Anticipated joint venture between Liberty Global Plc and Telefónica S.A.

Decision on relevant merger situation and substantial lessening of competition

ME/6914/20

The CMA's decision on reference under section 33(1) of the Enterprise Act 2002 announced on 11 December 2020. Full text of the decision published on 21 December 2020.

Please note that [✂] indicates figures or text which have been deleted or replaced in ranges at the request of the parties or third parties for reasons of commercial confidentiality.

SUMMARY

1. On 7 May 2020, Liberty Global plc (**Liberty Global**) and Telefónica S.A. (**Telefónica**) entered into an agreement to establish a 50:50 joint venture (**JV**) to merge their operating businesses in the UK, including Virgin Media Ltd (**Virgin Media**)[1] and Telefónica UK Limited (**O2**)[2] respectively (the **Merger**). Liberty Global and Telefónica are together referred to as the **Parties**. The Competition and Markets Authority (**CMA**) believes that it is or may be the case that arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation.

2. The Merger will lead to both horizontal overlaps and vertical relationships between the Parties in the UK. Liberty Global supplies retail and wholesale fixed telecommunications services, and pay TV services, in the UK through Virgin Media and also operates as a mobile virtual network operator (**MVNO**) through Virgin Mobile Telecoms Ltd (**Virgin Mobile**). Telefónica operates in

[1] Liberty Global will contribute to the JV its wholly owned subsidiary Virgin Media Inc., the parent company of Virgin Media Ltd and Virgin Mobile Telecoms Ltd.
[2] Telefónica S.A. is contributing to the JV its wholly owned subsidiary O2 Holdings Limited, the UK parent company of operating businesses including Telefonica UK Limited, Tesco Mobile Limited and giffgaff Limited.

the UK primarily through O2 as a mobile network operator (**MNO**) supplying retail and wholesale mobile telecommunications services.

3. The Merger meets the thresholds for review under Council Regulation 139/2004/EU (the **EUMR**) and on 30 September 2020, the European Commission received formal notification of the Merger. On 8 October 2020, the CMA requested the referral of the Merger to the UK for review pursuant to Article 9(2)(a) of the EUMR. On 19 November 2020, the European Commission announced its decision to refer in its entirety the Merger to the CMA pursuant to Article 9(3)(b) of the EUMR. The CMA consequently commenced its Phase 1 investigation on 19 November 2020.

4. The Parties submitted a request for a fast track reference of the Merger to an in depth Phase 2 investigation. For a case to be fast tracked, the CMA must, at an early stage of its investigation, have evidence objectively justifying the belief that the test for reference to Phase 2 is met. In addition, fast track cases are likely to be cases where, to the extent that the CMA does find a concern with the merger, that concern would impact on the whole or substantially all of the transaction, and not just one part (that could be resolved through structural undertakings in lieu (**UILs**)).

5. The CMA has concluded that the test for reference is met because there is a realistic prospect that the Merger will result in a substantial lessening of competition (**SLC**) as a result of input foreclosure in relation to the supply of: (i) wholesale access and call origination on public mobile networks (**wholesale mobile services**) to MVNOs in the UK; and (ii) passive fibre leased lines to MNOs, at each of the access and aggregation layers on a local basis.

6. The CMA notes that the identified SLCs would impact on the whole or substantially all of the Merger and not just one part. The CMA has also had regard to its administrative resources and the efficient conduct of the case. In light of the above, the CMA believes that it is appropriate to proceed with a fast track reference of the Merger to Phase 2.

7. As part of their request for a fast track reference, the Parties waived their procedural rights at Phase 1, which included their right to submit UILs. As a result, the CMA has not considered UILs under section 73 of the Enterprise Act 2002 (the **Act**).

8. The CMA has therefore decided to refer the Merger pursuant to sections 33(1) and 32ZA(2) of the Act.

ASSESSMENT

Parties

9. Liberty Global is an international video, broadband and communications company. In the UK, it operates Virgin Media which provides retail fixed telecommunications services (specifically fixed voice, fixed broadband), retail pay TV services and wholesale fixed telecommunications services. Virgin Media also supplies retail mobile services as an MVNO through the Virgin Mobile brand. The turnover of Liberty Global for the financial year 2019 was approximately £10,766 million worldwide and [✂] in the UK.[3]

10. O2 is a subsidiary of Telefónica, the holding company of an international group of telecommunications companies. In the UK, it operates O2 as an MNO, offering retail mobile services to consumers and businesses as well as wholesale mobile services to MVNOs. O2 Holdings Limited, O2's UK parent company,[4] also owns giffgaff Limited (an MVNO) and has shareholdings in the Tesco Mobile joint venture (an MVNO), CTIL (a mobile network-sharing joint venture with Vodafone) and Digital Mobile Spectrum Limited (a 4G joint venture in which Three, EE and Vodafone also hold 25% shareholdings). O2 also provides certain retail fixed services to business customers. The turnover of Telefónica in the financial year 2019 was approximately £42,463 million worldwide and £6,234 million in the UK.[5]

Transaction

11. On 7 May 2020, the Parties entered into an agreement under which Telefónica O2 Holdings Limited and Liberty Global Europe 2 Limited will contribute their respective UK businesses[6] to the JV and each be allotted 50% of the JV's share capital.[7] The businesses contributed by Telefónica S.A. will include its minority shareholdings and joint venture interests in the UK described at paragraph 10 above.

12. On the same date, the Parties also entered into a shareholders' agreement which governs how the JV will be owned, controlled and managed.[8]

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[3] Turnover figures converted from EUR to GBP based on Bank of England average exchange rate for 2019.
[4] See footnote 2.
[5] Turnover figures converted from EUR to GBP based on Bank of England average exchange rate for 2019.
[6] See footnotes 1 and 2.
[7] Form CO submitted by the Parties to the European Commission on 30 September 2020 (**Form CO**), Sections 1-5, paragraph 73. Under the Contribution Agreement, the sellers are described as being Telefónica and Liberty Global: Annex S5.4.1 to the Form CO.
[8] Form CO, Sections 1-5, paragraph 74.

Jurisdiction

13. Each of the businesses being transferred to the JV by each Party is an enterprise. As a result of the Merger, these enterprises will cease to be distinct. The UK turnovers of the transferring businesses exceed £70 million, so the turnover test in section 23(1)(b) of the Act is satisfied. The CMA therefore believes that it is or may be the case that arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation.

14. The Merger meets the thresholds under the EUMR for review by the European Commission and was notified on 30 September 2020. On 8 October 2020, the CMA requested that the European Commission refer the Merger to the CMA for assessment under Article 9(2)(a) EUMR.[9] On 19 November 2020, the European Commission adopted its decision to refer in its entirety the Merger to the CMA for review pursuant to Article 9(3)(b) EUMR. The preliminary assessment period for consideration of the Merger under section 34A(4) of the Act started on 20 November 2020 and the statutory 45 European Commission working day deadline for a decision is therefore 1 February 2021.

Fast track reference

15. The Parties requested that the CMA make a fast track reference of the Merger for an in-depth investigation at Phase 2 and gave their consent to use of the fast track procedure. The Parties accepted that the conditions set out in paragraphs 6.61 to 6.65 of the CMA's jurisdictional and procedural guidance (**CMA2**) are satisfied and that the CMA will find that the test for reference under section 33 of the Act is met (ie that there is a realistic prospect that the Merger will give rise to an SLC).[10] As part of the request, the Parties waived their normal procedural rights during the Phase 1 investigation and agreed that the CMA would not be required to undergo all of the procedural steps it normally follows in cases that are referred for a Phase 2 investigation.

16. For the case to be fast tracked, the CMA must, at an early stage of its investigation, have evidence objectively justifying the belief that the test for reference to Phase 2 is met.[11] In addition, fast track cases are likely to be cases where, to the extent that the CMA does find a concern with the merger,

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[9] See Request pursuant to Article 9(2) of Council Regulation (EU) 139/2004 dated 8 October 2020.
[10] *Mergers: Guidance on the CMA's jurisdiction and procedure (CMA2)*, paragraph 6.62.
[11] *CMA2*, paragraph 6.63.

that concern would impact on the whole or substantially all of the transaction, and not just one part (that could be resolved through structural UILs).

17. The CMA has considered the Parties' request and, for the reasons set out below, finds that the Merger gives rise to a realistic prospect of a SLC in one or more markets in the UK, as a result of input foreclosure in relation to the supply of: (i) wholesale mobile services to MVNOs in the UK; and (ii) passive fibre leased lines to MNOs at each of the access and aggregation layers on a local basis.

18. The CMA notes that the identified SLCs impact on the whole or substantially all of the Merger and not just one part. The CMA has also had regard to its administrative resources and the efficient conduct of the case.[12] In light of the above, the CMA believes that it is appropriate to proceed with a fast track reference of the Merger to Phase 2. For the avoidance of doubt, the CMA's in-depth Phase 2 investigation is not restricted to investigating the issues that have been found to give rise to a realistic prospect of an SLC at Phase 1.[13]

Counterfactual

19. The CMA assesses a merger's impact relative to the situation that would prevail absent the merger (ie the counterfactual).

20. In this case the CMA believes the prevailing conditions of competition to be the relevant counterfactual.

Frame of reference

21. The Parties overlap in the supply of certain retail mobile and fixed telecommunications services, as well as certain retail business services.[14] There are also vertical relationships between the Parties. O2 provides wholesale mobile services to MVNOs, and Virgin Mobile is an MVNO. Virgin

[12] *CMA2*, paragraph 6.65.
[13] *Merger Assessment Guidelines* (OFT1254/CC2), September 2010, paragraphs 4.2.5 and 4.2.6. The *Merger Assessment Guidelines* have been adopted by the CMA (see *CMA2,* Annex D).
[14] In addition to retail mobile services, the Parties overlap specifically in the supply of retail broadband, retail voice, retail business connectivity, retail internet hosting and IT services. The Parties also have vertical links in relation to the supply of wholesale markets for international roaming, wholesale markets for call termination, wholesale termination and hosting of calls to non-geographic numbers, wholesale call origination at a fixed location, wholesale domestic call transit and wholesale international carrier services. The evidence indicates that there are small increments as a result of the Merger and that the Parties do not compete closely in the horizontal overlaps. In relation to the vertical links, either Virgin Media or O2 as an upstream supplier has no ability to foreclose given their small upstream presence/the presence of other significant rivals. Third parties have not raised any concerns in relation to the supply of any of these services. Given this, the CMA does not discuss the supply of these services further in this decision.

Media also provides fibre leased lines as mobile backhaul to MNOs, and O2 is an MNO.

22. The CMA has focussed its Phase 1 investigation on whether the test for reference is met in relation to the supply of: (i) wholesale mobile services to MVNOs; and (ii) passive fibre leased lines to MNOs at the access and aggregation layers, and has considered the appropriate frame of reference for each of these two areas below. For the purposes of its Phase 1 assessment, the CMA has not found it necessary to conclude on the appropriate frame of reference for other areas in which the Parties overlap or have vertical relationships.

Wholesale mobile services

Product scope

23. The Parties submitted that – consistent with both CMA and European Commission decisional precedent – there is a single wholesale market for access and call origination on public mobile telephone networks.[15] The CMA did not receive any evidence to indicate that the product scope should be further widened or narrowed. Accordingly, and consistent with the CMA's approach in *BT/EE,* the CMA believes the appropriate product frame of reference to be the supply of wholesale access and call origination on public mobile networks (ie, of wholesale mobile services).[16]

Geographic scope

24. The Parties submitted that the relevant geographic market is national in scope, ie limited to the UK.[17] The CMA and the European Commission have previously found that the geographic market for wholesale mobile services is national in scope (which in this case, would be the UK), due to, *inter alia*, regulatory barriers stemming from the fact that licences granted to MNOs are generally national in scope.[18] The CMA did not receive any evidence to

[15] Form CO, Sections 6-8, Chapter 2, paragraph 113; see report on the anticipated acquisition by BT Group plc of EE Limited (***BT/EE***) dated 15 January 2016 (***BT/EE* Final Report**), paragraph 13.10, in which the CMA concluded the relevant product market was no broader than the wholesale market for network access and call origination on public mobile networks. See also European Commission decision in eg Case M.8792 - *T-Mobile NL/Tele2 NL* (2018), paragraph 239.
[16] The CMA notes that a possible segmentation exists between the supply of wholesale mobile services to suppliers of fixed-mobile services (ie fixed-MVNOs) and suppliers that do not also sell fixed services (ie mobile-only MVNOs). The CMA has not considered whether such a segmentation is appropriate for the purposes of this decision, but note that in the competitive assessment the CMA has focussed on the ability and incentive for the JV to foreclose MVNOs that, like the JV, can combine their retail mobile offer with a range of retail fixed services in a 'fixed/mobile' bundle. The CMA has also considered the effect that this would have on competition in the supply of such 'fixed/mobile' bundles.
[17] Form CO, Sections 6-8, Chapter 2, paragraph 115.
[18] *BT/EE* Final Report, paragraph 13.10; Case M.8792 - *T-Mobile NL/Tele2 NL* (2018), paragraphs 240-243.

indicate that the geographic scope should be further widened or narrowed. Accordingly, and consistent with the CMA's approach in *BT/EE,* the CMA believes the appropriate geographic frame of reference for the supply of wholesale mobile services to be the UK.

Passive fibre leased line services

Product scope

25. Mobile backhaul is the network connectivity that connects an MNO's base station to its core network. Virgin Media supplies MNOs with fibre leased line services for mobile backhaul in the form of passive leased lines, also referred to as 'dark fibre' (leasing of the physical line itself without any electronic equipment (ie unlit optical cables connecting two nodes)).[19] Virgin Media also supplies active leased lines (namely, optical access and Ethernet products where the physical line is supplied with electronic equipment).[20] Several third parties responding to the CMA's merger investigation raised concerns based on the supply of passive leased lines and, as such, the CMA has taken passive leased lines as the starting point for its Phase 1 assessment of the product frame of reference.

26. Firstly, the CMA considered whether it is appropriate to widen this frame of reference to include active leased lines. Both the CMA and European Commission have previously considered the question of whether passive leased lines and active leased lines should form part of the same product market.[21] The Parties submitted that distinguishing passive from active leased lines was not appropriate on the basis that all the products have the technical suitability and bandwidth to provide a similar service, and suppliers can easily substitute between offering these products.[22] However, third party feedback received during the CMA's merger investigation was mixed and did not definitively indicate whether passive leased lines are a close substitute to

[19] Form CO, Sections 6-8, Chapter 5, paragraph 13.
[20] Optical access refers to suppliers leasing, for fibre leased lines, the line together with electronic equipment that gives access to part of the optical spectrum of the fibre (Form CO, Sections 6-8, Chapter 5, paragraph 12(b) and 15(b)). Ethernet access refers to when suppliers lease the line with electronic equipment that supports a transmission protocol (predominantly, through Ethernet access) (Form CO, Sections 6-8, Chapter 5, paragraph 12(c) and 18).
[21] In *BT/EE* (*BT/EE* Final Report, paragraph 15.53), the CMA distinguished between 'managed' and 'unmanaged' leased lines but concluded that the supply of (terminating segment) unmanaged fibre backhaul formed part of a wider leased lines market (including the supply of dark fibre, either from third-party suppliers or self-build). It noted that where available, dark fibre was used as a substitute for active leased lines. It further noted that, unlike managed backhaul services, unmanaged leased lines products were not customised for MNOs; instead they were used both as inputs for managed mobile backhaul services and as inputs for fixed business connectivity services. The same also applied for dark fibre terminating segments (see also paragraph 15.52). The European Commission has considered (but left open) the question of whether active and passive leased lines should be in the same market: see for example Case M.7109 *Deutsche Telekom/GTS* (2014), paragraph 70; Case M.8864 *Vodafone/Liberty Global* (2019), paragraph 201.
[22] Form CO, Sections 6-8, Chapter 5, paragraph 192-193.

active leased lines from either a demand or supply-side perspective. As noted above, several third parties raised concerns that Virgin Media could withdraw access to passive leased lines, forcing MNOs to use active leased lines. These third parties did not consider active leased lines to be a close substitute for passive leased lines, principally because the latter have a favourable cost structure (particularly relevant given the anticipated increase in demand for 5G telecommunication services). As such, these third parties had a strong preference for passive leased lines over active leased lines.

27. Secondly, the CMA also considered whether it is appropriate to distinguish within passive fibre leased lines between the terminating segments (the access layer) and the trunk segments (the aggregation layer). In *BT/EE*, the CMA did not distinguish on this basis.[23] The Parties submitted that the two layers formed part of a single market on the basis that bandwidth requirements do not necessarily differ between network layers. Moreover, the Parties submitted that if bandwidth requirements were similar, the same products could be deployed in both layers; specifically, passive fibre leased lines.[24] However, some third parties responding to the CMA's merger investigation indicated that distinguishing between the access and aggregation layers may be appropriate due to lack of demand-side substitutability and differences in competitive constraints as between them.

28. Accordingly, in light of the mixed evidence outlined above, the CMA has, on a cautious basis, assessed the impact of the Merger on the supply of passive fibre leased lines in: (i) the access layer; and separately, (ii) the aggregation layer.

Geographic scope

29. The Parties submitted that there is no significant variation in either demand or supply conditions across different areas of the UK (for the supply of leased lines) and therefore the geographic market can be defined as national.[25] The CMA has previously considered different competitive conditions in local markets but has ultimately not concluded on the precise geographic frame of reference.[26]

[23] In *BT/EE*, the CMA instead focused on 'mobile backhaul', which it described as usually including 'a connection from the base station site to a local exchange and additional connectivity from a local exchange to a POC or POP with the MNO's core network' (*BT/EE* Final Report, paragraph 2.20),
[24] Form CO, Sections 6-8, Chapter 5, paragraphs 186.
[25] Form CO, Sections 6-8, Chapter 5, paragraph 213.
[26] *BT/EE* Final Report, paragraph 15.57.

30. The CMA has considered the impact of the Merger in respect of the supply of passive fibre leased lines at the access and aggregation layers:

(a) In relation to the access layer, several third parties noted that, in line with the geographic markets defined by Ofcom, there are four geographic frames of reference.[27] Given this, the CMA will consider geographic frames of reference in the access layer in line with these classifications of local areas.

(b) In relation to the aggregation layer, Ofcom has previously defined each BT exchange (the network facility that aggregates lines) to be a separate geographic market.[28] In particular, exchanges are classified by the number of suppliers (BT only, BT and one other supplier '**BT+1**', or BT and two or more other suppliers '**BT+2**') present at each exchange. The CMA did not receive any evidence to indicate that Ofcom's classifications should be further widened or narrowed. Given this, the CMA will consider geographic frames of reference in the aggregation layer in line with these classifications of local areas.

Conclusion on frame of reference

31. For the reasons set out above, the CMA has considered the impact of the Merger in the following frames of reference:

(a) The supply of wholesale mobile services in the UK; and

(b) The supply of passive fibre leased lines at each of the access and aggregation layers on a local basis. As set out at paragraph 47, notwithstanding that the product frames of reference are separate, the CMA has assessed the effect of the Merger on the supply of passive fibre leased lines (at both the access and aggregation layer) together in the competitive assessment (given the similarities in the nature of the assessment at Phase 1).

[27] These are the Central London Area (**CLA**) where several suppliers are present, the High Network Reach (**HNR**) areas which are characterised by the presence of BT and more than one other operator, **Area 2** (where there is already some material commercial deployment by rival networks to BT or where this could be economic) and **Area 3** (where there is unlikely to be material commercial deployment by rival networks to BT). See also Ofcom, paragraph 7.93, Promoting competition and investment in fibre networks: Wholesale Fixed Telecoms Market Review 2021-26 (Volume 2).
[28] See Ofcom, paragraphs 7.74-7.77, Promoting competition and investment in fibre networks: Wholesale Fixed Telecoms Market Review 2021-26 (Volume 2).

Competitive assessment

32. Vertical effects may arise when a merger involves firms at different levels of the supply chain, for example a merger between an upstream supplier and a downstream customer or a downstream competitor of the supplier's customers.[29] The CMA's approach to assessing vertical theories of harm is to analyse (a) the ability of the merged entity to foreclose competitors, (b) the incentive of it to do so, and (c) the overall effect of the strategy on competition.[30]

Input foreclosure in the supply of wholesale mobile services to MVNOs in the UK

33. There are four MNOs that provide wholesale mobile services to MVNOs in the UK (BT/EE, O2, Three, and Vodafone). O2 and BT/EE are the largest MNOs supplying wholesale mobile services to MVNOs. The Parties estimate that in 2019 O2 had a share of supply of [30-40]% in the supply of wholesale mobile services to MVNOs.[31] Some MVNOs (such as Virgin Mobile and Sky Mobile (the latter of which is hosted by O2)), referred to throughout this decision as '**fixed-MVNOs**', are able to combine their retail mobile offer with a range of retail fixed services such as fixed voice and fixed broadband (**fixed/mobile bundles**). These may also be sold alongside pay TV services.

34. The JV will combine Virgin Mobile's fixed-MVNO offering with O2's substantial position in both retail mobile services (estimated to be around [30-40]%)[32] and wholesale mobile services to MVNOs in the UK. In light of the dependency of MVNOs on MNO wholesale mobile services (and specifically O2's wholesale mobile services) a number of third parties raised concerns that the JV might restrict access to these services, degrade the quality of its service provision or increase the price it charges for wholesale mobile services (so as to reduce rival MVNOs' competitiveness).

35. The CMA has therefore assessed, in relation to the supply of wholesale mobile services currently provided by O2, whether the JV would have: (i) the ability to foreclose fixed-MVNOs (either under its current contract with Sky Mobile or when fixed-MVNOs are looking to negotiate new contracts); and (ii) the incentive to do so. It has also assessed whether the effect of such an

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[29] *Merger Assessment Guidelines*, paragraphs 4.1.4 and 5.6.6.
[30] See the *Merger Assessment Guidelines*, at paragraph 5.6.6.
[31] Table 2.11 of the Form CO, Sections 6-8, Chapter 2. The estimates exclude MVNOs that are sub-brands of MNOs and Tesco Mobile.
[32] Table 1.9 of the Form CO, Sections 6-8, Chapter 1. Includes sub-brand giffgaff and the joint venture with Tesco Mobile.

input foreclosure strategy would result in reduced competition in the supply of fixed/mobile bundles.[33] The CMA has focused specifically on provision to fixed-MVNOs as this is the segment in which the JV's incentives may differ from O2's incentives prior to the Merger. Prior to the Merger, O2 operated its retail mobile MNO business in competition with those MVNOs to which it supplied wholesale mobile services. O2 did not have the ability to offer fixed/mobile bundles to any significant extent prior to the Merger.[34] The profitability of a foreclosure strategy that could result in switching by fixed/mobile bundle customers is likely to be different than that of a foreclosure strategy that could result in switching by mobile customers only.

Ability

36. The Parties submitted that the JV will not have the ability to: (i) restrict or degrade the supply of wholesale mobile services to MVNOs (including fixed-MVNOs) by not bidding or bidding less competitively for future contracts; or (ii) degrade within the existing contract the quality of wholesale mobile services O2 currently provides to Sky Mobile.[35] The Parties submitted that, as regards future contracts, the JV will lack the ability to foreclose MVNOs as credible alternative MNOs will remain post-Merger.[36]

37. The CMA notes that absent the Merger, O2 would continue to be one of only four MNOs available to fixed-MVNOs (such as Sky Mobile) seeking to negotiate a supply contract for wholesale mobile services with an MNO.

38. In the event that the JV restricted access to these services, degraded the quality of its service provision or increased the price charged for these services, fixed-MVNOs would have only three alternative MNOs (ie Three, BT/EE, and Vodafone). We note that one of these MNOs, BT/EE, competes with Sky Mobile in the supply of fixed/mobile bundles, and may therefore not be a strong bidder in the supply of wholesale mobile services to fixed-MVNOs. Furthermore, third party views and evidence in relation to the willingness of Three, BT/EE, and Vodafone to compete strongly in order to host fixed-MVNOs post-Merger is inconsistent. As such, fixed-MVNOs may face higher prices or lower quality when tendering for a host MNO.

39. Accordingly, the CMA believes that, given the limited alternative providers available, fixed-MVNOs (such as Sky Mobile) would likely experience lower

[33] See the *Merger Assessment Guidelines*, at paragraph 5.6.6.
[34] O2 does not provide any fixed/mobile bundles to consumers, but provides to a limited extent fixed/mobile bundles to business customers.
[35] O2 currently supplies Sky Mobile with wholesale mobile services. The MVNO agreement between O2 and Sky Mobile [✄] (Form CO, Sections 6-8, Chapter 2, paragraph 11).
[36] Form CO, Sections 6-8, Chapter 2, paragraphs 4-5.

quality of service or higher prices for wholesale mobile services if the JV restricted its supply of wholesale mobile services.

Incentive and effect

40. The Parties submitted that the JV will not have the incentive to foreclose MVNOs as it could not recoup lost wholesale revenues on the downstream retail mobile market, and any refusal to supply or degradation of the wholesale mobile services it supplies would not lead to material switching by those MVNOs' fixed customers to the JV's fixed products.

41. The CMA has not assessed in detail whether any foreclosure strategy would be profitable but notes that the JV would become a provider of fixed/mobile bundles as a result of combining Virgin Media's services with O2's services. If the JV were to worsen the commercial terms of wholesale mobile services to other fixed-MVNOs (such as Sky Mobile) post-Merger, this could result in retail customer diversion from the foreclosed fixed-MVNOs to the JV's fixed/mobile bundles. Accordingly, the CMA believes that the JV may have the incentive to foreclose fixed-MVNOs (either within contract, through a degradation of service, or upon contract renewal).

42. As the JV may have the ability and the incentive to foreclose MVNOs which supply (or seek to supply) fixed/mobile bundles, and given these MVNOs are some of the largest providers of fixed/mobile bundles,[37] the CMA believes that the remaining level of retail competition in the provision of such bundles may not be sufficient to mitigate potential price increases or quality deterioration of retail offers.

Conclusion on input foreclosure in the supply of wholesale mobile services to MVNOs

43. Accordingly, the CMA believes that the Merger raises a realistic prospect of an SLC as a result of input foreclosure in relation to the supply of wholesale mobile services to MVNOs active in the supply of fixed/mobile bundles in the UK.

[37] For example, we note that the Parties estimate that Sky has high shares of supply (by number of subscribers or revenue) in fixed-mobile bundles. The Parties estimate that Sky has a 23% share of revenue in the supply of all fixed-mobile bundles (ie including dual-play, triple-play and quadruple-play bundles) in 2019, and this is higher in the supply of quadruple play fixed-mobile bundles (33%, by revenue, in 2019). Parties' submission, 'EC RFI 2: Annex 2.1,' Tables 12 and 16.

Input foreclosure in the supply of passive fibre leased lines to MNOs in the access and aggregation layer on a local basis

44. Virgin Media is the second largest provider of mobile backhaul to MNOs in the UK across both the access and aggregation layer. Virgin Media's fibre network is present in around 45% of postcodes nationwide.[38] It currently supplies dark fibre / passive leased lines as mobile backhaul to Three, MBNL (a network sharing joint venture between BT/EE and Three), Vodafone and O2. In addition, it supplies passive fibre leased lines to other providers of mobile backhaul which in turn supply MNOs.

45. In addition to Virgin Media, mobile backhaul is supplied by Openreach, which provides network access to BT's fixed communications infrastructure in the UK (**BT/Openreach**).[39] BT/Openreach is the largest supplier of mobile backhaul to MNOs and is active across nearly all UK postcodes in both the access and aggregation layers.[40] However, BT Openreach only supplies active leased lines (except for areas where it is the sole backhaul provider and is required to supply passive leased lines at the aggregation layer).[41] There are also a number of other passive leased line providers, such as CityFibre, which have only a very limited national presence or are only present in major cities.[42] Smaller suppliers are more likely to be present in the aggregation layer (and may expand into the access layer as and when they have built up a customer base such that expanding into the access layer is economical).

46. Some third parties raised concerns that the JV could engage in input foreclosure in the supply of passive fibre leased lines to MNOs that it will compete with downstream. It could do this by increasing the price, reducing service quality, changing the offering (eg by stopping or delaying the rolling

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[38] Form CO, Sections 6-8, Chapter 5, paragraph 162.

[39] Openreach operates at arm's length from the rest of BT, in accordance with undertakings offered to Ofcom in 2005 in lieu of a market investigation reference to the Competition Commission (**the Undertakings**). The purpose of these Undertakings is to ensure that other divisions of BT transact with Openreach on the same terms as third party customers and that BT does not discriminate in favour of its own downstream wholesale and retail divisions. The remainder of BT's business is run through five other business divisions, namely EE, Wholesale and Ventures, Consumer, Business and Public Sector and Global Services.

[40] BT/Openreach is present in around 98% of UK postcodes (Form CO, Sections 6-8, Chapter 5, paragraph 162). BT is present in the four local areas identified above (CLA, HNR, Area 2, Area 3) in the access layer and is present at all BT exchanges in the aggregation layer.

[41] In the aggregation layer, Ofcom imposes a remedy on BT of access to passive leased lines/dark fibre at cost for those BT only exchanges where a rival network is more than 100m away. Passive leased lines are unregulated in the access layer across the UK (Form CO, Sections 6-8, Chapter 5, paragraphs 25 and 27).

[42] Smaller providers are only present in the CLA and HNR areas in the access layer. In the aggregation layer smaller providers are active in between 10% and 23% of exchanges (there are 5,573 exchanges in total, 733 of which are BT+1 exchanges and 571 of which are BT+2 exchanges. As some of the 733 BT+1 exchanges are exchanges where Virgin Media is active, the 23% is an upper bound). As set out in Ofcom (2019) *Promoting competition and investment in fibre networks – review of the physical infrastructure and business connectivity markets*, Volume 2, table 8.1.

out of passive fibre leased lines so as to reduce those MNOs' network coverage), or offering only active or managed services. Third parties did not raise concerns specific to a particular network layer.

47. The CMA has assessed whether the JV would engage in input foreclosure in the supply of passive fibre leased lines to MNOs in both the access and aggregation layers. The CMA has considered the JV's (i) ability to foreclose rival MNOs (either under its current contracts with MNOs or when MNOs are looking to negotiate new contracts); and (ii) incentive to do so for the both the access and aggregation layers together, given the approach to our Phase 1 assessment does not differ between the layers. The CMA has also assessed whether the effect of such an input foreclosure strategy at the access and/or aggregation layer would result in reduced competition in the supply of retail mobile services.[43]

Ability

48. The Parties submitted that the JV would not have the ability to foreclose MNO rivals because the putative foreclosed MNOs would always be able to purchase price-regulated backhaul from BT/Openreach and increasingly from other rival infrastructure providers.[44] However, as set out above in the context of the frame of reference at paragraph 26, the CMA notes that several third parties have indicated that active leased lines are not close substitutes for passive leased lines (such that they may form part of a separate product frame of reference).

49. The CMA notes that other rivals of Virgin Media in the supply of passive fibre leased lines, such as CityFibre, only have a limited presence in the UK.[45] Although BT/Openreach infrastructure is available almost everywhere in the UK, BT/Openreach only offers active leased lines in areas where it is not the sole supplier.[46] Furthermore, Ofcom does not regulate the price or quality of BT/Openreach in areas where it does not have 'significant market power' status.[47] Therefore, in local areas where only BT/Openreach and Virgin Media

[43] See the *Merger Assessment Guidelines*, at paragraph 5.6.6.
[44] Form CO, Sections 6-8, Chapter 5, paragraph 254. In addition, the Parties submitted that (i) existing customers of Virgin Media enjoy stringent contractual protections, (ii) Vodafone derives additional protection from its network-sharing arrangements with O2, and (iii) backhaul represents only a small proportion of MNOs' costs.
[45] In addition, one third party considered that an MNO would not be able to build their own mobile backhaul network should they be unable to contract with a mobile backhaul supplier
[46] As set out in Ofcom (2019) *Promoting competition and investment in fibre networks – review of the physical infrastructure and business connectivity markets*, Volume 2. The Parties estimated that BT had a leased line presence in 97.5% of total postcodes nationwide (Form CO, Sections 6-8, Chapter 5, Table 5.12).
[47] Ie, in relation to active leased lines. BT has 'significant market power' status in the whole of the UK for the access layer, except for the CLA and the Hull Area. In the aggregation layer, BT has 'significant market power' status in all of its exchanges where it faces competition from fewer than two other operators. See Ofcom (2019)

are present (at either the access or aggregation layer),[48] MNOs only have Virgin Media as a passive fibre leased line supplier and the regulation of BT/Openreach would not prevent Virgin Media from adopting a foreclosure strategy.[49]

50. This suggests that the JV may have the ability to engage in partial foreclosure of rival MNOs through price increases or quality deterioration (at either the access or aggregation layer). This may occur for existing customers, insofar as certain elements of Virgin Media's offering are not sufficiently contractually constrained, and when Virgin Media competes for new contracts post-Merger. In addition, this suggests that the JV is also likely to have the ability to stop or delay the rollout of its passive leased lines to rivals, or withdraw its rivals' access to it where it is already offered.[50]

Incentive and Effect

51. The Parties submitted that the JV would not have the incentive to foreclose MNO rivals because (i) it would only be able to foreclose a subset of MNOs' mobile sites due to its limited geographic presence; (ii) Virgin Media [✂] from supplying passive leased lines; and (iii) it would not recoup the revenues sacrificed upstream through increased sales of retail mobile services downstream. The Parties argued that even if the JV did engage in a foreclosure strategy, it would have no anticompetitive effect as BT/EE (through BT infrastructure) and Vodafone (through the Cable & Wireless infrastructure)[51] would be able to self-supply backhaul and others could invest in self-supply.

52. The CMA has not assessed in detail whether any foreclosure strategy would be profitable but notes that the quality and availability of passive fibre leased lines for the rollout of 5G are likely to have a direct impact on the mobile services that MNOs can provide to their retail customers. Several third parties

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Promoting competition and investment in fibre networks – review of the physical infrastructure and business connectivity markets, Volumes 2, p4.

[48] For the purposes of its Phase 1 decision, the CMA has focused its competitive assessment on the impact on Area 2 in the access layer (ie, areas where there is already some material commercial deployment by rival networks to BT or where this could be economic) and BT+1 areas in the aggregation layer (where the additional supplier is Virgin Media).

[49] The CMA notes that even if BT/Openreach's leased lines for mobile backhaul were close substitutes with Virgin Media's, it may not affect Virgin Media's ability to adopt a foreclosure strategy because (a) a foreclosure strategy by Virgin Media would reduce the choice available to MNOs given that in many areas, BT/Openreach and Virgin Media are the only two suppliers of any form of backhaul and (b) one MNO submitted that, where it is possible, they use two suppliers in the aggregation layer for greater resilience (again given that in many areas, BT/Openreach and Virgin Media are the only two suppliers of any form of backhaul).

[50] The CMA has seen no evidence suggesting that the ability of Virgin Media to engage in a foreclosure strategy differed materially between the access and aggregation layers and third parties that raised concerns about the Merger did not distinguish between these segments.

[51] In 2012, Vodafone acquired Cable & Wireless (see Case M.6584 – *Vodafone Group / Cable & Wireless Worldwide*).

submitted that a foreclosure strategy by Virgin Media would have a significant negative impact on their costs and their retail mobile business (these third parties did not indicate whether any such strategy would occur at the access or aggregation layer, but the CMA considers that it is plausible that the incentive could exist at either or both layers). The CMA believes that any material deterioration in the quality and/or availability of retail mobile services may be a significant stimulus of customers switching away from their retail supplier. This may be particularly relevant in the context of the roll out of 5G services. By engaging in a foreclosure strategy the JV could both worsen the attractiveness of rival MNOs' offering (in particular Vodafone and Three) and increase the JV's attractiveness to retail customers. Therefore, the profit gains that the JV could obtain at the retail level from a foreclosure strategy could be large.[52]

53. As the JV may have the ability and the incentive to foreclose MNOs which compete with the JV in the supply of retail mobile services, and given these MNOs are some of the largest rivals to the JV (notably Vodafone and Three), the CMA believes that the remaining level of retail mobile services competition may not be sufficient to mitigate potential price increases or quality deterioration of retail mobile service offers.

54. The CMA therefore believes that the JV may have an incentive to foreclose rival MNOs by increasing the prices and/or deteriorating the quality of the passive fibre leased lines services provided by Virgin Media.

Conclusion in relation to the supply of passive fibre leased lines to MNOs in the access and aggregation layers

55. Accordingly, the CMA believes that the Merger raises a realistic prospect of an SLC as a result of input foreclosure in relation to the supply of passive fibre leased lines to MNOs at each of the access and aggregation layers on a local basis.

Third party views

56. The CMA contacted customers and competitors of the Parties and some parties raised concerns about the Merger. Most of these concerns related to the two vertical issues set out in the competitive assessment above. However, the CMA also received concerns relating to a number of additional issues.

[52] Such a strategy need not necessarily involve a significant sacrifice by Virgin Media at the wholesale level if it were to offer active services instead of passive services.

57. A small minority of third parties raised concerns that the Merger would lead to a loss of competition in retail mobile services on the basis that Virgin Mobile is an important competitive constraint on O2 in the supply of retail mobile. The CMA notes that Virgin Mobile has a low share of supply (supplying an estimated [0-5]% of mobile subscribers in 2019),[53] and that this share of supply has declined over time.[54] The evidence also indicates that the Parties do not compete closely. Given this, the CMA does not believe that competition concerns would arise as a result of the Parties' overlap in retail mobile services.

58. In addition, a small minority of third parties raised customer foreclosure concerns in relation to both wholesale mobile services and fibre leased lines for mobile backhaul. However, in relation to customer foreclosure in wholesale mobile services, the CMA does not consider concerns to arise on the basis that Virgin Mobile is, as noted above, very small relative to the size of MNOs at the retail mobile services level. As such, the JV would not have the ability to engage in customer foreclosure. Similarly, in relation to customer foreclosure concerns in relation to fibre leased lines, although a larger share of O2's mobile backhaul requirements may be supplied by Virgin Media post-Merger, Vodafone and Three will continue to require fibre leased lines for mobile backhaul.

Decision

59. For the reasons set out above, the CMA believes that it is or may be the case that (i) arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation; and (ii) the creation of that situation may be expected to result in an SLC within a market or markets in the United Kingdom. The CMA therefore believes that it is under a duty to refer under section 33(1) of the Act.

60. The Parties requested and consented to the use of the fast track process and waived their right to offer UILs. The CMA has therefore decided to refer the Merger pursuant to sections 33(1) and 34ZA(2) of the Act.

Joel Bamford
Senior Director, Mergers
Competition and Markets Authority
11 December 2020

[53] Form CO, Sections 6-8, Chapter 1, Table 1.9.
[54] Until 2009 Virgin Mobile had a share of supply of around [5-10]% (based on number of subscribers). Form CO, Sections 6-8, Chapter 1, paragraph 201.