ability to set fares for its bus operations in certain circumstances, as a multi-operator ticket may only act as a constraint if it creates a fare ceiling that is likely to be binding, ie if Arriva's fares are the same as, or just below, the multi-operator fare.

11.12 We consider fare stages, Arriva's area tickets and multi-operator tickets, where relevant.[216]

11.13 The Parties also told us that Arriva might not be able to adjust service quality on buses because of existing regulatory constraints. For example, the Parties said that the existence of VPAs or QPSs reduced Arriva's ability to flex a service at the flow level.[217] However, we have not received evidence on the remaining flows on how Arriva's relationships with councils or PTEs inhibit Arriva to flex its fares or services.[218]

The Parties' incentives to raise bus fares or degrade bus services post-Merger

11.14 The Parties told us that in setting fares, Arriva needed its fares to remain competitive or become more competitive with rival bus operators and that fares needed to remain competitive or become more competitive with other modes of transport in certain instances.[219] The Parties also told us that a number of other factors, including regulation, potential competition and entry restricted Arriva's incentives to increase fares. We consider these factors below.

213 [✂].
214 Arriva initial submission, paragraph 10.21.
215 Arriva does not have the ability to increase multi-operator fares and needs the consent of all parties involved in providing these tickets.
216 In particular, we note the presence of a flat fare structure in Merseyside.
217 Arriva response to issues statement, paragraph 5.2.
218 [✂].
219 Arriva initial submission, paragraph 10.24.

Flow revenue as a proportion of route revenue

11.15 The Parties told us that due to the costs involved in changing the fare structure and/or degrading service quality, Arriva had a very low incentive to adjust fares if the revenue share of a flow in the overall route is very small.[220]

11.16 The Parties also told us that as each flow was part of a route, which itself was part of a wider bus network, a reduced service or higher price on one flow was likely to have consequences for other flows on the route. The Parties said that, on the supply side, any cost savings from reducing bus frequencies or increasing fares were uncertain and case specific and that bus companies optimised their networks by interworking buses between different routes during the day.

11.17 We note that adjusting the fare stage on a flow may have relatively low costs (subject to not adversely affecting the coherence of fares on the wider route) and that the Parties may therefore have an incentive to increase fares at the flow level if competition is reduced as a result of the Merger.

11.18 However, adjusting non-price aspects of a flow, such as frequency or other aspects of the service, including the quality of buses, would affect the whole route and therefore the incentive to adjust non-price aspects may depend on the importance of the flow to the route as a whole. We therefore consider that the Parties are less likely to have an incentive to adjusting factors such as frequency and service quality that affect the whole route unless the flow(s) on which competition concerns arise account for a significant part of the route.

11.19 As set out in Section 9, we filter out flows on which flow revenue accounts for less than 10% of route revenue (see paragraph9.26). We also consider the proportion of route revenue accounted for by a flow in the flow-by-flow competitive assessment as a measure of the Parties' incentive to adjust bus fares or services in response to changes in the competitive conditions on a flow as a result of the Merger.

Northern Franchise profit sharing

11.20 The Parties also told us that they had no incentive to move passengers from Arriva bus services to the Northern Franchise due to the requirement to share a proportion of Northern Franchise profits with the DfT above a certain threshold.

[220] Arriva initial submission, paragraph 10.24.

11.21 We examine the profit sharing thresholds in relation to rail services in Section 8 (see paragraph 8.28). Although profit sharing does not restrict the Parties' behaviour directly, it may affect incentives on Arriva to increase the patronage of the Northern Franchise over and above its projected levels.

11.22 Given the relatively small number of flows that are under consideration, we do not consider that this can be expected to have a direct impact on Arriva's incentives in respect of the relevant flows, although we recognise that if Arriva's performance is strong across the Northern Franchise there could be a scenario where the incentives are affected by the profit share arrangements.

The duration of the Northern Franchise

11.23 The Parties said that Arriva had been in the bus sector for approximately 30 years and, in contrast, the Northern Franchise was transitory, lasting for nine to ten years. The Parties said that this acted as a considerable commercial disincentive to Arriva to make modifications to its bus services with a view to potentially recouping associated losses via Northern Franchise rail services and that after franchise expiry Arriva may risk losing the revenue generated on rail by shifting passengers from bus to rail.

11.24 We provisionally conclude that the limited time of the Northern Franchise award does not reduce Arriva's incentive to optimise its profits across its rail and bus business.

(a) While transitory in nature, nine to ten years is a sufficient amount of time to implement changes to take into account additional profit opportunities for Arriva and significantly exceeds the two-year horizon over which the CMA would typically assess the competitive effects of a merger. In particular, as the Parties have argued, if there is a relatively low cost to entry or expansion, the transitory nature of the Northern Franchise does not constitute an effective barrier to implement otherwise profitable changes.

(b) In addition, after the expiry of the Northern Franchise, Arriva bus and Northern rail franchise services will be able to compete for passengers on the overlapping routes and flows. In particular, with the expiry of the Northern Franchise contract, Arriva can respond to the increase in competition by decreasing fares and potentially attracting customers from Northern Franchise services.

Closeness of competition between bus and rail services pre-Merger

11.25 The Parties told us that it was critical to assess whether the bus and rail services in question competed in any meaningful way pre-Merger.

11.26 We assess the closeness of competition between bus and rail services on overlapping flows by calculating the GJC of services. The GJC is a measure of the overall cost of a journey and is made up of a number of component costs including fares, journey time and frequency.

11.27 The Parties told us that they supported the use of a GJC approach, along with other evidence of customer preference and switching behaviour, as a measure of the closeness of competition between bus and rail.[221] The Parties said that a 10% difference between GJC on bus and rail was an appropriately cautious benchmark by which to assess whether or not overlapping bus and rail flows were likely to be close substitutes as a 5 to 10% threshold is used in the 'SSNIP' test commonly used to examine whether two goods or services are in the same market.

11.28 We consider that a threshold of 10% is too low to be used as a screen to exclude overlapping flows from detailed assessment given that GJC calculations do not capture all elements of passenger preferences. Adopting a threshold of 10% would therefore risk excluding flows on which there may be competition concerns.

11.29 We adopt a more cautious threshold of 25%, above which we consider that bus and rail services are less likely to be close and that, as such, Arriva's incentive to increase bus fares, or decrease service offering is likely to be lower on these flows post-Merger. We therefore prioritise our detailed assessment of overlapping flows where the GJC differential is below 25%. In the competitive assessment we consider the level of GJC in the assessment of each flow 'in the round' alongside other evidence.

Competition from other operators

11.30 We initially exclude flows from detailed assessment where third party operators are likely to be an effective competitor, as the incentives to flex fares or service quality are likely to be diluted if a significant proportion of passengers have alternative operators to which they may divert in the event of degradation of the Parties' rail services (see paragraph 9.11).

[221] We use a different methodology to the Parties to calculate GJC. In particular, we use the approach suggested in the Passenger Demand Forecasting Handbook (PDFH), while the Parties use the approach specified in WebTAG. We note that, in contrast to the PDFH, WebTAG does not account for frequency.

11.31 In examining the remaining flows, we consider the number of competitors and the frequency of their services.

Profit incentive

11.32 The Parties told us that, on the flows failing the filters, the profitability of increasing bus fares or degrading service quality was [✂].[222] As a result, the Parties said that Arriva would not have a material incentive to flex fares or service quality on those flows.

11.33 The Parties used the diversion ratios from their survey to calculate the diversion of passengers to the Northern Franchise (ie revenue retained) and to other competitors or modes (ie revenue lost) in response to a 10% increase in bus fares, reduction in service frequency and cancellation of service. The Parties told us that their analysis suggested that, on average, in each of the scenarios the increase in profitability from such a strategy was low.

11.34 We have a number of methodological concerns regarding the Parties' analysis:

(a) As we set out in paragraphs 11.40 to 11.50, we have concerns about the reliability of the Parties' survey and the resulting estimates of the diversion ratios at a flow level and provisionally conclude that whilst we can place some evidential weight on the average results, the flow level results may be unreliable.

(b) For flows that were not surveyed, the Parties used an average diversion ratio. However, this might misrepresent the actual diversion ratio on a flow. As the survey results indicate, there is variation in the diversion ratios between flows. The profit incentive on individual flows might therefore be over or underestimated. On these flows, we note that the diversion ratios do not account for flow-specific characteristics.

(c) We have some concerns regarding the methodology used to calculate the profit incentive based on diversion ratios. In particular, as set out in the discussion of the Parties' survey of certain overlapping bus and rail flows (see paragraphs 11.40 to 11.50), we have concerns regarding the accuracy of the diversion ratios at flow level and, consequently, regarding their use in the profitability calculations.

[222] [✂].

11.35 In response to the Parties’ profitability analysis, and notwithstanding the issues discussed above, we considered the diversion ratio necessary for upwards pricing pressure on an Arriva bus flow. In particular, we used the gross upwards pricing pressure index (GUPPI) analysis to estimate the implied diversion ratio necessary for a GUPPI of 5 to 10%.[223] The advantage of this approach is that it provides us with a lower bound of the diversion ratio for which a price increase would be profitable.[224]

11.36 The implied diversion ratio suggests that, on average, the diversion needed for a price rise to be profitable, is [✂]% at the 5% GUPPI level and [✂]% at the 10% GUPPI level.[225] We therefore consider that, on average, the implied diversion ratio for an upwards profit pressure is low (ie the competitive interaction between bus and rail would not have to be high for the Parties to have an incentive to increase bus fares as a result of the Merger).

Other factors

11.37 In our assessment of the overlapping bus and rail flows we consider whether any other factors are relevant to the assessment. For example, we consider:

(a) local geographic factors or market conditions that might affect competition between bus and rail services on individual flows; and

(b) evidence of substitution between bus, rail and private transport at an aggregate level (ie across all flows surveyed) from the Parties’ survey (see paragraphs 11.40 to 11.50).

11.38 We focused our assessment of the competitive effects of the Merger on the 89 flows failing the filters set out in Section 9.

11.39 Before turning to the detailed competitive assessment of the 89 flows, we set out our assessment of three further areas of evidence submitted by the Parties:

(a) The Parties’ survey of overlapping bus and rail flows.

(b) Barriers to entry and expansion.

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[223] The GUPPI formula is: $GUPPI_{Bus} = {}^{margin_{Rail}fare_{Bus}}/_{DR_{Bus\,Rail}fare_{Rail}}$. We solve this equation for the diversion ratio (DR) from bus on rail, for GUPPI values of 5% and 10%.
[224] For the implied diversion ratio approach we need to assume a profit margin on rail. We assumed an 80% profit margin, which we consider to be at the lower end of variable profit margins of TOCs.
[225] The maximum at the 5% level is an implied diversion ratio of [✂]% and at the 10% level is an implied diversion ratio of [✂]%.

(c) Separation between Arriva UK Trains and Arriva UK Bus.

The Parties' survey of overlapping bus and rail flows

11.40 The Parties commissioned a survey of bus passengers on 18 of the 65 flows remaining after application by the Parties of a set of filters on overlap flows. A detailed description of the survey design, assessment of the survey quality and the results of this survey is set out in Appendix F.

11.41 The CMA monitored the survey fieldwork and identified a number of issues:

(a) A lack of care in ensuring that respondents' bus journeys corresponded to an overlap flow.

(b) Variations in the extent to which individual interviewers chose to conduct full interviews at the bus stop or collect passenger contact details for follow up internet or telephone interviews.

(c) Variation in the extent to which interviewers read questions out as written in the survey script.

(d) The survey questionnaire included a suite of diversion questions, covering diversion behaviours in the three hypothetical scenarios of a 10% increase in bus prices, a reduction in the frequency of the bus service, and the bus service not being available at all (so-called 'forced diversion'). We observed that the wording of the frequency question was long and was paraphrased, in different ways, by most interviewers.

11.42 The impact of these variations will have been accentuated, at the flow level, by the small number of interviewers working on each surveyed flow.

11.43 Furthermore, the CMA identified the following issues in relation to the survey methodology:

(a) We note that the number of passenger respondents was less than 100 on all but seven of the surveyed flows.

(b) The questionnaire was long and made little attempt to make respondents think about other modes of transport. This may have conditioned responses to the diversion questions.

(c) The diversion questions were hypothetical and responses may not reflect the actual behaviour that the respondent would take if the circumstances of the question were to be realised.

11.44 Notwithstanding these concerns, we provisionally conclude that the survey results may be used to give a measure of the closeness of competition between bus and rail services aggregated across surveyed routes. However, there is a wide margin of uncertainty around diversion estimates, even at this aggregate level, and to the extent that some interviewed passengers' journeys may not have been on overlap routes, and would therefore have less viable train alternatives, and may not have picked up the full extent of diversion from bus to rail.[226]

11.45 In relation to the survey results for individual flows, we take a more cautious approach due to the combination of the aforementioned concerns regarding the survey results and its methodology, interviewer variability, the flow specific problems we observed, the absence of a systematic assessment of interviewer quality on every flow and low sample sizes. We have therefore only used results for individual flows in combination with each other to look for relationships between estimated diversion ratios and other, non-survey derived, competition metrics.

11.46 The survey results show much more diversion to rail than to car. Aggregating results across 16 surveyed flows,[227] 17% of survey respondents said that they would not have taken the bus journey in response to a 10% price rise.[228] Of those we estimate from the survey that 46% would have travelled by train instead while 7% would divert to private car, van or motorbike.

11.47 The equivalent estimates from the forced diversion question are 33% to train and 16% to car, van and motorbike. Two-thirds of respondents said they did not have access to private transport, either as driver or passenger, making most of them dependent upon public transport for the journey.

11.48 These results for diversion to transport modes translate closely into more formal calculations of diversion to Northern Franchise train services. Again, aggregating across 16 surveyed flows we estimate price diversion of 36% to Northern Franchise services when including diversion to other Arriva-owned bus and train alternatives in the denominator of the calculation and 37% when it is excluded. The equivalent ratios for the forced diversion question are 27% and 29%, respectively.

11.49 These results appear to contradict other evidence, from Arriva and third parties, suggesting that private cars exert a much stronger competitive

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[226] We have particular concerns in this regard about interviews on the Liverpool to Halewood flow and have removed these from our analysis. We have also decided not to look at results for the frequency diversion questions. We were only able to monitor a small fraction of interviews and did not visit every surveyed flow.
[227] The 18 surveyed flows minus the two services from Liverpool to Halewood.
[228] Only paying passengers were asked the question.

constraint on buses than do trains. However, our understanding is that this evidence refers to the generality of bus routes and flows across the country, whereas the survey results refer specifically to a selection of flows in which rail travel is a viable alternative to the bus.

11.50 We estimated diversion ratios (to Northern Franchise services) for individual surveyed flows and plotted the results against a range of other, non-survey derived, competition metrics calculated for the same flows. There were no strong correlations. We provisionally conclude from this that either the underlying relationships were not strong or that the survey estimates at flow level were not of sufficient quality to enable such relationships to be apparent. The set of metrics plotted was not comprehensive and did not include, for example, market shares due to the incompleteness of data.

Entry and expansion in bus services

The views of the Parties

11.51 The Parties told us that the bus industry was characterised by extremely low barriers to entry and expansion, with the only requirements for entry being:[229]

(a) access to vehicles;

(b) access to an appropriate depot or other form of operating base; and

(c) obtaining relevant licences.

11.52 The Parties said that the regulatory barriers to operate a bus service were minimal, that there were limited economies of scale and scope and that incumbency advantages were very low.[230]

11.53 In relation to access to bus depots, the Parties told us that depot access was not necessary to enter new areas as more basic parking facilities, such as outstations, could be used, with maintenance being carried out at more distant depots or subcontracted.[231] In this regard, Arriva said that it was in the course of putting in a bid for a contract in [✂] even though it does not have a depot in the area as it considers that finding a depot or suitable place from which to operate would not be a significant obstacle.

[229] Arriva initial submission, paragraph 12.2.
[230] Arriva initial submission, paragraphs 12.5–12.10.
[231] The Parties noted that this point was made by several bus operators' submissions to the CC market investigation.

11.54 The Parties also provided evidence regarding the distance of existing bus operators' depots from the overlapping bus and rail flows which we prioritised for assessment following the application of filters. The Parties said that there was at least one competitor depot within 30 minutes' drive time of each flow and that the vast majority were within 15 minutes.

11.55 In relation to access to bus stations, the Parties told us that there were [✂] bus stations within the area of the Northern Franchise which were owned by Arriva and, in most cases, bus stations used by Arriva in this area were owned and run by the PTE.[232] The Parties said that charges for access to bus stations were generally set at a fair, reasonable and non-discriminatory level.

11.56 In relation to the cost of entry or expansion, the Parties told us that the sunk costs of entry or expansion were low and that the costs would depend on the scale involved. The Parties said that small scale entry (eg one to six buses) could take place within three months and with minimal upfront costs. Entry on a mid-scale (eg 10 to 40 buses) by an existing operator, including locating a depot, could take around three to six months and cost in the range of less than £[✂] to £[✂].[233]

11.57 The Parties also said that the presence of third party operators competing on bus routes operated by Arriva within the geographic areas overlapping with the Northern Franchise showed that the threat of retaliation or aggressive responses from an incumbent operator were not sufficiently material to deter entrants.[234] The Parties told us that achieving sustainable returns on services was a consideration for a potential entrant and [✂].[235] However, the Parties said that this had not stopped Arriva from entering or expanding its bus operations in competition with other bus providers where it considered its proposal to be viable or from competing strongly head to head with other operators.[236]

11.58 The Parties further stated that entry barriers were sufficiently low such that the threat of potential entry or expansion acted as a constraint on commercial behaviour, even absent the entry actually occurring.[237] [✂].

[232] [✂].
[233] [✂].
[234] Arriva initial submission, paragraph 12.11.
[235] [✂].
[236] The Parties provided a number of examples of instances where Arriva had expanded its services in competition with incumbent operators, including in circumstances where it considered the possibility of retaliation, The Parties also indicated a number of third party operators had entered, expanded or enhanced their competitiveness on routes where Arriva already operated. [✂].
[237] Arriva initial submission, paragraph 12.1.1.

Arriva provided examples of a number of instances in its internal documents which show it was mindful of the threat of potential competition.[238]

The views of third parties

11.59 Third parties had mixed views as to the extent of barriers to entry and expansion. Other large bus operators told us that barriers to entry and expansion were low, particularly for established players (where depots were available).[239,240]

11.60 However, one smaller operator told us that it would have to be 'aware of the potential for retaliatory competition' in deciding whether to enter.[241] This concern was reflected by a number of LTAs which told us that there had been little threat of entry by other bus operators,[242] and that incumbents would be likely to be very aggressive in any response to ensure a new entrant could not effectively compete.[243]

11.61 We consider the views of third parties in undertaking the flow-by-flow assessment of bus and rail overlaps. We also spoke to potential entrants to certain individual flows (see, for example, paragraphs 11.117 and 11.118).

CMA assessment

11.62 We consider evidence from the Parties and third parties. We also consider the extent to which the likelihood of entry and expansion has changed since the CC's market investigation into local bus services in 2011, with a particular focus on the competitive conditions in the Northern Franchise area.

11.63 In considering barriers to entry and expansion, we note that it is important to distinguish between the barriers that would be faced by a *de novo* entrant and the barriers to the expansion of existing operators into new areas. For example, if a bus operator is already licensed in an area and has access to a local depot and vehicles, barriers to expansion may be lower even if barriers to *de novo* entry are higher. Moreover, where operators already run a number of routes they may benefit from the density of their local operations

238 [✄].
239 [✄].
240 [✄].
241 [✄].
242 [✄].
243 [✄].

and may also have greater access to finance in order to deter (or survive) an aggressive local reaction by incumbent operators if they enter new routes.

Evidence from the local bus services market investigation

11.64 In December 2011, the CC's review of local bus services found in relation to barriers to entry and expansion that:

(a) there are some sunk costs associated with introducing a new service due to the relatively long period required to achieve profitability (which may take 12 to 18 months), as well as the costs of establishing a base for operations and setting up a fleet;[244]

(b) examples of aggressive local reactions by incumbent operators, particularly where the incumbent had better access to finance to enable it to withstand these conditions for a protracted period;[245]

(c) examples of strategic retaliation as a response, where an incumbent reacts by targeting the entrant, but on its existing routes; and[246]

(d) network scale, frequency of services, and 'lock-in' (ie selling multiple tickets in advance) can act as barriers to entry protecting incumbents with regard to network tickets.[247]

11.65 The CC identified other potential entry barriers including access to bus stations and depots.[248]

11.66 The CC also found that regulation and local knowledge were not significant barriers to entry. It did not conclude on the importance of achieving economies of scale although it was noted that operators of small depots may be disadvantaged to some extent.[249]

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[244] CC local bus services market investigation, paragraphs 9.16, 9.25–9.32.
[245] CC local bus services market investigation, paragraphs 9.41–9.57.
[246] CC local bus services market investigation, paragraphs 9.58–9.65.
[247] CC local bus services market investigation, paragraph 9.104.
[248] However, the report noted that there are some examples of times where these barriers were not realised in practice, stating that 'what is relevant as a barrier is that a potential entrant will not be able to predict in advance whether or not these costs will arise and their extent. Moreover, if it takes a long time for a route to build custom and achieve profitability, and if entry leads to intense competition, the size of these costs might be high. Therefore the risk of incurring these costs is likely to be perceived as significant, and it is these uncertain but potentially significant costs that act as the barrier'. CC local bus services market investigation, paragraph 9.208.
[249] CC local bus services market investigation, paragraphs 9.174–9.202.

Evidence of barriers to entry and expansion in the Northern Franchise area

11.67 We consider the extent to which the potential barriers to entry identified by the CC in 2011 are relevant to the assessment of the competitive effects of the Merger in the geographic region of the Northern Franchise in 2016.

11.68 The Parties told us that there had been significant changes within Arriva since the CC report, including new management being put in place. The Parties also said that the remedies that resulted from the market investigation had led Arriva to formalise its approach to access to depots. The Parties also noted the growth of the role and influence of PTEs, the increase of tailored partnership agreements and how these conditioned the conduct of bus operators.[250]

11.69 The Parties told us that a key factor in determining entry or expansion was whether there was unmet passenger demand that the new or existing operator could tap into. The Parties provided evidence of entry and expansion on a number of overlapping routes since 2012 for certain Arriva divisional areas:[251]

(a) North East: two examples of small operators introducing services on six routes, and a number of examples of entry and expansion on particular routes by Go North East and Stagecoach;

(b) Yorkshire Tiger: only a single example of entry by TLC in relation to a tendered service;

(c) Yorkshire: 15 examples of entry or expansion including by FirstGroup, Stagecoach, Arriva and small operators such as M-Travel, SGI, Utopia and Globe Holidays, with seven being through tendered services; and

(d) North West: 12 examples of entry or expansion with four being by Stagecoach and one by Arriva and with examples of smaller operators such as Routemaster, Avon Buses, Link Network and Rotala Diamond Bus.

11.70 These examples indicate that whilst entry and expansion are feasible, when set against the number of bus routes operated by Arriva in the relevant regions, entry appears to have been limited. Moreover, the Parties told us that they were not currently aware of any expected sizeable (ie across

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[250] [✂].
[251] [✂].

multiple flow) market entries or exits in the bus sector in the Northern Franchise area within the next three years.[252]

11.71 We note that a number of the barriers to entry and expansion identified by the CC may persist and note the following factors in particular:

(a) High levels of local concentration: For example, two-thirds of local authority areas in England (excluding London) have a single operator with a greater than 50% share of bus trips and 10% of areas have a single operator with a greater than 90% share.[253] This level of local concentration may allow incumbents to benefit from economies of scale and to credibly threaten to retaliate against operators seeking to enter their 'core territories'.

(b) Arriva's EBIT margins: Arriva's EBIT margins for its bus operations in the regions overlapping with the Northern Franchise (as stated in its management accounts) are [✂], and [✂] from [✂] in 2011 to [✂] in 2015.[254]

(c) Availability of depots: The Parties told us that access to depots was straightforward and that access to depots was not necessary to enter new areas (see paragraph 11.53). Arriva provided a number of examples of operators gaining access to depots.[255] Arriva also told us that it withdrew [✂] services, prompted by a notice from the landlord of its [✂] depot to vacate the premises within six months. Arriva said that it was unable to find suitable alternative premises within this timescale,[256] although it subsequently stated that it was able to use a smaller site based out of [✂] to continue providing some of the services and that there were very particular circumstances in this case, including the fact that the depot was let on a short-term basis.[257]

11.72 Arriva's internal documents provided only limited evidence that it has implemented aggressive and/or strategic responses to competitive entry or expansion. For example, when a new entrant ([✂]) was targeting tender

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[252] Arriva initial submission, paragraph 12.13.
[253] DfT, table bus1001b.
[254] Based on management accounts for Arriva North East, North West, and Yorkshire. Arriva also provided a reconciliation between management accounts and statutory accounts for 2011 to 2014, which shows a [✂] EBIT margin, but also shows [✂] in 2011 to [✂] in 2014. The Parties noted that the margins were [✂] the published margins of the Go-Ahead regional bus business in 2011 and the Stagecoach regional bus business in 2015.
[255] For example, the Parties told us that Arriva had reached an agreement with Garnetts to park a number of its buses at its depot near Bishop Auckland and in Alnwick, Arriva negotiated an agreement with a local coach operator to share its depot. The Parties also told us that Yorkshire Tiger had moved to a new depot in Bradford within 12 weeks and that bidders for the [✂] tender would be offered a building to use as a depot by York City Council. [✂].
[256] [✂].
[257] [✂].

work with low cost bids, an Arriva internal document noted that Arriva intended to [✂].[258]

Operator scale

11.73 We consider whether entry or expansion would be more likely to come from smaller or larger operators. In this regard, the Parties told us that different competitors had different characteristics. For example, the Parties said that smaller operators tended to have lower operational costs and legacy issues (such as pension commitments), whilst larger operators had greater access to investment and higher quality vehicles.[259]

11.74 Some evidence suggests that larger operators (such as FirstGroup, Stagecoach, and Go-Ahead) may be more likely to sustain successful entry than smaller operators. Data provided by the Parties regarding entry, expansion and exit on Arriva's overlapping routes with the Northern Franchise indicate that a number of smaller operators have entered the area but then exited within a few years, although a small number of new operators have sustained their services.[260]

11.75 A number of bus merger investigations undertaken by the CMA and its predecessor bodies found similar evidence.[261,262,263]

Tendered and commercial services

11.76 We also consider whether LTAs could use tendered services as a method to encourage other companies to enter or expand into their local geography.

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[258] [✂].
[259] [✂].
[260] Examples of operators exiting the sector include Star Travel, SGI, Tates Travel and Phoenix Taxis [✂]. M Travel, Ladies Only Travel, Spirit Buses and TLC are examples of smaller new operators in the Yorkshire or Northumberland areas which continue to operate [✂].
[261] McGill's Bus Services/Arriva Scotland West (2012, Phase 2); CC McGill's Bus Services Limited/Arriva Scotland West Limited merger inquiry, paragraph 15, '[…] in our view, issues of route profitability and possible incumbents' reaction to entry would provide disincentives for smaller operators in particular to enter on new flows. We thought it unlikely that small-scale entry would act as a sufficient constraint.'
[262] Diamond Bus Company/FirstGroup (2013, Phase 1); OFT Completed acquisition by the Diamond Bus Company Limited of the bus business of FirstGroup plc in Redditch and Kidderminster, paragraph 106, 'However, taking account of all of the evidence available to it, the OFT does not consider that actual entry would be timely, likely or sufficient in scope to prevent a substantial lessening of competition from arising as a result of the merger. The OFT also recognises that in this case the prevalence of dynamic supply-side responses and bus operators may create a perceived constraint through the threat of entry or expansion, but does not consider that the evidence points to this perceived potential competitive threat being sufficient to allay its concerns in this case.'
[263] Arriva/Centrebus (2014, Phase 1); CMA Completed acquisition by Arriva Passenger Services Limited of the remainder of the entire share capital of Centrebus Holdings Limited, paragraph 105, 'However, the CMA found that barriers to entry may be significant, particularly for new entrants. One third party submitted that obtaining planning permission to build a new depot is difficult. Further, the CC found that the expectation of reprisals from the incumbent operator may reduce the incentives to enter into new areas and as such create a barrier to entry. The CMA notes that Arriva internal documents suggest that aggressive scheduling may take place in response to new entry.'

For example, one LTA told us that 'there is little scope for widespread competition and this influences new entrants to the bus market. The council is however able to encourage new entrants using tendered contracts as a starting point.'[264] However, it is not clear how widespread this practice is, nor how easily an LTA is able to identify specific flows on which any measures to increase entry or expansion should be targeted.

11.77 The Parties told us that tender opportunities, although declining in numbers overall, remained exceptionally competitive and continued to assist operators in entering a new route or area.[265] The Parties said that PTEs exercised close oversight of local bus operators and were kept informed of changes to services and routes, allowing PTEs to gain an insight into routes with little competition or where service levels were reducing or fares rising.

11.78 We note that any future changes in policy or regulation that increase the number of tendered services available may act to reduce barriers to entry. However, it is not clear that this would be sufficient to negate all the barriers highlighted above (eg this would not prevent strategic retaliation from incumbent operators), and the necessary time between tender processes implies that the entry or expansion is unlikely to be timely on specific flows where there is no tender forthcoming.[266]

Multi-operator tickets

11.79 The Parties told us that multi-operator tickets made it easier for small scale operators to enter or expand to compete sustainably with larger incumbents.[267] The Parties said that the relevant schemes were open to entry from smaller operators and often encouraged smaller operators to join.[268] The Parties also added that the investment required to join such schemes was now reduced as many buses had smart card readers, most operators had the necessary ticketing systems in place as they were often required for tenders and the managing organisation was often willing to allow smaller operators to use its back office data platforms.

11.80 However, the potential for multi-operator tickets to facilitate entry may be limited by a number of additional factors, including:

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[264] LTA [✂] response to market questionnaire, question 21.
[265] The Parties told us that [✂]. The Parties also said that CT Plus had commenced local bus operations by winning the Dewsbury Free Town Bus contract. [✂].
[266] For example, Northumberland County Council's recent tender for services between Morpeth and Thornton (part of Arriva NE's X14 service) was for five years.
[267] Arriva initial submission, paragraph 12.9.
[268] The Parties provided a copy of minutes relating to the [✂]. scheme in [✂]. which included a decision to contact smaller operators to ask them to participate [✂].

(a) a multi-operator ticketing scheme may lower some of the barriers to entry and expansion (eg the time before a service becomes profitable), but would not affect others (eg strategic retaliation);

(b) any effect can only be seen in locations where a multi-operator scheme is active;

(c) the new operator would need to join the multi-operator scheme, which would also require surrendering some commercial flexibility of the new entrant (eg the setting of prices); and

(d) the multi-operator scheme is likely to involve a degree of investment (eg in compatible ticketing systems) for certain operators, particularly *de novo* entrants.

11.81 We therefore provisionally conclude that multi-operator tickets are unlikely to sufficiently mitigate other barriers to entry or expansion.

Flow-level assessment of barriers to entry and expansion

11.82 We examine the competitive effects of the Merger at the route and flow level as competitive conditions may vary by route and flow. We note that the level of barriers to entry and expansion may also differ between flows and routes depending on the presence and scale of potential competitors and the local commercial conditions. We therefore examined barriers to entry and expansion at the route and flow level.

11.83 In this regard, the Parties assessed the constraint from potential competitors on the bus-rail overlaps which were prioritised for further assessment following the application of filters.[269] The analysis assessed how many of the flows had a competitor depot within 30 minutes' drive-time of either the start or end of the flow. As a sensitivity check, the analysis was also undertaken based on whether competitor bus depots are located within 20 and 15 minutes' drive-time of the rail stations at either end of the flow.

11.84 We consider this analysis as part of our competitive assessment. Where potential competition concerns are identified on flows we place particular weight on examining whether entry or expansion would be timely, likely and sufficient to remedy any SLC.

11.85 In examining whether entry or expansion would constrain the Parties on specific flows, we note that an entrant would need to be able to profitably

[269] [✂].

operate not only on a particular flow, but on a sufficient proportion of the longer routes of which they are part.[270]

Provisional conclusion

11.86 Although structural barriers to entry or expansion are relatively low, uncertainty regarding both the profitability of a route and the response of incumbents may act as barriers to entry. This is reflected in the limited number of examples of entry or expansion on any significant scale in the area of the Northern Franchise, as well as concentration levels and profitability in the bus sector.

11.87 We provisionally conclude that whilst *de novo* entry by new operators is unlikely to be timely, likely and sufficient to constrain the Parties' commercial behaviour, expansion by existing operators may act as a competitive constraint in certain areas, particularly where existing operators have a sizeable presence in the local area.

11.88 We note that the likelihood of entry or expansion by existing operators into new areas may vary according to the presence and scale of nearby bus operators and local competitive conditions. We therefore consider the level of barriers to entry and expansion on a flow-by-flow basis.

Separation between Arriva UK Bus and Arriva UK Trains

11.89 The Parties told us that they saw no potential advantage to coordinating strategy between the bus and rail divisions and noted that Arriva's existing structure is evidence of this.[271] The Parties also told us that there are separate [✂] for its bus and rail divisions which preclude any realistic ability or incentive for coordination across Arriva's bus and rail network tickets.

11.90 We considered the extent to which Arriva's current organisational structure may restrict the commercial incentives of Arriva UK Bus to respond to the Merger (ie whether the incentives of Arriva UK Bus division will change as a result of the Northern Franchise rail services being operated by ARN, which is also part of Arriva).

11.91 Arriva is currently divided into three divisions – Arriva UK Trains, Arriva UK Bus and Mainland Europe.[272] Arriva UK Trains operates a number of TOCs

[270] For example, there is likely to be a minimum efficient scale in order to ensure that bus and driver utilisation is sufficiently high, and so there is likely to be a need for an entrant to provide multiple routes within a geographic area.
[271] Arriva initial submission, paragraph 1.14.1.
[272] See paragraph 3.4.

and Arriva UK Bus is split into regional management areas, including Arriva North West and Wales and Arriva Yorkshire and North East.[273]

11.92 We note, however, that Arriva is a commercial organisation and therefore has incentives to ensure that it profit maximises post-Merger, which may include facilitating a degree of coordination between its bus and rail services in certain geographic areas.

Assessment of bus and rail overlaps

11.93 We examined the 89 flows remaining after applying the filters set out in Section 9. If the individual flows raised competition concerns, we examined the route in its entirety, including the overlapping flows which passed the filters and prioritisation.

11.94 We also examine flows surveyed by the Parties even where these were filtered out. We therefore examine the following additional bus routes:

(a) route 110;

(b) routes X14, X15 and X18; and

(c) route 415.

11.95 Table 19 sets out the overlapping bus routes and number of flows following the application of filters by Arriva depot.

Table 19: Overlapping bus and rail routes and flows

Depot	*Routes*	*Number of flows*
Redcar	X3/X3A, 3, X4, 63, 64, 81/81A	20
Castleford	188, 189	12
Wakefield	110, 145, 147/157, 148, 149, 496	9
Darlington	5, 12, X66	6
Green Lane	6, 7, 15, 536	6
Dewsbury	202, 203	5
Elland	X58	5
Speke	76, 79, 80/80A	5
Leeds	737, 747	4
St Helens	352, 33	4
Stockton	28/28B, 29/29A	4
Waterloo	83/84	3
Durham	X12	2
Bolton	541	1
Honley	315	1
Jesmond	685	1
Wythenshawe	130	1
Elland	X58	3

Source: The Parties.

[273] See paragraph 3.6.

11.96 We used the framework for assessment set out above in order to assess the competitive effects of the Merger on the overlapping bus and rail flows.

11.97 Before considering the individual overlaps, we summarise our assessment methodology.

(a) We assess whether bus and rail services are likely to be close substitutes for passengers. We compare the GJC for bus and rail journeys as an indicator of whether passengers are likely to see bus and rail services as close substitutes. In addition, we use the individual components of the GJC to understand what drives the closeness of substitution, including:

(i) differences in fares (if bus and rail fares are similar we consider bus and rail more likely to be close substitutes);

(ii) differences in journey time (if bus and rail journey times are similar we consider bus and rail more likely to be close substitutes); and

(iii) differences in service frequency (if bus and rail service frequencies are similar we consider bus and rail more likely to be close substitutes). In our assessment, we consider whether a high frequency on one mode may compensate for a higher journey time on this mode.[274]

(b) We assess whether Arriva is likely to have the ability to increase fares or degrade its services post-Merger. We consider, where there is relevant evidence, the scope for multi-operator ticketing schemes to restrict the Parties' ability to increase fares.

(c) We assess whether Arriva is likely to have the incentive to increase fares or degrade its services post-Merger.

(i) We examine the share of route revenue which is accounted for by the flows remaining after filtering. If the flow revenue share is small, Arriva may not have a strong incentive to increase fares or degrade its services post-Merger. As we note in paragraphs 11.17 and 11.18, it is likely to be less costly for the Parties to change fares on a flow as relative to degrading services (which would affect the whole route). We therefore consider the threshold for the Parties to have

[274] For example, if the bus journey takes longer, but has a very high frequency it is likely to be a substitute to a relatively faster rail journey.

the incentive to degrade services on a flow is higher than the threshold for the Parties to have the incentive to increase fares on a flow.

(ii) If a flow has revenue close to the *de minimis* threshold of £10,000 we consider whether there may be any 'spillover effects' as a result of the Merger on the overall route (ie whether the change in competitive conditions on the flow as a result of the Merger affects competitive conditions on the wider route).

(iii) We consider competition from other bus and rail operators and, where relevant, other modes of transport.

(iv) We consider other evidence relevant to individual flows and routes such as whether some bus services are tendered, whether VPAs are in place and evidence from the Parties' internal documents.

(d) We assess whether entry and/or expansion is likely on a flow or route. In particular we take into account the following factors:

(i) We consider whether a bus operator is providing services in close proximity to, or on part of, the flow or route under consideration. Where we identify such a bus operator, we assess whether it is likely to enter, or expand, on the route in response to a fare increase or a degradation of service quality by Arriva, and therefore provides a competitive constraint on Arriva. We take into account the size of the bus operator in this assessment.

(ii) We consider whether a bus operator is running a route on part of the flow or route. We then assessed whether it is likely that the transport operator expands its operation on the route or flow under consideration.

11.98 Table 20 below summarises our assessment of each flow by route and depot:

Table 20: Assessment of overlapping bus and rail flows by route and depot

Depot	*Route*	*Origin*	*Destination*	*SLC or no SLC*
Redcar	3	Redcar	Lingdale	SLC
Redcar	X3/X3A	Middlesbrough	Lingdale	SLC
Redcar	X4	Middlesbrough	North Skelton	SLC
Redcar	63	Middlesbrough	Redcar	No SLC
Redcar	64	Middlesbrough	Ings Farm	No SLC
Redcar	81/81A	Marske	Stokesley	No SLC
Darlington	5	Darlington	Bishop Aukland	No SLC
Darlington	12	Hurworth	Middleton St George	SLC
Darlington	X66	Darlington	Middlesbrough	No SLC
Ashington	X14/X15/X18	Newcastle	Thropton/Berwick upon Tweed	SLC
Waterloo	83	Huddersfield	Denby Dale	SLC
Waterloo	84	Huddersfield	Denby Dale	SLC
Bolton	541	Toppings Estate	Bolton	No SLC
Castleford	167/168	Leeds	Castleford	No SLC
Castleford	188	Wakefield	Knottingley	No SLC
Castleford	189	Wakefield	Leeds	No SLC
Castleford	404	Micklefield	Cross Gates	No SLC
Dewsbury	202/203	Huddersfield	Leeds	No SLC
Dewsbury	262	Dewsbury	Huddersfield	No SLC
Durham	X12	Middlesbrough	Newcastle	No SLC
Elland	X58	Halifax	Rochdale	No SLC
Elland	536	Halifax	Huddersfield	No SLC
Green Lane	6	Warrington	Liverpool	No SLC
Green Lane	7	Warrington	Liverpool	No SLC
Green Lane	15	Huyton	Liverpool	No SLC
Honley	315	Honley	Huddersfield	No SLC
Elland	536	Halifax	Huddersfield	No SLC
Jesmond	685	Newcastle	Hexam	No SLC
Leeds	737	Bradford	Leeds-Bradford Airport	No SLC
Leeds	747	Bradford	Harrogate	No SLC
Selby	415	Selby	York	No SLC
Speke	76	Halewood	Liverpool	No SLC
Speke	79	Halewood	Liverpool	No SLC
Speke	80A	Liverpool Airport	Liverpool	No SLC
St Helens	33	Sutton Manor	Sutton Heath	No SLC
St Helens	352	St Helens	Wigan	No SLC
Stockton	28/28B	Middlesbrough	Lingdale/Stockesley	No SLC
Stockton	29/29A	Middlesbrough	Nunthorpe	No SLC
Wakefield	103	Stanley	Wakefield	No SLC
Wakefield	110	Leeds	Hall Green	No SLC
Wakefield	145/148/149	Knottingley	Wakefield	No SLC
Wakefield	147/157	Wakefield	Pontefract	No SLC
Wakefield	186/187	Wakefield	Pontefract	No SLC
Wakefield	496	Wakefield	Doncaster	No SLC
Wythenshawe	130	Manchester	Macclesfield	No SLC

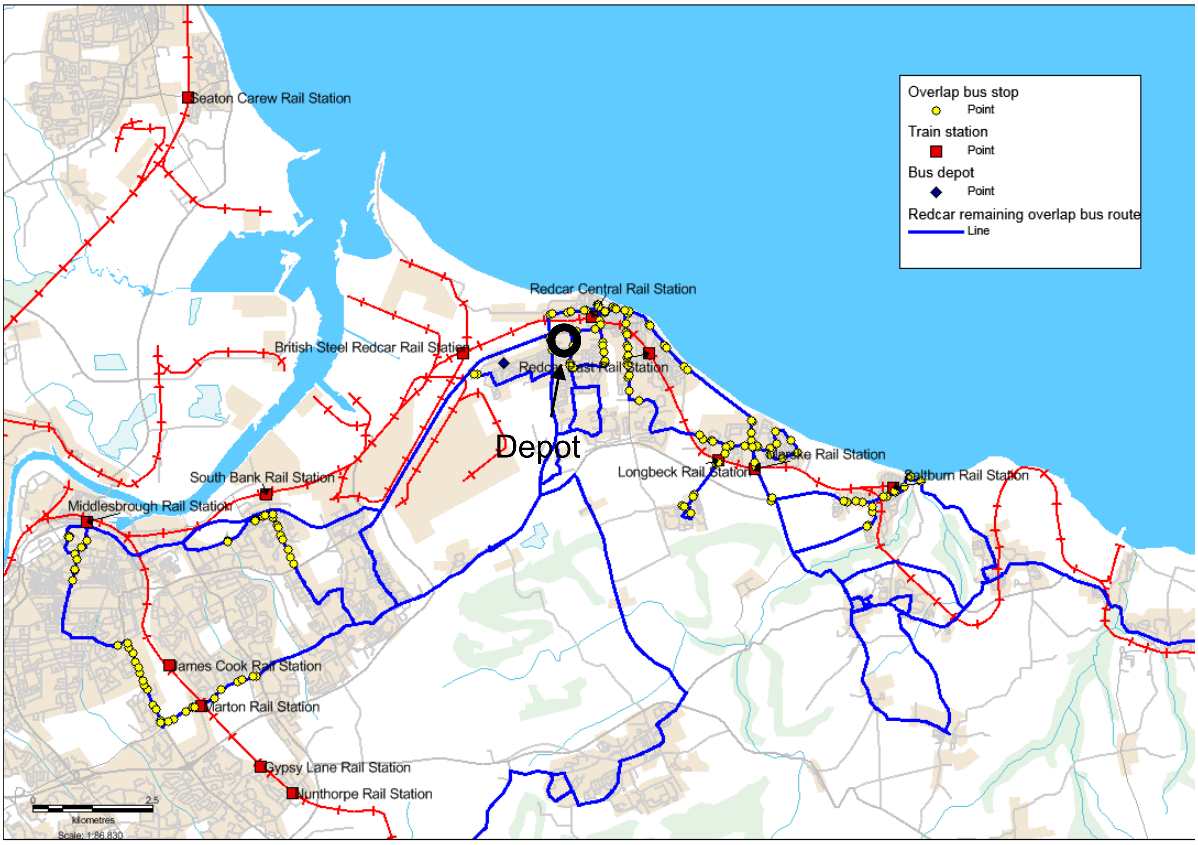
Source: The Parties and CMA assessment.

11.99 In the following paragraphs we set out our assessment of the flows and routes on which we provisionally conclude that the Merger has resulted in or may be expected to result in an SLC.

11.100 We set out our assessment of the flows and routes on which we provisionally conclude the Merger has not resulted in or may not be expected to result in an SLC in Appendix G.

Redcar

Figure 9: Map of Redcar area



Source: Basemap data/CMA calculations.

11.101 Arriva's Redcar bus depot serves ten overlapping bus routes that overlap with the Northern Franchise's rail services across Middlesbrough to Whitby (Table 21). After filtering, six of these routes remain for in-depth analysis. The map in Figure 9 shows the Parties' overlapping bus and rail routes in the Redcar area.

Table 21: Number of overlap flows on the routes

Route	*Number of flows post-filtering*	*Number of flows pre-filtering*
X4	8	16
X3/X3A	6	13
63	2	5
3	2	8
81/81A	1	4
64	1	13
64A	-	1
22	-	8
95	-	2
X93	-	1

Source: The Parties and CMA assessment.

11.102 Arriva is the sole provider of bus services between Middlesbrough to Whitby.[275] Northern Franchise rail services are the only competing public transport alternative on these flows. Stagecoach operates an extensive bus network within Middlesbrough, but none of their services run on Middlesbrough to Whitby.

11.103 In the following paragraphs we set out a more detailed assessment of the routes and overlap flows.

Table 22: Routes X3/X3A/3 and X4 overlap flow journey metrics with GJC

			Journey time		*Fare*		*Frequency (per hour)**		
Origin	*Destination*	*Route*	*Bus*	*Rail*	*Bus*	*Rail*	*Bus*	*Rail*	*GJC†*
Redcar East	Saltburn	3	21	14	2.5	2.8	0‡	1.5	-
Marske	Redcar Central	3	12	8	2.3	2.3	0	1.5	-
Middlesbrough	Saltburn	X4	47	28	3.8	4.6	4	1.5	[✂]
Middlesbrough	Whitby	X4	111	91	6.1	6.8	2	1.5	[✂]
Redcar East	Saltburn	X4	14	14	2.5	2.8	4	1.5	[✂]
Middlesbrough	Marske	X4	40	19	3.8	4.2	4	1.5	[✂]
Marske	Redcar Central	X4	16	8	2.3	2.3	4	1.5	[✂]
Middlesbrough	Redcar East	X4	34	14	3.8	3.8	5	1.5	[✂]
Redcar Central	Saltburn	X4	23	16	2.5	2.8	4	1.5	[✂]
Middlesbrough	Redcar Central	X4	24	10	3.8	3.8	4	1.5	[✂]
Middlesbrough	Saltburn	X3/X3A	47	28	3.8	4.6	2	1.5	[✂]
Redcar East	Saltburn	X3/X3A	14	14	2.5	2.8	2	1.5	[✂]
Marske	Redcar Central	X3/X3A	15	8	2.3	2.3	2	1.5	[✂]
Redcar Central	Saltburn	X3/X3A	22	16	2.5	2.8	2	1.5	[✂]
Middlesbrough	Redcar East	X3/X3A	34	14	3.8	3.8	2	1.5	[✂]
Middlesbrough	Redcar Central	X3/X3A	24	10	3.8	3.8	2	1.5	[✂]

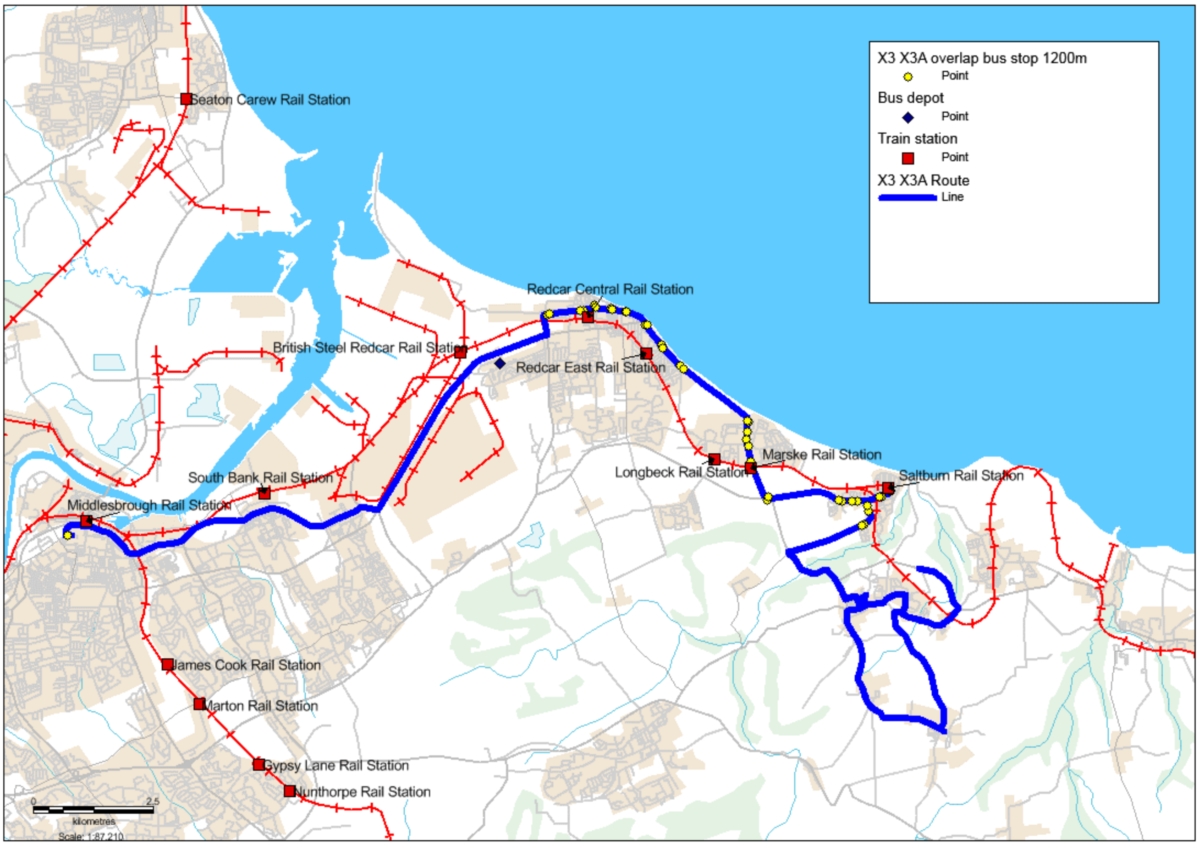
Source: The Parties and CMA assessment.
* Peak time frequency per hour.
† Negative GJC indicates a lower GJC on rail relative to bus.
‡ Zero as the 3 service operates a twice hourly off-peak service only.

11.104 Routes X3/X3A run from Middlesbrough to Skelton and operate from Monday to Saturday between the hours of 6:30 and 18:49. Route 3 runs from Redcar to Lingdale on Sundays only. This is a Sapphire service run by Arriva North East. The number of overlap flows for routes X3/X3A/3 is 13 and eight for the 3 service. After filtering, six overlap flows remain on route X3/X3A and two on route 3 (Table 22).

11.105 Figure 10 shows a map of the X3/X3A bus routes. From Middlesbrough, the first bus stop is in Redcar where the service then proceeds to make more frequent stops between Redcar, Marske and Saltburn. On the X3/X3A routes there are a considerable number of bus stops within the 1,200-metre catchment area.

275 We have identified a local council service that provides very limited bus services. We do not consider those services as effectively competing with Arriva's bus services. We provide further detail in the detailed assessment below.

Figure 10: Map of routes X3/X3A

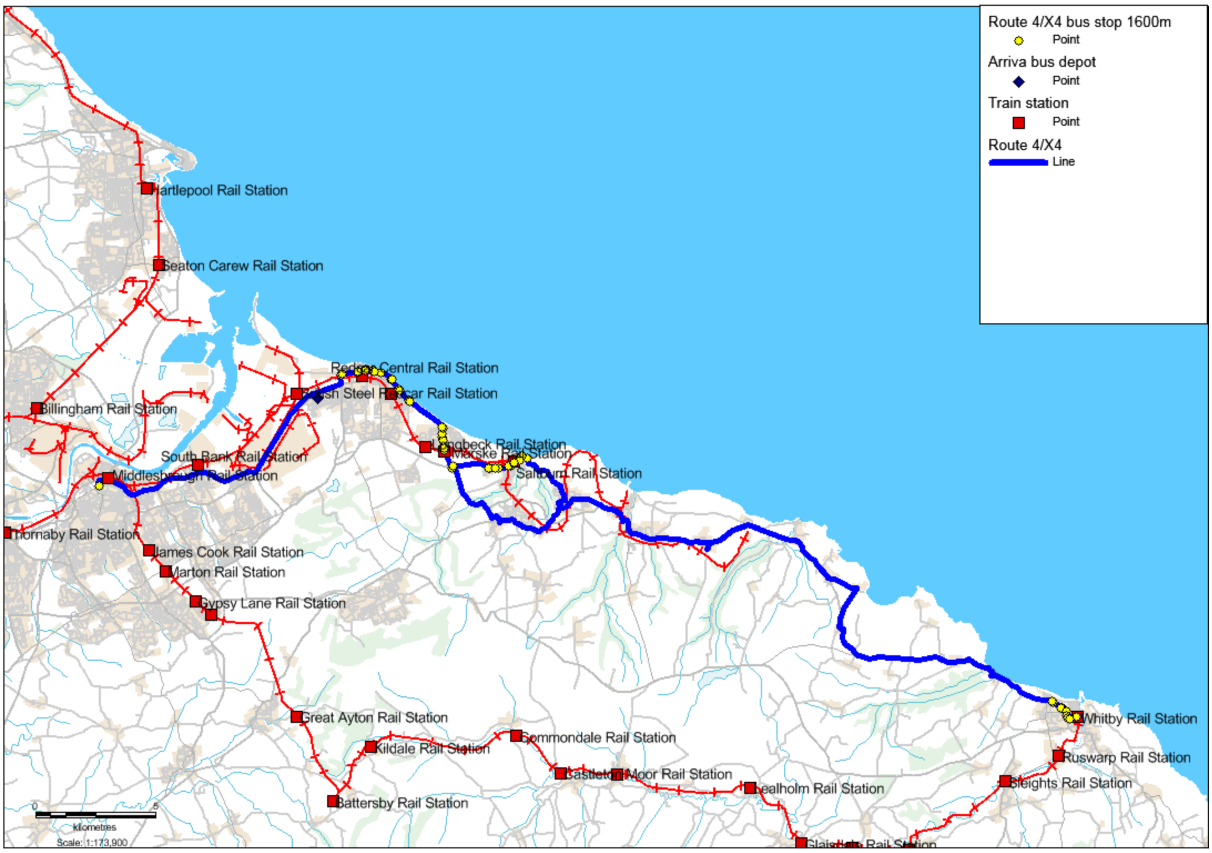


Source: Basemap data/CMA calculations.

11.106 Route X4 runs from Middlesbrough to Whitby (see Figure 11), operating Monday to Sunday between the hours of 6:07 and 20:27.[276] This is a Sapphire service run by Arriva North East. The X4 tracks the same route as the X3/X3A between Middlesbrough and Saltburn before continuing along the coast to Whitby. In contrast to the other flows on this route, journeys between Middlesbrough and Whitby require a train journey on a different line, which runs further inland. Journey time, fare, and frequency for overlap flows on routes X4 and 3/X3/3 are given in Table 22.[277]

[276] The Parties told us that the 4 service is no longer in operation. Data provided for this flow refers to the '4/X4' service.
[277] The Parties told us that the private car was likely to be an attractive alternative on routes X3/X3A/3 and X4. In paragraphs 6.16-6.26 above we present our assessment of the competitive interaction between bus/rail and the private car.

Figure 11: Map of routes X4



Source: Basemap data/CMA calculations.
Note: The overlapping catchment between bus and rail stations used for the CMA's competitive assessment is 1,200-metres.

11.107 On routes X3/X3A/3 the differences in GJC between the bus and the Northern Franchise services are broadly low, with an average GJC of [5-10%] on the overlap flows (Table 22). For example, the GJC on the flow between Redcar Central and Saltburn is [0-5%]. All flows have a GJC below 25%, with the highest GJC difference being [10-20%] (between [✂]). Although fares are broadly similar, the difference in GJC is driven by a faster rail service and marginally higher rail frequency (see Table 22).

11.108 On routes X4 the differences in GJC between the bus and the Northern Franchise services are broadly low, with an average GJC of [10-20%] on the overlap flows (Table 22). For example, the GJC on the flow between Middlesbrough and Redcar Central is [0-5%]. The highest GJC difference is [10-20%] ([✂]). Although fares are broadly similar, the difference in GJC is driven by a faster rail service and marginally higher rail frequency (see Table 22).

11.109 The relatively small GJC difference on the X3/X3A/3 and X4 overlap flows suggests that the degree of differentiation between bus and rail is low. Therefore, we consider that passengers are likely to view bus and rail services as substitutes.

11.110 Arriva's internal documents suggest that [✂].[278] The evidence from internal documents suggests that Arriva's bus services:

(a) [✂]; and

(b) [✂].

11.111 Total revenue on the X3/X3A bus routes was £[✂] in the last financial year, with revenue generated on the overlap flows representing [20-30%] (about £[✂]) of the total route revenue for the X3/X3A bus service (Table 23).

11.112 For route 3, the total revenue was £[✂] in the last financial year, with the overlap flows representing [5-10%] (just over £[✂]) of the total route revenue for this flow.

11.113 Total revenue for X4 was £[✂] in the last financial year, with overlap flows representing [10-20%] (about £[✂]) of the total revenue on these routes (Table 23).

11.114 The Northern Franchise's revenue on these flows and routes amounted to £[✂] in the last financial year.[279]

Table 23: Flow revenue of the Parties' bus and rail services, including journey numbers

Origin	*Destination*	*Route*	*Bus revenue*	*% of total route revenue*	*Northern Rail Revenue**	*Journeys (Bus)*	*Journeys (Rail)**
Middlesbrough	Marske	X3/X3A	[✂]	[✂]	[✂]	[✂]	[✂]
Middlesbrough	Redcar Central	X3/X3A	[✂]	[✂]	[✂]	[✂]	[✂]
Middlesbrough	Redcar East	X3/X3A	[✂]	[✂]	[✂]	[✂]	[✂]
Middlesbrough	Saltburn	X3/X3A	[✂]	[✂]	[✂]	[✂]	[✂]
Marske	Redcar Central	X3/X3A	[✂]	[✂]	[✂]	[✂]	[✂]
Redcar Central	Saltburn	X3/X3A	[✂]	[✂]	[✂]	[✂]	[✂]
Redcar East	Saltburn	X3/X3A	[✂]	[✂]	[✂]	[✂]	[✂]
Redcar East	Saltburn	3	[✂]	[✂]	[✂]	[✂]	[✂]
Marske	Redcar Central	3	[✂]	[✂]	[✂]	[✂]	[✂]
Middlesbrough	Marske	X4	[✂]	[✂]	[✂]	[✂]	[✂]
Middlesbrough	Redcar Central	X4	[✂]	[✂]	[✂]	[✂]	[✂]
Middlesbrough	Redcar East	X4	[✂]	[✂]	[✂]	[✂]	[✂]
Middlesbrough	Saltburn	X4	[✂]	[✂]	[✂]	[✂]	[✂]
Middlesbrough	Whitby	X4	[✂]	[✂]	[✂]	[✂]	[✂]
Marske	Redcar Central	X4	[✂]	[✂]	[✂]	[✂]	[✂]
Redcar Central	Saltburn	X4	[✂]	[✂]	[✂]	[✂]	[✂]
Redcar East	Saltburn	X4	[✂]	[✂]	[✂]	[✂]	[✂]

Source: The Parties.
* Aggregating across routes will result in double counting.

11.115 The Northern Franchise rail service is the only service competing with Arriva North East at present. Redcar and Cleveland Borough Council is operating a bus service from Redcar to Lingdale. The service runs at evening off-peak

[278] [✂].[✂].
[279] The Parties told us that Northern Franchise has little incentive to increase fares on these flows given that the revenues generated account for a small proportion of the total revenues on the relevant routes.

hours after Arriva North East services have ended, with a maximum of four services. We have not seen any evidence to suggest Redcar and Cleveland Borough Council would expand its bus services in response to an increase in Arriva's bus fares.

11.116 The Parties told us that Stagecoach, Stagecarriage and Croft Coach each had a bus depot located within 10 minutes' drive time from Middlesbrough rail station. The Parties said that their incentive to raise fares or reduce the frequency of their services was limited by potential entry.

11.117 Stagecoach told us [✄].[280] However, Stagecoach also told us that [✄].

11.118 Stagecarriage, a smaller bus operator in Middlesbrough, told us [✄]

11.119 Stagecoach operates bus services in Middlesbrough. However, none of the services overlap with Arriva services on the X3/X3A/3 or X4 routes. Stagecoach's route network focuses on the south of Middlesbrough (for example to Coulby Newham or Stainton as well as to Stockton-on-Tees or Billingham). Although [✄], we note that a competitor would have to invest substantially in order to match Arriva's extensive network and to provide effective competition. We did not receive any evidence suggesting that entry on such as scale was likely or timely such as to prevent an SLC.[281]

11.120 The Parties also told us that Arriva North East had entered a VPA with all the councils in the Tees Valley, which had given Arriva North East certainty to invest in service quality on this flow.[282] Therefore, Arriva stated that it had limited incentive to degrade services on these routes and flows as this would damage both its relationship with the partnership local councils, and the investments it had already made. However, we have not received evidence on how this would inhibit Arriva's ability to flex fares.

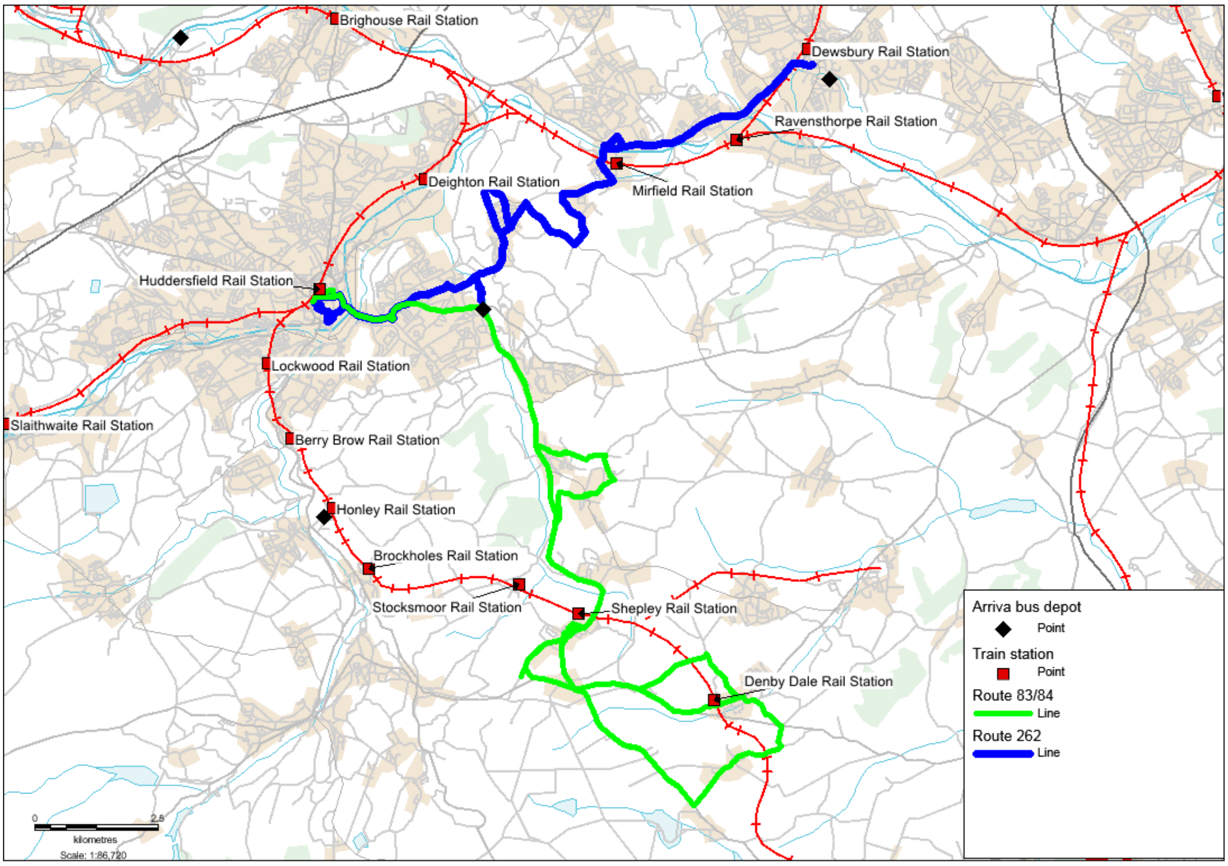
11.121 We provisionally conclude that the Merger has resulted in or may be expected to result in an SLC on these routes. The total number of overlap flows covers a large share of the total route revenue which suggests the ability to increase fares. Our analysis of GJC suggests that rail and bus services compete closely on the flows. No other viable public transport opportunities are available on the routes and therefore passengers do not have alternative public transport choices on the flows. We do not consider entry or the threat of entry to be viable on these routes. Therefore, post-

[280] The indicators they mentioned to assess Arriva's competitiveness on this flow are Arriva's high frequency and competitive fares.
[281] *Merger Assessment Guidelines*, paragraph 5.8.
[282] The Parties told us that the Tees Valley VPA was designed to address the long-term decline in bus patronage, offer a step change in bus service provision and provide a real alternative to the private car. [✄].

Merger we consider that Arriva is likely to have an incentive to increase fares.[283]

Huddersfield

Figure 12: Map of Huddersfield area



Source: Basemap data/CMA calculations.

11.122 Arriva's bus depot in Waterloo serves three bus routes running from Huddersfield that overlap with the Northern Franchise's rail services (83, 84 and 262). After filtering, one flow on each of these routes remains for in-depth analysis (Table 24). The map in Figure 12 shows the Parties' overlapping bus and rail routes in the Huddersfield area.

Table 24: Number of overlap flows on the routes

Route	*Number of flows post-filtering*	*Number of flows pre-filtering*
83	1	3
84	1	3
262	1	3

Source: The Parties.

283 We provisionally conclude that the Merger has not resulted in or may not be expected to create an incentive for the Parties to degrade service quality and/or frequency on these routes.

11.123 We examine of each of these routes in turn. The analysis of the 262 service is included in Appendix G as we provisionally conclude that the Merger has not resulted in or may not be expected to result in an SLC on any flows on this route.

Routes 83/84

Table 25: Routes 83 and 84 overlap flow journey metrics with GJC

Origin	*Destination*	*Route*	*Bus fare*	*Rail fare*	*Bus frequency (per hour)*	*Rail frequency (per hour)*	*Bus journey time*	*Rail journey time*	*GJC*
Huddersfield	Shepley	83	2.3	2.6	1	1	34	18	[✄]
Huddersfield	Shepley	84	2.3	2.6	1	1	28	18	[✄]

Source: The Parties and CMA assessment.

11.124 The 83 and 84 bus routes are operated by Yorkshire Tiger. They run between Huddersfield Bus Station and Denby Dale Rail Station and overlap with the Northern Franchise's rail service on the flow between Huddersfield and Shepley. After filtering, the flow that remains for consideration on each of these routes is the flow from Huddersfield to Shepley.

11.125 Routes 83/84 operate Monday to Saturday. Both the 83 and 84 bus services operate a similar route between Huddersfield and Denby Dale. Bus 83 calls at additional stops in Highburton, Kirkburton, Shepley, and Denby, resulting in a journey time of 34 minutes which is approximately six minutes longer than the comparable journey on the 84 bus service (see Table 24 above). The journey on the Northern Franchise's rail service takes about 18 minutes.[284]

11.126 Total revenue on the 83/84 bus routes was £[✄] in the last financial year, with the revenue generated on the overlap flow (£[✄]) representing approximately [20-30%] of the total revenue on these routes, as shown in Table 25 below.

11.127 The Northern Franchise's revenue on this flow amounted to £[✄] in the last financial year.[285]

[284] The Parties told us that the private car was likely to be an attractive alternative for passengers travelling on this flow given that the equivalent journey could be made by car within approximately 20 to 22 minutes. In paragraphs 6.16-6.26 above we present our assessment of the competitive interaction between bus/rail and the private car.
[285] The Parties told us that this accounted for approximately [0-5%] of the Northern Franchise's total revenue on the 83/84 bus routes. The Parties said that, taking this into account, the Northern Franchise had very little incentive to increase the fares on this flow.

Table 26: Flow revenue of the Parties' bus and rail services, including journey numbers

Origin	*Destination*	*Route*	*Bus revenue*	*% of route revenue*	*Northern Franchise revenue*	*Journeys (Bus)*	*Journeys (Rail)*
Huddersfield	Shepley	83	[✂]	[✂]	[✂]	[✂]	[✂]
Huddersfield	Shepley	84	[✂]	[✂]	[✂]	[✂]	[✂]

Source: The Parties.

11.128 Route 83 accounts for [20-30%] of Arriva's bus journeys on this flow. The difference in GJC on this flow between bus and rail is close to -[10-20%]. This is because the Parties' bus and rail services operate at about the same frequency (with one service per hour), the single peak fare on the bus is 30 pence cheaper than the equivalent rail fare, but the journey time on the Northern Franchise rail service is 16 minutes quicker than on the bus. It is the additional journey time, compared to the 84 service, which drives the [✂] in GJC.

11.129 Route 84 accounts for [70-80%] of Arriva's bus journeys on this flow. The difference in GJC on this flow between bus and rail is relatively small on the 84 route (-[5-10%]). This is because the Parties' bus and rail services operate at about the same frequency (with one service per hour), the single peak fare on the bus is 30 pence cheaper than the equivalent rail fare and the journey time by rail is 10 minutes quicker than on the bus.

11.130 The relatively small GJC difference on this flow suggests that the degree of differentiation between bus and rail is low. Therefore, we consider that passengers are likely to view bus and rail as viable alternatives.

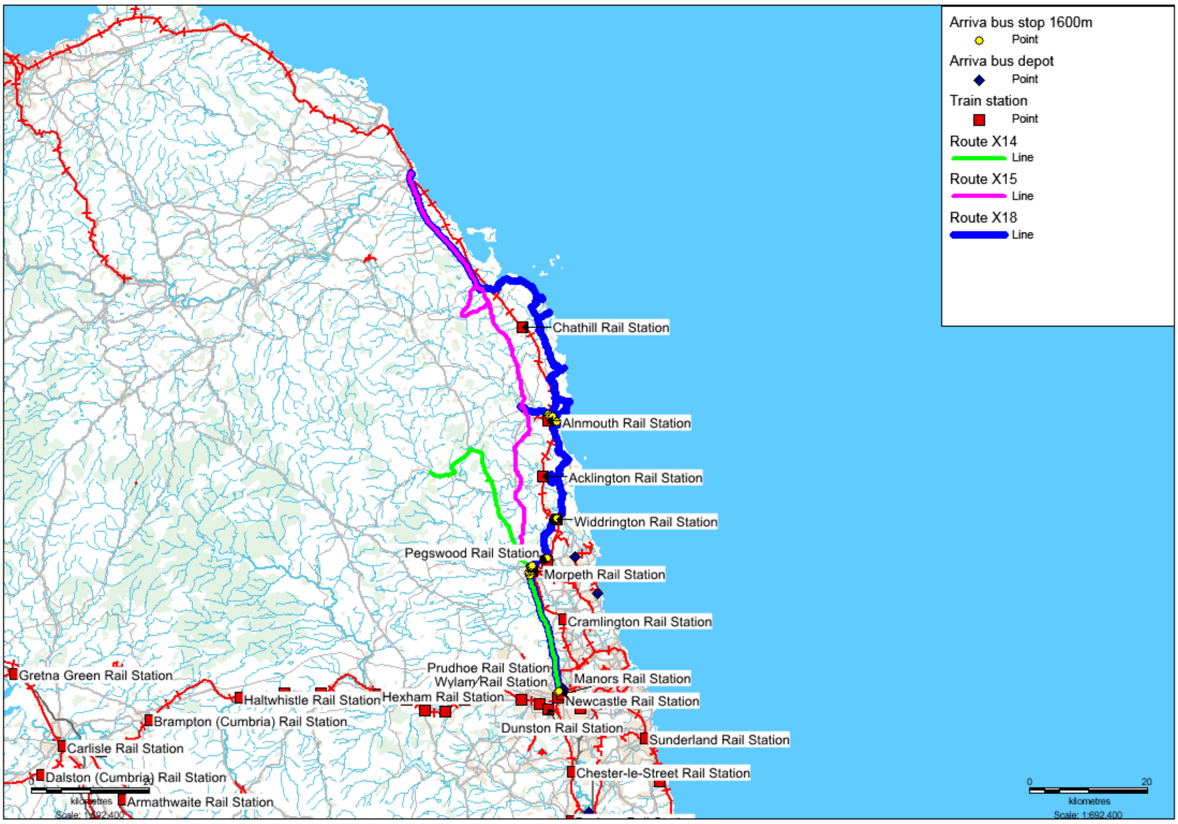
11.131 Arriva is the sole operator of bus services on the 83/84 routes. The Northern Franchise rail service is the only service competing with Yorkshire Tiger at present.

11.132 The Parties told us that FirstGroup had a bus depot under six minutes' drive time from Huddersfield Rail Station. The Parties said that, in view of this, FirstGroup could easily enter to serve this flow if Arriva were to raise its bus fares or reduce the frequency of its services and, therefore, that threat of such entry would constrain Arriva from taking any such action. However, we have not seen evidence that FirstGroup has plans to enter this flow or that entry would be timely, likely or sufficient in response to a fare increase by Arriva to prevent an SLC.

11.133 We provisionally conclude that the Merger has resulted in or may be expected to result in an SLC on the Huddersfield to Shepley flow. The flow covers a large share of the total route revenue which suggests the ability to increase fares. Our analysis of GJC suggests that rail and bus services compete closely on this flow. No other viable public transport opportunities are available on the routes and therefore passengers do not have alternative public transport choices on the flows. We do not consider entry or the threat of entry to be sufficient to constrain Arriva on this flow. Therefore, post-Merger we consider that Arriva is likely to have an incentive to increase fares.[286]

Ashington

Figure 13: Map of Ashington area



Source: Basemap data/CMA calculations.

11.134 Arriva's Ashington bus depot serves three bus routes across Northumberland and Newcastle that overlap with the Northern Franchise's rail services (X14, X15 and X18). After filtering, four flows on the X14, X15 and X18 services remained for consideration (Table 27). The flow from Morpeth to Newcastle was not included in our analysis as it fell outside the 1,200-metre catchment area adopted. However, in internal documents reviewed, we noted that Arriva [✂].[287] Moreover, the Morpeth to Newcastle flow was included by the Parties in the survey on bus-rail overlaps conducted (see Appendix F). For this reason, we have also included this

[286] We provisionally conclude that the Merger has not resulted in or may not be expected to create an incentive for the Parties to degrade service quality and/or frequency on these routes.
[287] [✂]: [✂].

flow in our analysis. The map in Figure 13 indicates the overlaps between Arriva's bus services and the Northern Franchise in the Ashington area.

Table 27: Number of overlap flows on the routes

Route	*Number of flows post-filtering*	*Number of flows pre-filtering*
X14	1	2
X15	1	3
X18	2	6

Source: The Parties and CMA assessment.

11.135 In the following paragraphs we set out a more detailed assessment of the routes and overlap flows.

Routes X14/X15/X18

Table 28: Routes X14/X15/X18 overlap flow journey metrics

Origin	Destination	Route	Bus fare	Rail fare	Bus frequency (per hour)	Rail frequency (per hour)	Bus journey time	Rail journey time
Morpeth	Newcastle	X14	5.2	5.4	3	1	28	22
Morpeth	Newcastle	X15	5.2	5.4	3	1	28	22
Morpeth	Newcastle	X18	5.2	5.4	3	1	28	22
Newcastle	Widdrington	X18	6.1	7.4	0	0.5	56	46

Source: The Parties.

11.136 The X14/X15/X18 buses are MAX services operated by Arriva North East. They overlap with the Northern Franchise's rail service on the flow between Morpeth and Newcastle (the X18 service also overlaps on the flow from Newcastle to Widdrington).

11.137 Route X14 runs on weekdays and Saturdays but not on Sundays; the X15/X18 buses operate seven days a week. The X14 service runs between Newcastle and Thropton, while the X15 and X18 services run between Newcastle and Berwick. The journey time on the X14/X15/X18 buses is approximately 28 minutes (see Table 28 above). The journey on the Northern Franchise's rail service takes about 22 minutes but does not operate on Sundays.[288]

11.138 Total revenue on the X14/X15/X18 bus routes was £[✂] in the last financial year, with the revenue generated in the overlap flows (£[✂]) representing approximately [10-20%] of the total revenue on these routes (see Table 29).

288 The Parties told us that the private car was likely to be an attractive alternative for passengers travelling on this flow given that the equivalent journey could be made by car within approximately 22 to 26 minutes. In paragraphs 6.16-6.26 above we present our assessment of the competitive interaction between bus/rail and the private car.

11.139 The Northern Franchise's revenue on these flows amounted to £[✂] in the last financial year.[289]

Table 29: Flow revenue of the Parties' bus and rail services, including journey numbers

Origin	*Destination*	*Route*	*Bus revenue*	*% of route revenue*	*Northern Franchise revenue*	*Journeys (Bus)*	*Journeys (Rail)*
Morpeth	Newcastle	X14	[✂]	[✂]	[✂]	[✂]	[✂]
Morpeth	Newcastle	X15	[✂]	[✂]	[✂]	[✂]	[✂]
Morpeth	Newcastle	X18	[✂]	[✂]	[✂]	[✂]	[✂]
Newcastle	Widdrington	X18	[✂]	[✂]	[✂]	[✂]	[✂]

Source: The Parties.

11.140 On Morpeth to Newcastle, the Parties' bus services operate at a greater frequency than their rail service, the single peak fare on the bus is 20 pence cheaper than the equivalent rail fare[290] but the journey time on the Northern Franchise rail service is six minutes quicker than on the bus (Table 28). This suggests that the degree of differentiation between bus and rail is low. Therefore, we consider that passengers are likely to view bus and rail services as viable alternatives.

11.141 The Parties told us that passengers on the X14/X15/X18 buses may not view the Northern Franchise rail service as a viable alternative if they wanted to travel to a destination around the vicinity of Haymarket, given that the train station was located 1.26 km walking distance away from the Haymarket bus station in a different part of Newcastle city. Moreover, the Parties said that the bus service was more convenient for students and employees travelling from Morpeth to Newcastle University or the Newcastle campus of Northumbria University as well as patients and employees of the Royal Victoria Infirmary. However, the Parties have not provided any evidence indicating that the numbers of passengers travelling to these locations are significant enough to affect the competitive dynamics of the route.

11.142 The Northern Franchise faces limited competition from other rail operators. VTEC and CrossCountry operate services on the flow at a lower frequency compared to the Northern Franchise, but with a shorter journey time of 12 minutes. Single peak rail fares are the same for all rail operators (£5.40). The Northern Franchise and CrossCountry generate [80-90%] of the total rail revenue on the Morpeth to Newcastle flow,[291] with VTEC receiving the remaining [10-20%], which suggests that it is not a sufficient competitive constraint. On the section of the flow from Morpeth to Widdrington, the

[289] The Parties told us that this accounted for approximately [10-20%] of the Northern Franchise's total revenues on the relevant routes. The Parties said that Arriva would have very little incentive to make changes to this flow that could have unintended consequences across the wider Northern Franchise rail service.
[290] The difference between the bus fare and the rail fare on the flow between Newcastle and Widdrington is £1.30.
[291] [60-70%] and [20-30%] respectively.

Northern Franchise rail service is the only service competing with Arriva North East at present.

11.143 The Parties told us that that the competing bus operated by Glen Valley Tours, ran from Morpeth to Newcastle twice a day on Wednesday and once a day on Saturday with a journey time of 25 minutes. The Parties noted that Go North East had been competing with Arriva's local services along the Great North Road. The Parties said that in the event that Arriva were to increase fares on its bus services on this flow or degrade service quality, given the low barriers to entry and expansion, Glen Valley Tours could expand its existing services or other bus operators could enter the flow. The Parties told us that Stagecoach and Go North East each had depots within 10 minutes' drive time of this flow. The Parties said that the threat of such entry would constrain Arriva from raising its bus fares or reducing the frequency of its services.

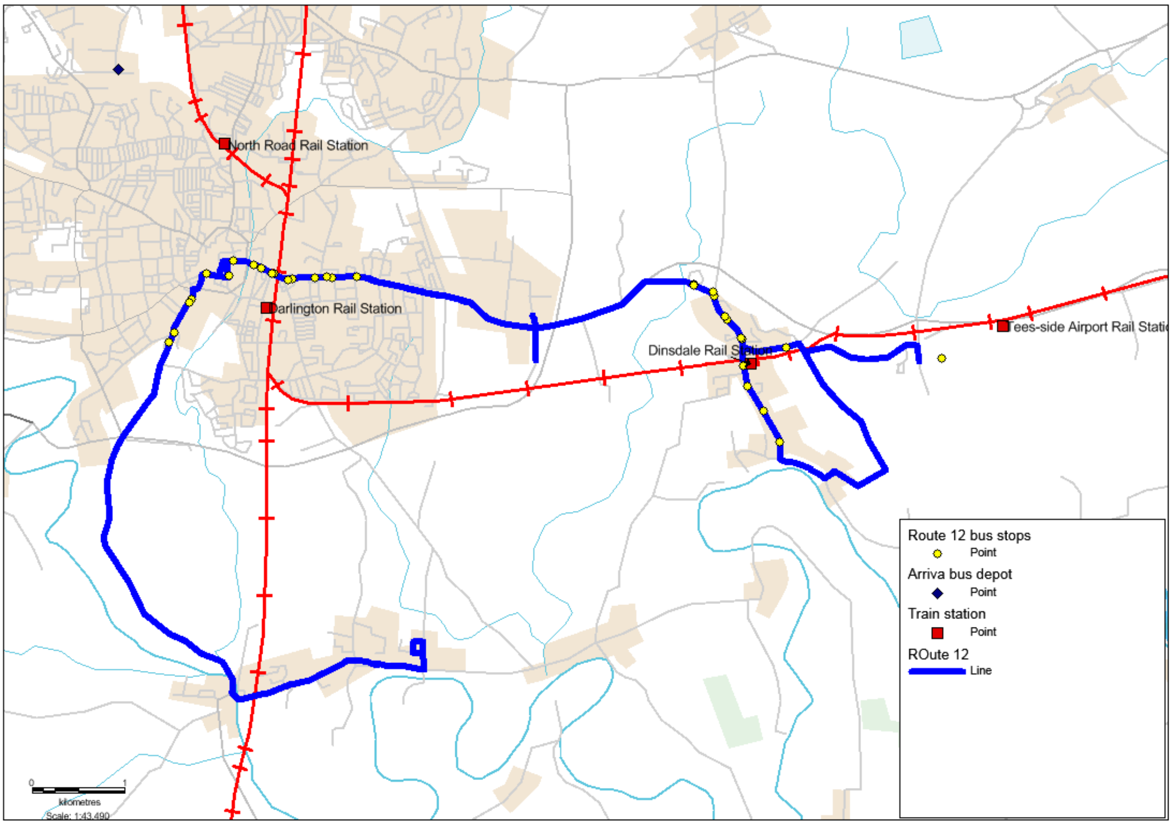
11.144 However, we have not seen evidence that Glen Valley Tours or Go North East have plans to enter this flow or that entry would be likely or sufficient in response to a fare increase by Arriva to prevent an SLC.

11.145 We provisionally conclude that the Merger has resulted in or may be expected to result in an SLC on the Morpeth to Newcastle flow. Our analysis of journey metrics (ie fares, frequency and journey times) suggests that rail and bus services compete closely on this flow. We do not consider entry or the threat of entry to be viable on this flow. Therefore, post-Merger we consider that Arriva is likely to have an incentive to raise fares.[292]

[292] We provisionally conclude that the Merger has not resulted in or may not be expected to create an incentive for the Parties to degrade service quality and/or frequency on these routes.

Darlington

Figure 14: Map of Darlington area



Source: Basemap data/CMA calculations.

11.146 There is only one flow on the 12 bus service that overlaps with the Northern Franchise’s rail service (both before and after applying filters), which is from Darlington to Dinsdale (Table 30). The map in Figure 14 shows the overlapping bus and rail route in the Darlington area.

Table 30: Number of overlap flows on the route

Route	Number of flows post-filtering	Number of flows pre-filtering
12	1	1

Source: The Parties and CMA assessment.

Route 12

11.147 Route 12 is operated by Arriva North East. The service runs from Hurworth to Middleton St George and operates from Monday to Sunday between the hours of 07:05 to 18:54.[293] The journey time from Darlington to Dinsdale on

[293] Five services on a Sunday between the hours of 09:51 and 18:05.

the bus is about 20 minutes, compared to a 5-minute rail journey (Table 31).[294] Northern Franchise rail services have a higher frequency (two per hour) compared to the bus (one per hour). However, the single fare on bus is lower (£2.30) compared to the rail fare (£2.80).

Table 31: Route 12 overlap flow journey metrics

Origin	*Destination*	*Route*	*Bus fare*	*Rail fare*	*Bus frequency (per hour)*	*Rail frequency (per hour)*	*Bus journey time*	*Rail journey time*
Darlington	Dinsdale	12	2.3	2.8	1	2	20	5

Source: The Parties.

11.148 The difference in journey time and frequency between bus and rail on the flow in Table 31 initially suggests some degree of differentiation between the offerings, with a likely passenger preference for rail. However, Table 32 shows that bus revenue (£[✂]) is higher than rail revenue (£[✂]), indicating that passengers generally prefer to travel by bus on the flow.[295]

Table 32: Flow revenue of the Parties' bus and rail services, including journey numbers

Origin	*Destination*	*Route*	*Flow revenue*	*% of bus route revenue*	*Northern Rail revenue*	*Journeys (Bus)*	*Journeys (Rail)*
Darlington	Dinsdale	12	[✂]	[✂]	[✂]	[✂]	-

Source: The Parties.

11.149 Total route revenue for the last financial year on the 12 service was £[✂]. Flow revenue in the last financial year was £[✂], which represents a relatively high revenue share on the route ([10-15%] of the route revenue). Furthermore, single-peak adult bus fares are currently 50 pence lower than the equivalent rail fare.

11.150 The Northern Franchise rail service is the only service competing with Arriva North East at present. The Parties told us that Croft Coach and Stagecoach had a depot within 20 minutes' drive time and given the low barriers to entry and expansion it would be easy for a bus operator to enter this flow. The Parties also said that Scarlet Band, based in County Durham, operated bus services in the surrounding area and was well placed to enter the flow if an opportunity arose. However, we have not seen evidence that Scarlet Band has plans to enter this flow or that entry would be likely or sufficient in response to a fare increase by Arriva to prevent an SLC.

[294] The Parties told us that the private car was likely to be an attractive alternative for passengers travelling on this flow, once travel time to the station and waiting time were taken into account. The equivalent journey by car could be made within approximately 10 to 14 minutes. In paragraphs 6.16-6.26 above we present our assessment of the competitive interaction between bus/rail and the private car.
[295] The Parties told us that this represented [0-5%] of the Northern Franchise's route revenue. The Parties said that, in view of this, the Northern Franchise was unlikely to have any incentive to alter fares on the flow.

11.151 The Parties also told us that Arriva North East had entered a voluntary partnership with all the councils in the Tees Valley, which had resulted in a high degree of certainty for Arriva North East to invest in its bus service. Therefore, Arriva had limited incentive to degrade services on these routes and flows as this would damage both its relationship with the partnership local councils, and the investments it had already made.

11.152 We provisionally conclude that the Merger has resulted in or may be expected to result in an SLC on the Darlington to Dinsdale flow. This flow covers a significant share of the total route revenue which suggests the ability to increase fares. No other viable public transport opportunities are available on the routes and therefore passengers do not have alternative public transport choices on the flows. We do not consider entry or the threat of entry to be sufficient on these routes. Therefore, post-Merger we consider that Arriva is likely to have an incentive to increase fares.[296]

Provisional conclusion

11.153 We provisionally conclude that the Merger has resulted in or may be expected to result in an SLC on the following routes:

(a) routes 3, X3/X3A and X4 in the Redcar area;

(b) routes 83 and 84 in the Huddersfield area;

(c) routes X14, X15 and X18 in the Ashington area; and

(d) route 12 in the Darlington area.

12. The effect of the merger on transport networks

12.1 In our assessment of market definition we note that some passengers may purchase network tickets rather than route or flow-specific tickets. For these passengers, the relevant market may be the network rather than the route or flow. We also note that, on the supply side, bus operators organise their services around hubs and depots and may switch their services to or from the overlapping bus and rail flows and routes.

12.2 Arriva UK bus offers at least 22 network tickets in the geographical area served by the Northern Franchise. ARN offers 17 rail network tickets. In addition to these operator-specific network tickets, both Arriva UK Bus and the Northern Franchise participate in a number of multi-operator ticketing

[296] We provisionally conclude that the Merger has not resulted in or may not be expected to create an incentive for the Parties to degrade service quality and/or frequency on this route.

schemes promoted and managed either by LTAs or various stakeholder groups.

12.3 We therefore consider the effect of the Merger on transport networks. We summarise our findings below and set out further detail of the assessment in Appendix H.

The views of the Parties

12.4 The Parties told us that a theory of harm in relation to network effects was predicated on the current existence of strong competition between the Arriva and ARN networks and the prospect that such competition would be reduced significantly as a result of the Merger.[297]

12.5 The Parties said that Arriva bus and ARN network tickets were not currently close competitors. In particular, the Parties emphasised that Arriva did not currently offer on a permanent basis any rail tickets in the Northern Franchise area and that there was a significant disparity in price between Arriva and ARN day and seven day tickets in the Northern Franchise area. The Parties also told us that the scope of the Northern Franchise network was determined by the Northern Franchise award and the routes contained therein and that Arriva's bus network tickets did not extend to all destinations covered by ARN network tickets.

The views of third parties

12.6 Third parties did not raise concerns in relation to the effect of the Merger on transport networks.

CMA assessment

12.7 We consider four ways in which the Merger might give rise to horizontal effects at the level of transport networks.

12.8 We first consider the possibility that Arriva would have the ability and incentive post-Merger to profitably degrade its offer of bus network tickets by diverting passengers to either rail network tickets or specific ARN rail flows. This theory of harm is contingent on passengers buying network tickets and being willing substitute between bus and rail.

12.9 There was limited geographical overlap between bus and rail network tickets, that there was a significant price differential between the two types of

[297] Arriva response to issues statement, paragraphs 7.1 & 7.2.

network ticket and that bus and rail network tickets covered networks with different densities. This indicates that bus and rail network tickets serve different market segments and that most passengers are unlikely to substitute between them. The wide availability of alternative bus network tickets offered by Arriva's competitors are likely to exert a competitive constraint on Arriva post-Merger and restrict its ability and incentive to flex its commercial offer on bus network tickets.

12.10 We also consider the possibility that the Merger would enable the Parties to leverage wider network effects as a result of operating the Northern Franchise by introducing multi-modal tickets restricted to their own services. The restrictions imposed by committed obligations in rail franchises, the important role of PTEs in developing network tickets and the increasing importance of multi-operator tickets are likely to restrict the ability and incentive of the Parties to leverage any wider network effects through ownership of Arriva and the Northern Franchise.

12.11 Finally, we assess the possibility that the Merger could give Arriva an incumbency advantage with LTAs and whether it could provide Arriva with the incentive to engage in anti-competitive behaviour, such as determining bus operator information available at rail stations or engaging in selective advertising. However, LTAs told us that scale of an operator had no effect on an operator's dealings or negotiations with them, that tenders were widely used to award specific routes to operators and that tender specifications were designed to maximise market contestability. LTAs also confirmed that their role included ensuring that information on the services provided by all operators was available to passengers.

Provisional conclusion

12.12 We therefore provisionally conclude that the Merger has not resulted or may not be expected to result in an SLC in relation to transport networks.

13. Provisional findings on the SLC test

13.1 As a result of our assessment, we provisionally conclude that:

(a) the award of the Northern Franchise to ARN has created a relevant merger situation;

(b) the relevant merger situation has not resulted in or may not be expected to result in an SLC for the award of rail franchises;

(c) the relevant merger situation has not resulted in or may not be expected to result in an SLC in relation to transport networks;

(d) the relevant merger situation has resulted in or may be expected to result in an SLC on the following overlapping rail flows:

(i) Leeds to Sheffield;

(ii) Wakefield to Sheffield;

(iii) Chester to Manchester; and

(iv) Chester to Stockport; and

(e) the relevant merger situation has resulted in or may be expected to result in an SLC on the following overlapping bus and rail routes:

(i) routes 3, X3/X3A and X4 in the Redcar area;

(ii) routes 83 and 84 in the Huddersfield area;

(iii) routes X14, X15 and X18 in the Ashington area; and

(iv) route 12 in the Darlington area.