

ANTICIPATED ACQUISITION BY BT GROUP PLC OF EE LIMITED

Summary of hearing with Telefonica on 28 July 2015

Overall concerns

1. Telefonica said that it had two main concerns about the proposed BT/EE transaction: first, that the significant concentration of spectrum would allow the merged entity to foreclose its competitors from certain segments of the retail market; and second, that the scale of the merged entity's retail business would provide increased incentive to use BT's position of significant market power in transmission services provided to mobile operators to foreclose competing operators. It did not think that these problems were insurmountable, but strongly believed they would need to be remedied in some way.

General trends

2. Telefonica said that the UK telecoms market was probably the most advanced in Europe, with the highest levels of data consumption, high innovation, presence of all the major telecoms groups, and some of the lowest prices and poorest margins. The UK mobile market was mature with a very high level of penetration and high data growth, due to factors including innovations in applications, over the top voice services, social networks and mobile commerce. The clear trend was a huge and ongoing increase in data consumption over mobile, driven by 4G.
3. Telefonica said that the proposed merger between H3G and O2 represented a complete exit by Telefonica Group from being a mobile network operator (including GiffGaff and Tesco Mobile, as well as O2) in the UK. There would be an office left dealing with the international wholesale business-to-business (B2B) business of Telefonica and also a business unit active in mobile applications and innovations.

Retail mobile

Consumer vs business

4. Telefonica said that historically it had been more consumer than business oriented, apart from the last five years. The consumer business operated

under the O2 brand, plus two additional principal brands (Tesco Mobile, a joint venture with Tesco, and GiffGaff, a social self-service community of users helping each other), and was the larger part of the Telefonica business. The core network service used by business and consumer was fundamentally the same, with consumer and B2B having a different set of applications on top. There was considerable cross-over between some parts of the consumer market and the small businesses.

5. Telefonica said that there was a lot of product differentiation in the market – key factors included pricing products to address different usage patterns, but also the level of customer service (for example, O2 offers a guru service in its retail stores). [☒]
6. Telefonica said that stores were considered very important to enable customers to directly experience devices when purchasing them and to interact more easily when seeking help for problems with their devices, compared with discussions remotely online or over the phone.
7. Telefonica said that, for large corporate customers, an increasingly large fraction of that market [☒]. Business customers were very risk-averse, and tended to wish to have a direct relationship with the person who owned the network in case things went wrong.
8. Telefonica said that, for large enterprises, the relationship was greater, moving beyond fixed and mobile phone communications into a range of IT services and a larger integration role. Small and medium business (SMB) relationships were also moving that way. In the enterprise space, products tended to be bespoke around individual customers. Public sector customers had different channels of engagement, with a different set of standards and procurement frameworks, and the decision making was very different to a commercial environment.

New entry/changes in strategy

9. Telefonica said that O2 had a very strong mobile virtual network operator (MVNO) business with a consistent stream of approaches (deals recently signed with TalkTalk and Sky).
10. Telefonica said that, at the mobile network level, there had been some innovation around the margin, such as BT's inside out strategy. A stand-alone mobile operator was unlikely to start from scratch (in other markets where mergers had taken place, no new entrants had really emerged).

Convergence

11. Telefonica said that convergence was the other issue that was seen overseas and had been talked about in the UK for years. Everyone, possibly with the exception of Three, had tried bundling fixed and mobile. In 2006 O2 had acquired a broadband business, Be Unlimited, which bundled fixed and mobile and was successful to a degree, but had been sold in 2013 to Sky. The current convergence today seemed to have been driven by the fixed players trying to move into mobile. O2 was trying to do it the other way round from a mobile base, trying to build fixed relationships. However, in the UK the two customer relationships were very different: the fixed relationship was at a household level, and the mobile relationship was at an individual level, [☒].
12. Telefonica said that take up of bundles in Spain had been considerably greater than in the UK, due to supplier push. The regulatory environment in Spain had regulated access for all sets of inputs except for fibre, where it allowed for a certain amount of differentiation. In Spain, the investment was fibre to the home, not fibre to the cabinet. Telefonica had invested in this network, and the fixed operators, ONO and Jazztel, had responded by building fixed infrastructure and expanded their portfolios to include fibre to the home. As Telefonica pushed the converged offering, Orange and Vodafone had responded by acquiring assets to enable them to compete in the market (Orange had acquired Jazztel and Vodafone had acquired ONO).
13. Telefonica, as part of its fixed offering in Spain, had an IPTV offering and had now acquired DTS (the principal digital TV company). It said that once an operator had the fixed infrastructure and the fixed customer base information, it was fairly easy to start matching people up. Packages were driven by differentiation in the market.
14. Telefonica said that the situation in Germany was different for two reasons. First, there was not a huge supplier push for convergence. Second, the structure of the German television market was quite different, being quite dispersed and more cable-oriented. Germany therefore did not appear to lend itself at this point in time to a converged offering including television.
15. Telefonica said that, in the UK, fixed and TV bundling was already substantially happening, with a number of fixed players having large shares of customers taking triple-play services. Telefonica initially just offered a pure broadband service, but found very quickly it had to offer a fixed line with that.
16. Telefonica did not believe there was a meaningful distinction between true bundling and cross-selling different types of communication service. There were relatively few benefits to customers from purchasing bundles, which was

why there was limited customer pull. The main benefit for consumers in the European market had been price – acquiring three or four services together at a substantial discount to buying them individually.

17. Telefonica said that one of the principal reasons for the supplier push to bundling was that once customers bought multiple products, the decision-making process to switch suppliers became much more difficult, so churn was reduced. The savings in subscriber acquisition costs, certainly in mobile, would dwarf any savings from synergies in customer service or economies of scale.

Small cells

18. Telefonica said that a distinction needed to be drawn between femtocells for in-house in building coverage and small cells outside. In-house femtocells were small low-power boxes like a Wi-Fi router that connected back to a mobile network via a home broadband line, for instance, and provided mobile services in the home where there might not be coverage. Many mobile operators, including Telefonica, were offering those services today. [☒]. The service was dedicated to the particular customer and was not shared.
19. Telefonica said that another type of femtocell was a small cell, which was part of a high concentration of mobile infrastructure operated by a mobile operator at street level (such as telegraph poles or lamp posts). The propagation of these cells was usually limited by surrounding buildings to less than 100 metres, but a large number of cells in the streets would provide high-concentration infrastructure, giving very high concentration of capacity, effectively reusing the spectrum. In principle it worked, but you needed access to street furniture locations in order to employ the equipment, and you needed connectivity to those locations, increasingly with 4G fibre.
20. Telefonica said that it and competitors had been engaged with BT around mobile backhaul products for small-cell solutions, but at present there were none available from BT's regulated product set that were fit for purpose, as they required large terminating equipment. [☒]. Telefonica considered small-cell backhaul to be immature.
21. [☒]
22. BT was in a different situation because it had, from its legacy fixed business, some of those assets needed to deploy a small-cell network, and a more widespread network of fibre. BT also had a significant proportion of capacity 4G spectrum, which would be ideal for this application.
23. Telefonica won the 800MHz low-frequency spectrum at the last auction [☒].

24. [☒]
25. [☒]
26. Telefonica believed the importance of the BT brand name was very segment specific. For example, in B2B BT was already an established brand in mobile, and for certain segments of customers had strong resonance. In consumer today, it had a much lower resonance, although there were some segments of customers where it did resonate, and if the market moved much more towards fixed bundling, then they would expect that resonance to increase.

Spectrum and capacity

27. Telefonica said that spectrum coming on to the market in Ofcom's Public Sector Spectrum Release (PSSR) award [☒]. First, there was only 40 MHz of 2.3 GHz spectrum, and the 3.4 GHz spectrum had much poorer propagation characteristics and was not supported by devices. [☒]. Second, there was no guarantee that there were not very large foreclosure incentives in the PSSR auction for BT or EE to acquire that spectrum. Third, Ofcom had not said what competition constraints it would place in that auction. Lastly, Ofcom had raised the prospect of delaying that award, and it was unclear which bits of spectrum might be delayed.
28. Telefonica said that in every spectrum auction it had observed in Europe, incumbent operators had been willing to pay a lot more to buy capacity to protect their base, whereas all the small operators had just retained their share or obtained a smaller share of spectrum coming out of the auction. It saw very, very large incentives for BT or EE to bid high and/or bid strategically for the spectrum.
29. Telefonica said that the different relationship between capacity and number of customers per unit of capacity among mobile network operators (MNOs) was largely historical. H3G was a late entrant to the market and had a 3G licence; it developed a business strategy that was about filling up the unused capacity on its network, so historically had offered very generous data tariffs. [☒]
30. [☒]
31. Telefonica said that BT/EE would not hit a capacity constraint for a very long time, [☒].
32. Telefonica said that [☒].
33. Telefonica said that it had recently done deals with both TalkTalk and Sky, [☒].

34. Telefonica said that combining it with H3G gave total spectrum holdings that were still less than Vodafone's. [☒]
35. Telefonica said that the merged BT/EE would not have capacity constraints and all of their competitors would be capacity-constrained. It was concerned that the merged entity could 'warehouse' the spectrum, would not have to invest, and that its competitors would be less effective. In relation to transmission, moving from the current situation where BT was a supplier but was not a mobile operator to BT having a mobile operator within its portfolio, might bring new incentives to protect that differentiation. The Openreach structure did not give Telefonica all the protection that might be expected, principally because much of what it bought was dealt with by BT Wholesale. There was a concern over how BT Wholesale might behave towards Telefonica compared with how it might behave in relation to EE.
36. Telefonica said that [☒].

Wholesale mobile

37. Telefonica launched Tesco Mobile as the first MVNO in the UK market. [☒]. There was an argument for an empty network to use MVNOs as a way to fill in capacity, [☒].
38. [☒]. Historically MVNOs had been much more voice-orientated and pre-pay, resulting in relatively low usage. Capacity had therefore been less of an issue. [☒].
39. Telefonica said that [☒].
40. [☒].
41. Telefonica said that the MVNO market was naturally quite opaque – it was quite hard to work out who it was competing against. It considered Vodafone and EE to be strong competitors and Three to a much lesser degree. There was a strategic consideration in what was offered to MVNOs. Switching an MVNO was very difficult, [☒].
42. [☒]
43. Telefonica said that, post-merger, BT might decide not to give access to its direct competitors in bundles, especially if it had a network that was far superior to everybody else (ie 'why give away the crown jewels on which they had spent £12.5billion?'). Given H3G's limited wholesale activity, there would then be a choice of two, rather than three, networks.

44. [☒]
45. Telefonica believed the MVNO market from a subscriber perspective was [☒], in percentage terms, whereas the overall market was [☒]. That was driven by new MVNO entrants and was expected to continue.
46. [☒]. It was harder to win an MVNO from someone else, rather than a renewal. It would cost Telefonica [☒] to bring TalkTalk from Vodafone to O2, including setting up the network access, the provisioning systems, the IT systems, the testing and the migration support. Virgin had had tenders out three or four times, but had always stayed with the network it was on. In theory an MVNO moving hosts could decide whether it tendered existing customers or just new connections (but that became difficult to manage as two relationships needed to be managed in the long run).
47. MVNOs operated on different models. Lyca operated as a national roamer, a full MVNO. It had its own number range, its own SIM cards, its own billing systems, its own Home Location Registers (HLRs). For Lyca to switch hosts was simply a network integration project. At some point you would flick the switch and overnight all of the customers would move, at a total cost for the MNO and Lyca of around [☒]. In Spain, Lyca did switch overnight.
48. Another example was TalkTalk, a light MVNO on Vodafone. It had Vodafone's number ranges on the SIM cards, so they would all have to be swapped out and new SIM cards put in place. [☒].
49. Telefonica said that, for a new entrant to the market, the costs depended on which architecture you were choosing. Some architectures were considerably cheaper, but they were more expensive per unit to operate in the longer run. Some were considerably more expensive, but then you got scale economics if you actually achieved scale.
50. Manx was a tiny MVNO, [☒].
51. [☒]
52. Telefonica said that, looking at the BT/EE transaction, there were things that EE could already do in its network like double speed. If it had the 2.6 Ghz spectrum as well, it would have multiple carrier aggregation which would not be available to its competitors. It would then be able to differentiate the network quality it gave to MVNOs versus its own network quality. There would then be an MVNO market that did not provide a competitive constraint for those higher value services. BT/EE would know that it could do over and above what any of the other mobile operators could do, and it could also keep

this as an advantage BT/EE had as an organisation, without sharing it with MVNOs.

53. The concentration of spectrum was one merger-specific issue. In addition, [☒]. If BT developed its own specific small cell proposition for itself because of its fibre and the availability of spectrum, that would be a merger-specific effect that would not be available to other operators.

Mobile backhaul

54. Telefonica said the bulk of its transmission (backhaul) was provided by BT. It had a portion of capacity on BT's 21st Century Network, appended with access tails from Openreach. End to end, the service was provided by the aggregation network it obtained from BT Wholesale and Openreach access components which were also bought through BT Wholesale. [☒].
55. In Telefonica's understanding, MBNL also made extensive use of BT's MEAS product, and a lot of microwave. Vodafone did use a lot of BT products and probably a third of its network was microwave based (after a three to four year programme to introduce competition to BT), but with its purchase of Cable & Wireless it had built its own equivalent of the BT 21st Century Network on the Cable & Wireless estate and were evolving to that over time.
56. With the Beacon Agreement, Telefonica had a network sharing agreement with Vodafone where broadly the country was divided east and west (with slightly different arrangements in London). [☒].
57. The bandwidth demands of 4G were driving a reduction in the amount of microwave because of the need for fibre and the higher capacities. Under the network sharing agreement with Vodafone, [☒].
58. The Beacon Agreement was [☒].
59. [☒]
60. In terms of BT/EE's ability to influence the cost of backhaul, [☒]. The access components of that product were clearly strictly governed under Openreach with some level of regulation. The concern for Telefonica was [☒].
61. The cost of backhaul was a proportion of a much larger cost pool. Telefonica said that the bigger concern about the merger was around innovation. In a world where data was increasing at [☒]% per year, it was likely there would be a number of innovations that Telefonica would want to introduce and it had tried to introduce some without much luck. If there were innovations being

developed to the benefit of EE but not to other wholesale customers, Telefonica would have a very large concern.

62. For example, the backhaul market for small cells was fairly immature. Openreach had held a number of forums with the mobile operators and sought requirements. However, as well as the Openreach component to get to the BT exchange, services would be required from BT Wholesale to get to the Telefonica switch sites. There would be concern if the development of that could be influenced by BT/EE interests.
63. Telefonica said that [§].
64. Telefonica said that today BT did not own a mobile operator, and therefore it had the incentive to develop products for as many MNO customers as possible. In the circumstances where BT had its own MNO, it would have an incentive not only to delay products that other operators might want, but also to develop products for itself that were no longer available to everybody else – that was a merger-specific effect.
65. Telefonica said that there was a distinction between Openreach and BT Wholesale. It believed that Ofcom had concerns about the way Openreach operated. Openreach was a monopoly that had no incentive to improve its quality, and this was a concern across the entire industry. Telefonica's concern was about the development within BT Wholesale, as the network became more complicated and the data demands greater. It would not want innovation to become the responsibility of Openreach, because then there would not be any innovation. There needed to be a way to ensure that everybody received the level of innovation that BT Wholesale could develop on an open market, where it did not own a mobile operator.
66. Telefonica said that implementation of the passive dark fibre remedy proposed by Ofcom would deal with the 'tail end' but would not deal with the complexity and the portion between its core and the BT exchanges.
67. Telefonica said that backhaul represented about [§]% of overall network build costs. [§]. Any extra costs would either take investment away from something else, be added to prices, or the amount of capacity would be constrained.
68. Telefonica said that the market was not static. The amount of capacity being purchased was [§], and the bottleneck in networks moved around. Historically it had been in the access [§].
69. In terms of quality of service, with the backhaul components everyone was equally dissatisfied with the level of repair from Openreach, but from

published figures it seemed to be fairly equivalent between operators, and it was difficult to see how this would change with a combined BT/EE entity, given the current transparency.

70. Telefonica said that BT could potentially differentiate between operators within its 21st Century Network and give more priority to the EE mobile traffic it was carrying, which would be invisible. Ofcom's view was that BT Wholesale did not hold significant market power in the provision of the overall backhaul fibre product, so there were no associated Significant Market Power (SMP) conditions, as distinct from Openreach which was closely regulated. Telefonica disagreed with this view.
71. Telefonica [§]. For Vodafone, EE and Hutchison, self-provide (in terms of microwave) might have worked historically, but they were migrating away from that. The more traffic there was in a network, the more important fibre was going to be, which led to BT.
72. Telefonica was using self-provide microwave for [§]% of its network. [§]. It was necessary to find a site with straight-line visibility to another site to deploy microwave, and discussions were required with landlords for dish rights (which could be anything between [§] a year for attaching the dish to a tower) and towers might need to be strengthened. Nowadays, microwave had to go back to a fibred hub (rather than chain lots of cell sites together) due to the growth of traffic and capacity of microwave backhaul, which limited the number of sites to which microwave could be provided. [§]. Microwave also had other disadvantages, eg quality of service and performance in poor weather conditions. Telefonica estimated that no more than [§]% of its network could be moved towards microwave if BT's product suddenly became a lot worse and more expensive.
73. Telefonica said that it used Virgin [§], but it was not used for aggregation. Due to economies of scale and the difficulties of managing and building links with more than one aggregation network, operators only had one aggregation network (MBNL used BT, Vodafone was using BT and was now building its own based on the Cable & Wireless assets, moving away from BT).
74. [§]
75. Smaller providers were a very limited constraint on BT Wholesale, because of how geographically dispersed the network was and given that the alternative providers were in a very small number of urban areas. [§].
76. Telefonica said that, in general, it was hard to deliver competition. In central London there were lots of options, but if you had to provide 98% coverage to

the country, as Telefonica did, there were only a relatively limited number of places you could go.