Competition & Markets Authority

ANTICIPATED ACQUISITION BY BT GROUP PLC OF EE LIMITED

Summary of hearing with Vodafone on 3 August 2015

Opening statement

1. Vodafone said it was concerned about the impact of the BT/EE transaction, in particular the fundamental changes it brought to the UK market.

2. Vodafone said that BT was its biggest supplier and that spend was expected to increase as Vodafone entered new markets such as fixed and broadband. BT/EE's EBIT, when combined, would be 56% of the entire industry, across fixed, mobile and TV. If the merger was allowed to proceed, BT would not only be Vodafone's biggest supplier but also its biggest competitor across all its markets.

3. Vodafone said that it did not generate enough cash in the UK to invest sufficiently in the future, so it was reliant on its group to fund it. However, as the UK operations had the second worst margins in the Vodafone group, [✂].

4. Vodafone believed the transaction would make the situation worse, as BT would have both the ability and incentive to discriminate against Vodafone and every other mobile operator, in its position as unavoidable trading partner and supplier. Vodafone was very vulnerable to strategic behaviour by BT undermining the quality of Vodafone's network and raising its costs, in two ways in particular: degradation of mobile backhaul directly affecting the quality of the network, [✂]. It was also exposed to an increased likelihood of margin squeeze in superfast broadband and fixed mobile bundles.

5. Vodafone said that, like other mobile operators, it was heavily reliant on BT for the fibre backhaul inputs which were critical to ensure its network had sufficient capacity and reliability to meet exponentially increasing demands for data, with no alternative supplier that could provide an equivalent backhaul service. BT already had a proven track record of degrading its service quality, threatening to increase its backhaul costs arbitrarily and preventing Vodafone from developing a cost-effective network (for example, two out of five of all Ethernet orders were late), and the merger substantially increased its incentives to do so.

6. Vodafone believed that regulation alone was not the answer. The vast majority of its fibre network was purchased from BT Wholesale (BTW), which was unregulated. Also, it was very difficult to regulate quality of service (shown by BT's poor service via Openreach).

7. Vodafone said that its cost competitiveness was dependent on its network sharing agreement with O2 through the CTIL joint venture. It believed that the Three/O2 transaction would proceed, [and O2 traffic might move to MBNL]. This would mean Vodafone would have the smallest customer base, smallest revenue base, and largest cost base, which would make it potentially an unsustainable business in the UK.

8. Vodafone was also concerned about the impact of the merger on competition in the wholesale markets. The merger would strengthen BT/EE's spectrum position [✂].

General trends in industry

9. Vodafone said that obvious examples of technical innovations to consider were voice-over Wi-Fi and voice-over LTE (4G), and the increased use of open femtocells. A key trend was the enormous growth in data going forward, so increasing the capacity of the network was key through fibre backhaul and making networks denser. The other trend was content, if it decided to go into that market.

10. Vodafone said that a press release had been put out talking in high-level terms about potential asset swaps between Vodafone and Liberty Global, [✂].

Network sharing

11. As regarded the proposed Hutchinson 3G UK/O2 merger, [✂].

12. Vodafone believed the Three/O2 merger would happen, which could lead to Three straddling both networks. This would give them an advantage, knowing what each network was planning, being able to cherry pick sites [✂], and having insight into the commercial decisions and future strategy of both network sharing partners. [✂]

13. Vodafone said that the problem with a three-player market had been seen in other countries, where two players had a network agreement and the smallest player left out was [at a disadvantage].

14. [✂]

Retail mobile

15. Vodafone thought all MNOs competed hard across all segments [✄], whereas Three had pursued a different strategy focusing on aspects such as free roaming. O2 had been strong on SIM only recently, and EE had focused on the quality of its network and its 4G advantage.

16. Vodafone said that MVNOs were also incredibly important in particular segments of the market. Lebara and Lyca competed head to head in the ethnic segment. The retail MVNOs, like Tesco and Sainsbury's, had the value added of the grocery segment (Tesco competed very hard on customer satisfaction). There was then the multiplayer segment with Virgin, TalkTalk and Sky (due to launch). Because the MNOs competed across a broad section of the market, they intersected with MVNOs day to day.

Business vs consumer

17. Vodafone thought that the customer requirements of the business and domestic markets were surprisingly similar, apart from really large multinationals. When companies tried for unified communications, that is fixed and mobile together, BT became more of a competitor. O2 had been competing very heavily in the business segment, [✄].

18. Vodafone commented that business had been slower to use 4G, and more reluctant to pay for it than consumers, but that was now changing.

Network capacity

19. Vodafone said that spectrum from a particular site would be shared between all of the users in the cell in the area of that site. The more users, the more that shared resource slowed down. There were then two options: increase the bands of spectrum used, or build another site.

20. Vodafone said that to add bands of spectrum was difficult, as spectrum was rarely available (determined by Ofcom and the government) and the eco systems to use that spectrum (eg handsets and network kit) needed to be built up before it could be used.

21. Vodafone said that rolling out sites in the UK was particularly challenging, and would take 12 to 18 months to cover approval and planning delays (actually building the site only took eight weeks). It had a much lower site density in London than, for example, in Madrid, Milan or other European capitals, and this was largely down to planning. The planning rules meant

that site masts were shorter than elsewhere in the Vodafone group, so each site covered less distance because the signal propagated less far.

BT as a competitor in retail mobile

22. Vodafone said that BT had been an MVNO on the Vodafone network until it recently signed with O2. BT had been clear about its intentions to enter the mobile market via an ‘inside out strategy’. Although BT’s attempts in the past to enter the market had not been particularly successful, Vodafone recognised BT had a very strong brand in British telecommunications, had spent £200 million on spectrum, and had a large R&D group, so the expectation was that BT would make sure its technological solution worked. It had no reason to think BT’s plan to get to 0 to 5% in two years and 5 to 10% within five years was unreasonable, [✄].

23. Vodafone had been expecting BT to compete across the whole market, rather than in a particular segment. One of the key issues was whether it could overcome the technological barriers in relation to handover between its Wi-Fi network and the macro network. Although some of BTs proposals of timing and pricing seemed perhaps a bit aggressive, there was no reason to think they were not realistic. Vodafone anticipated that BT’s commercial focus would be, as with TV, to bundle mobile with its other existing products.

Fixed mobile bundling

24. Vodafone said that in other countries, such as Spain, the market had moved very quickly to quad play, largely driven by deep discounts offered across the piece. In the UK, there was a degree of bundling, usually fixed and broadband, but to date it had been operators adding something on to defend their existing base. Vodafone had launched a fixed and broadband offer, but that was largely a defensive play to protect its mobile base as it was vulnerable if the market moved to quad play. However, the UK had not moved to quad play in the same way as other European markets.

25. Vodafone said there had been different processes seen in the adoption of converged products in Europe, with different factors affecting the speed of adoption, but the trend was clear. In Spain and Portugal it had gone very quickly, driven by discounting. In other countries, such as Germany, where there were a lot of players who had both fixed and mobile, it had been a lot slower, partly because the levels of discount offered had been less, but also because of how people actually bought their services (for example, in some countries people had bought their pay TV, broadband and telephone through their housing associations, so adding mobile would not make sense as that would have to be sold to an individual rather than a landlord). Vodafone’s

strategy had been to meet the trend, so it had bought cable TV businesses in a number of countries, and Cable & Wireless in the UK.

26. Vodafone said that it was not necessarily the case that convergence reduced churn. [✂]. Churn was generally lower in fixed broadband or fixed services than it was in mobile. In mobile there was the factor of the handset – at the end of a contract, the customer would think they were ready for the latest handset. In fixed, there was no natural point at which there was a purchasing decision, if the customer was happy with their fixed supplier.

27. In terms of whether BT had a particular advantage in fixed mobile bundles, Vodafone thought that BT already had a big consumer base and an established name. The only segment where it did not have an advantage was with the customers completely driven by sports, but it was moving towards filling that gap. BT also had an advantage that no one else had being the incumbent, in that there was an installed base of people who had always taken their fixed services from BT and were very difficult to switch because of the perceived hassle.

Femtocells

28. Vodafone said there were two uses for femtocells: for in-building coverage (its product Sure Signal was an example), and as open femtocells which was about capacity and offload. The underlying technology that they relied upon was similar, but they served different purposes.

29. The Vodafone Sure Signal product was installed in homes to effectively create a mini base station handling voice calls while in the home. Up to 32 people could be registered on the system to use it. The Sure Signal cell used 2100 licenced spectrum for the 3G service.

30. Vodafone said that BT's 'inside-out' strategy would leverage a large number of open femtocells out in the street or built into street furniture. Anyone who was a subscriber who happened to be in range of that product could use them, which then would take capacity off the macro network.

31. Vodafone said that BT had an advantage with its femtocells in that it had a home hub product which was out in 5 million homes, for which part of the bandwidth could be given by BT to any other BT customer who happened to be walking past the home. BT had proposed increasing the technological capabilities of those home hubs by adding the licenced 2.6 spectrum it recently acquired, and in addition had many cabinets, phone boxes and other infrastructure points which could be used.

32. Vodafone was seriously concerned that, as a result of the merger, BT would have less incentive to make that kind of infrastructure available to competitors like Vodafone.

Wholesale mobile

33. Vodafone commented that although there were four MNOs competing in the wholesale market, it had been a three-player MNO market to a large extent, as Three had been relatively quiet over the last few years (although had perked up recently), with Carphone Warehouse having been the only notable wholesale contract of late. O2, EE and Vodafone competed aggressively for any new contract coming into the market, whether new entrants or MVNOs switching.

34. [✂] It was a ‘fact of life’ that although Vodafone was hosting and getting an economic benefit from the MVNO, at the same time it might be competing with it and taking customers that might otherwise sign up to Vodafone. However, Vodafone recognised that Vodafone retail and wholesale were both avenues to reach customers, and MVNOs were one way to access customers that Vodafone might otherwise not reach. [✂].

35. Vodafone was willing to provide 4G access to its MVNOs, [✂].

36. Vodafone did not think its entry into the fixed segment would affect what it did in the wholesale market. In contrast to BT, it was just starting out in the fixed market and did not have a significant customer base in fixed.

Capacity

37. [✂]

38. [✂] However, in terms of the spectrum which was becoming available, Vodafone did not believe this would have a significant impact on 4G within the next three to five years. The existing ranges were all that was available for 4G over the next five years, and EE had nearly 60% of it.

39. [✂] Vodafone thought the other MNOs, apart from EE, were in a similar position.

40. Vodafone said that spectrum, backhaul and network sharing were all links in a chain for determining capacity in the MVNO wholesale market, and were all equally important – if one problem was solved, the bottleneck moved from one spot to the next.

41. Vodafone was concerned that BT/EE would be unlikely to utilitise fully the large share of 4G ready spectrum that the combined parties would hold, as the other MNOs would not be able to force them to through competition. For example, today there was single speed 4G. Through carrier aggregation, Vodafone could amalgamate different bits of spectrum it held and could probably get to triple speed. Some competitors were in an even more constrained position than Vodafone, but BT/EE would be able to get to something like eight speed. BT/EE would be likely to hoard their spectrum as a competitive threat against anybody who might want to improve spectral efficiency or bring other innovations to the market, effectively saying 'don't bother as if you do that, we can always stay just one step ahead'.

Negotiations with TalkTalk

42. [✄]

43. [✄]

44. [✄]

45. [✄]

46. Vodafone also said that in some customer bases there were several 'glove box users' (people who took a phone and put a SIM inside and kept it in the glove box for emergencies). With a price per unit charging methodology, they would only be charged for what they consumed, but there was latent network cost to providing the network, buying the spectrum and having the backhaul in place so the phone could be used. [✄]

47. [✄]

Impact of BT/EE merger

48. Vodafone said that if MNOs all had access to appropriate spectrum, access to appropriately priced backhaul and infrastructure and all were able to have the lowest costs in terms of network sharing, then they would be able to compete on an equivalent basis and would compete as today, fairly and aggressively, for MVNO business. However, it was concerned that going forward BT would be incentivised to either degrade the network quality or play around with pricing because these inputs were not regulated. If there were remedies to deal with the backhaul, spectrum and network sharing issues then it thought competition in the wholesale market would continue, but if not it was likely that constraints in spectrum, backhaul and network sharing costs would prevent effective competition.

49. Vodafone suggested that the merger potentially changed BT’s incentives to compete. If BT could act strategically to limit the ability of Vodafone, O2, or Three to compete with it in the wholesale market, then the fact that it had a big fixed base to protect perhaps changed its incentives to compete for MVNOs that were looking to offer competing converged bundles. If other operators could compete effectively for that business, then BT might have the incentive to be less aggressive, but would not have the ability.

Relationships with MVNOs

50. [✂]

51. [✂]

52. [✂] The access network was a shared pipe, whether you were an MVNO subscriber or a Vodafone retail subscriber, [✂].

53. Vodafone said that the buying power of MVNOs depended on the technology platform that the MVNO was based on, and whether it was a thin or full MVNO. The more infrastructure that an MVNO owned, the greater the level of flexibility and technology it could deploy.

54. Vodafone was very active in the MVNO market. Its most recent customer win was Sainsbury’s, which had been with it for two years, [✂].

New entrants

55. Vodafone thought the barriers to entry into the MNO market were high, and it was much more likely that someone would enter either as a thick MVNO or as a thin MVNO and progress towards becoming a thick MVNO.

Mobile backhaul

56. Vodafone said it was heavily dependent on BTW, [✂]. [✂]

57. [✂]

58. [✂] Third, service quality was not protected and Vodafone was at serious risk of service degradation. It was incredibly difficult to claim credits under contracts with BTW and Vodafone was reliant on BTW’s own data to claim credits against it – it was a long and arduous process to get service level guarantees out of BT. The contract with BT therefore did not protect Vodafone – it tied Vodafone more to BT exposing it to qualitative discrimination.

59. [✂]

60. [✂] although buying EADs from Openreach would provide better protection as a buyer, Vodafone would still be concerned that Openreach products were priced in a way that enabled common cost recovery to be loaded onto high bandwidth circuits, so they were still substantially above the incremental costs which BT/EE enjoyed, and there would still be a problem with service and quality degradation. The 2015 Equality of Access Board found that when provisioning EADs, BT lines of business did better than non-BT lines of business. BT tended to buy 'project services' which was an unregulated product that 'pushed' the delivery through Openreach. It was 'wooden dollars' for BT but would be uneconomic for Vodafone to use as this would represent a real cost. Openreach was better than MEAS and BTW, but was not a perfect solution. Vodafone would like to see an appropriate dark fibre remedy.

61. Vodafone believed the merger would make existing discrimination worse. BT had an incentive to discriminate against Vodafone today because they were competitors downstream in the fixed enterprise market. As a result of the merger, BT would equally have an incentive to discriminate when supplying mobile backhaul for Vodafone to compete in the downstream mobile market.

62. [✂]

Cable & Wireless acquisition

63. Vodafone said the acquisition of Cable & Wireless gave opportunities for self supply and backhaul over the long term, [✂].

Small cell developments

64. Vodafone said that small cells would have a different backhaul requirement to the macro networks of today. Because of the site density and the limits on the amount of traffic that a small cell would be able to physically handle, backhaul was much more likely to be around 100 megabits per second (a virtual unbundled local access (VULA) like product) than the one gigabit per second high bandwidth lease lines for the macro network. However, BT would be equally dominant in the supply of VULA which would be the most natural input for small cell backhaul.

Technological developments

65. Vodafone said Cloud-RAN was a technological solution that could be useful for spectrum constrained MVNOs because it made more efficient use of

spectrum. Vodafone had requested dark fibre for this development but had been turned down by Openreach. Openreach made its decisions about what went through the statement of requirements process based upon its own commercial imperatives, so if it was something that did not benefit BT Group as a whole, it was under no obligation to push it forward.

66. Vodafone said that microwave was only used where fibre could not be deployed (for example in more remote areas), and there were issues about reliability and it was very costly to maintain, so it did not see microwave as a replacement for fibre. [✂] In a voice centric world, microwave was a better substitute for fibre than it would be in the future, due to customer expectations.

Supplying other parties

67. [✂]

68. Vodafone was open to supplying other parties, [✂].

Impact of BT/EE merger

69. Vodafone said that EE had an advantage today in terms of coverage and it was deeply concerned that EE could also have an advantage on quality if its sites and fixes were prioritised, which it thought would be possible for the parties.

70. Vodafone was also extremely concerned that while BT/EE could choose to keep the mobile backhaul benefits to themselves, effectively discriminating against the whole of the market, there was an alternative strategy where they could share some of those benefits with MBNL and encourage O2 to bring the O2 traffic to MBNL, [✂].

71. Vodafone said that with a market subject to high barriers to entry, it was important to have full and effective competition to ensure customers benefited in innovation and network investment. The European Commission had stated that competition drove investment, not the other way round, so assuming the O2/Three transaction took place, it was important to have three strong, healthy competitors to drive benefits for customers in terms of speed of roll out, G4, network investment and (in the future) 5G. Vodafone was seriously concerned that unless remedies were put in place or the transaction was blocked, there could be a situation which had gone from four players in the mobile market to effectively two and a half.

Network quality

72. Vodafone said network quality was fundamental to what it sold, and was the most important reason people gave on why they chose a particular mobile network (and network was the primary reason people gave for leaving). The localised quality (if a site needed maintenance) critically affected a customer's experience. Trying to keep all sites working and getting them back on board as quickly as possible if they stopped working was an important metric.

73. Vodafone said that ongoing quality was also important. It had a massive network deployment programme in place to avoid dropped calls. [✂] if the merger went through, the key supplier that it needed to rely on for that would also be its key competitor which benefited from Vodafone's perceived lack of network quality in the downstream market.

74. Vodafone said that information had recently been published on tests across the country on network 4G speeds and reliability: on those 27 tests, EE came first in 24, Three came first in three and Vodafone and O2 came first in zero.

75. [✂]

76. [✂]

77. [✂]

Wholesale broadband

78. Vodafone had an ADSL based network which was part of the Cable & Wireless transaction, which was copper based and could get up to 17 megabits per second. [✂]

VULA margin test

79. Vodafone said the VULA margin test was originally designed for fixed bundling. It had become more complicated by the addition of BT Sport and sports acquisition costs, and Vodafone was concerned that it would become even more complicated by the inclusion of mobile costs. Foreclosure could still take place whilst theoretically passing the test. Post merger, it would become more difficult to assign infrastructure between merger and fixed so costs would be less clear. Even today, there was no confidence that the VULA margin squeeze test, already under appeal, would survive and protect Vodafone.

80. Vodafone accepted that the VULA test would get more difficult anyway with BT launching a mobile product itself even without the merger, but the merger made it much more difficult to identify assets that were used in providing the different services, and in the counterfactual the wholesale costs would be more visible.

81. [✂]