



**RESPONSE OF VIRGIN MEDIA LIMITED TO THE
CMA's PROVISIONAL FINDINGS
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**VIRGIN MEDIA'S RESPONSE TO THE COMPETITION AND MARKET AUTHORITY'S
PROVISIONAL FINDINGS ON THE ANTICIPATED ACQUISITION BY BT GROUP PLC OF
EVERYTHING EVERYWHERE**

1. EXECUTIVE SUMMARY

1.1 This memorandum sets out the response of Virgin Media Limited ("**Virgin Media**") to the provisional findings ("**PFs**") of the Competition and Markets Authority ("**CMA**") in respect of the anticipated acquisition by BT Group PLC ("**BT**") of Everything Everywhere ("**EE**") (the "**Proposed Transaction**").

1.2 BT has repeatedly stated its expectation that the demand for joint purchases of fixed and mobile services from a single provider will strongly increase, and that positioning itself for this expected market development was the central rationale for the transaction. As explained by BT's CEO Gavin Patterson:

"We expect significant demand in the market for fixed and mobile converged products, and we will [be] better equipped than anyone else in the UK to offer these services and meet the changing needs of UK consumers".¹

1.3 The CMA has explicitly acknowledged that, should customer demand for combinations of fixed and mobile services develop in a way that is consistent with BT's strategic vision, "*the merger might change EE's ability and incentive to harm MVNOs which would compete with the merged entity across mobile and fixed services*".²

1.4 Such a change in incentives is of particular relevance for fixed-MVNOs which would be the primary sources of competitive constraint on the merged entity for customers who want to purchase fixed and mobile services from the same provider. Among fixed-MVNOs, Virgin Media's position has particular significance in the scenario envisaged by BT: as the owner of the second largest fixed network providing cable broadband and telephony service to nearly 5 million customers, and the largest independent MVNO, Virgin Media is capable of acting as an especially effective competitor to the merged entity for customers with combined demand for fixed and mobile services.

1.5 Virgin Media therefore strongly disagrees with the provisional finding that the Proposed Transaction should not be expected to result in a significant lessening of competition as a result of a foreclosure strategy by the merged entity in the wholesale mobile market. This is on the basis that the PFs:

(a) materially understate the importance of Mobile Virtual Network Operators ("**MVNOs**") in ensuring effective retail mobile competition, and the need for them to obtain wholesale mobile services on competitive terms in order to remain competitive. As a result the PFs materially underestimate the impact on consumers of total and/or partial foreclosure of MVNOs;

(b) undertake a flawed economic foreclosure analysis that does not properly assess the most obvious theory of harm: that the merged entity would have greater incentives to protect its fixed-mobile strategy through partial foreclosure of fixed-MVNOs (by increasing wholesale prices or reducing quality of wholesale services);

¹ See for instance <http://www.mobileworldlive.com/featured-content/top-three/bt-boasts-50000-consumer-mobile-subs/> or <http://www.btplc.com/Sharesandperformance/Presentations/downloads/EEAnnouncementPresentationFINAL.pdf>

² PFs, para. 22.

- (c) incorrectly assess the ability of fixed MVNOs to secure competitive terms for wholesale mobile services from the remaining Mobile Network Operators ("**MNOs**") post-merger;
 - (d) undertake a flawed demand side analysis of future market developments relating to the purchasing of fixed and mobile services from the same provider; and
 - (e) undertake a flawed substantive analysis of partial foreclosure. The PFs erroneously conclude that any harm to Virgin Media would be temporary. A delay to transformation to a full MNO, and being "locked in" to a longer term agreement with the merged entity, would have long term effects. Accordingly, the PFs **significantly understate the substantial effects the merged entity's partial foreclosure strategy would have on fixed-MVNOs and on retail competition.**
- 1.6 Independent of the above points, given that there is a clear divergence of views on the key issues between the four Members of the Group, the CMA should adopt a cautious approach in assessing whether the Proposed Transaction may result in the merged entity engaging in a foreclosure strategy in the supply of wholesale mobile services.
- 1.7 This is particularly the case given that the risks for consumers of the CMA reaching the wrong decision are asymmetrical. A Type I error (clearing the transaction without remedy when intervention is required) will have significantly worse adverse consequences for consumers than a Type II error (clearing the transaction with proportionate remedies when intervention is not required). This is because if the Proposed Transaction is cleared without remedy in circumstances in which that is the wrong decision, the adverse consequences for consumers will be significant and largely irreversible. In contrast, should the Proposed Transaction be cleared subject to proportionate remedies in circumstances in which such remedies were not required, there will be no or very minimal adverse consequences for consumers, and the situation would be reversible as the CMA would be able to vary, revoke or release any remedies, as appropriate.
- 1.8 Accordingly, the CMA should reverse the conclusion in the PFs and find that the merged entity may be expected to engage in a strategy of foreclosure in respect of the supply of wholesale mobile services with resulting adverse effects on retail competition.
- 1.9 [§].

Importance of MVNOs

- 1.10 The PFs materially understate the critical role played by MVNOs in ensuring effective competition in the retail supply of mobile services:
- (a) MVNOs are well-established in the UK since 1999 and are drivers of innovation and lower pricing;
 - (b) the European Commission has recognised that MVNOs play a "*significant role*" in the UK retail mobile market on the basis that they "*not only compete on price and consumer service with their host networks but they also stimulate competition by introducing innovative business models*";³ and
 - (c) Ofcom views MVNOs as an important means to ensure effective downstream retail competition by encouraging competition.⁴

³ See Case No COMP/M.5650 *T-Mobile/Orange*, 1 March 2010 ("**T-Mobile/Orange**") para. 46.

⁴ Ofcom's Second Consultation on Assessment of Future Mobile Competition and Proposals for the Award of 800 Mhz and 2.6 Ghz Spectrum and related issues, 12 January 2012 ("**Ofcom Second Consultation**"), Annex 6 (Revised Competition Assessment), para. 2.20.

- 1.11 The ability of MVNOs to act as a real competitive constraint is, however, dependent on there being effective competition in the supply of wholesale mobile services with MVNOs being able to secure commercial terms that enable them to compete. Ofcom has observed that, if wholesale markets were to evolve in a way which it would be difficult for MVNOs to obtain competitive wholesale access to national networks, then *"there could be a significant reduction in competitive intensity in the retail market ..."*.⁵
- 1.12 As a result, the PFs fail properly to assess the likelihood of the merged entity engaging in a foreclosure strategy and the adverse consequences for consumers which would follow.

Flaws in the PFs' economic framework for assessing foreclosure

- 1.13 The focus of the analysis in the PFs is primarily on a strategy of *total* refusal to supply fixed-MVNOs with mobile wholesale services. The concern of *"raising rivals' costs"* is, however, the most obvious and natural theory of harm to explore given that it can be more profitable for MNOs to retain wholesale revenue whilst gaining fixed-mobile customers that switch away from a weakened fixed-MVNO. The lack of a proper assessment in the PFs of the ability and incentive of the merged entity to raise rivals' costs is therefore a major omission.
- 1.14 Virgin Media's **primary concern is not total** foreclosure. [§]. The PFs should, therefore, have rigorously analysed, within a coherent framework, the effect of the Proposed Transaction on the likelihood of the merged entity engaging in a strategy of *"raising rivals' costs"* and the resulting impact at the retail level. The PFs do not do so.

Flaws in assessment of the ability of MVNOs to secure competitive terms from remaining MNOs

- 1.15 The PFs conclude that *"MVNOs would be able to gain wholesale contracts from the three remaining MNOs"*⁶ and that where bids are made by fewer than three MNOs, *the nature of the tender process for wholesale services may still enable some fixed-MVNOs to obtain competitive terms with the participation of only two MNOs*.⁷ Indeed, the PFs go so far as to assert that *"even if Telefonica became the only credible supplier, this [the desire to access fixed-mobile customers] may limit its incentive to increase substantially the wholesale price it charges to fixed-MVNOs."*⁸
- 1.16 The conclusions of the PFs on this key issue are incorrect. If the merged entity engages in a foreclosure strategy, there is little likelihood of this being mitigated by the factors identified in the PFs; in particular:
- (a) most other MNOs appear to be already capacity constrained relative to the merged entity and this will continue to be the case given the explosive growth in data requirements, and the limited scope economically to alleviate those constraints. Incentives to host MVNOs is highly uncertain due to the significant investment required, particularly in respect of large MVNOs such as Virgin Media which have significant capacity requirements;
 - (b) it is wrong to suggest that MVNOs will be able to extract competitive offers by creating a perception that more competition exists than in reality; and
 - (c) there can be no assumption that MNOs will have an incentive to supply fixed-MVNOs in order to gain indirect access to their customers. In any event, MNOs are

⁵ Ofcom Second Consultation, Annex 6, para. 2.10.

⁶ PFs, para. 14.121.

⁷ PFs, para. 14.122.

⁸ PFs, para. 14.61.

likely to prefer alternative strategies for reaching fixed-mobile customers e.g. further consolidation of fixed-mobile operators or developing their own fixed service networks.

Flaws in the CMA's demand side analysis for fixed-mobile services

- 1.17 There is considerable evidence set out in the PFs (provided by third parties and the CMA's own investigations) which suggest that the purchasing of fixed and mobile services from the same provider will become more prevalent (with associated changes in consumer behaviour). The PFs however highlight uncertainty relating to those future developments.⁹
- 1.18 The PFs do not sufficiently demonstrate why the evidence that points to future developments not occurring has been preferred to evidence which suggests that those developments will occur. This is highly relevant to the asymmetrical risks to consumers of a wrong decision described above.

Flaws in the CMA's analysis of partial foreclosure

- 1.19 In addition to the errors in the CMA's economic foreclosure analysis described above, the substantive analysis undertaken in the PFs is flawed and materially understates:
- (a) **the merged entity's** ability and incentive to engage in a strategy of partial foreclosure in respect of fixed-MVNOs; and
 - (b) the adverse effect on retail competition and therefore UK consumers.

Ability

- 1.20 Virgin Media strongly agrees with the provisional conclusion that EE has, and the merged entity would have, the ability to harm Virgin Media through a delay to its transition to a full MVNO.¹⁰
- 1.21 Virgin Media also agrees that EE has, and the merged entity would have, the ability to harm Virgin Media in-contract (in addition to a delay to its mobile transformation project ("**MTP**").¹¹ Virgin Media does not, however, agree that the scale of the potential harm is unclear. Virgin Media has provided the CMA with a number of clear examples of the merged entity's ability to degrade Virgin Media's service.

Incentive

- 1.22 Virgin Media agrees with the CMA that the merged entity may have an increased incentive post-merger to degrade (or not upgrade) the quality of Virgin Media's mobile services. However, Virgin Media finds it illogical that the CMA discounts that analysis on the basis that any incentive on the part of the merged entity may be lessened if either:
- (a) EE wishes to retain Virgin Media as a wholesale customer after [X]; and/or
 - (b) harm to Virgin Media would make the merged entity less attractive to other MVNOs that it wishes to supply.¹²
- 1.23 These statements misrepresent the actual choices of the merged entity. The relevant question is not whether the merged entity would like to retain Virgin Media as an MVNO customer, but on what terms the merged entity will seek to retain Virgin Media (and

⁹ PFs, para. 14.182.

¹⁰ PFs, para. 14.226.

¹¹ PFs, para. 14.226.

¹² PFs, para. 14.2.4.7.

supply other MVNO customers). When considering partial foreclosure, there will always be terms on which the merged entity will be willing to supply wholesale mobile services but these may not be at a level which allows effective competition.

Effects

- 1.24 As regards the effects of partial foreclosure¹³, the PFs rely on a number of propositions to assert that any resulting effects on the retail market would be limited, each of which is erroneous:
- (a) the PFs assert that it is unlikely that the merged entity could prevent Virgin Media from converting to a full MVNO and thereby "lock-in" Virgin Media for a further term.¹⁴ [X];
 - (b) the PFs claim that any harm to Virgin Media arising from the merged entity engaging in a strategy of partial foreclosure would be temporary.¹⁵ [X]; and
 - (c) the PFs speculate that other fixed-MVNOs could protect contractually against poor in-contract service (thereby preventing them being subject to a strategy of partial foreclosure by the merged entity).¹⁶ [X].
- 1.25 In conclusion, Virgin Media therefore finds it extraordinary that the PFs could conclude that the partial foreclosure of Virgin Media and other fixed MVNOs would not be expected to lead to a substantial effect on competition at the retail level.

¹³ PFs, paras. 14.264 and 14.274.

¹⁴ PFs, para. 14.258.

¹⁵ PFs, paras. 14.257, 14.261, 14.264.

¹⁶ PFs para. 14.273.

2. IMPORTANCE OF MVNOS AS A COMPETITIVE CONSTRAINT IN A CONCENTRATED MARKET

2.1 Virgin Media is extremely surprised that the PFs appear to question the importance of MVNOS in contributing to a competitive UK retail mobile market. In particular, the PFs provisionally find that, pre-merger, the four MNOs face "*limited additional competition from the MVNOS.*"¹⁷

2.2 Virgin Media considers that the PFs very materially understate the critical role played by MVNOS in ensuring effective competition in the retail supply of mobile services (whether on a standalone basis or as part of a package of fixed and mobile services).

A. MVNOS play an important role in increasing the level of retail competition in the UK

2.3 MVNOS are well-established in the UK and have been an important feature of the UK retail mobile market since 1999 when Virgin Mobile UK was launched as the world's first MVNO. A number of MVNOS have subsequently entered the UK retail mobile market with the result that:

- (a) the four MNOs active in the UK have reported 41 "direct" MVNO customers;¹⁸
- (b) many MVNOS compete directly with MNOs for mass market customers (as is the strategy of operators such as Virgin Media, TalkTalk, GiffGaff and Tesco); and
- (c) the combined share of retail mobile subscribers accounted for by MVNOS reached 16 per cent in 2014, following consecutive annual increases each year since 2010, while over the same period, EE's share of retail mobile subscribers has decreased each year.¹⁹ The combined share of the mobile subscriber base in the UK held by MVNOS is particularly notable when it is considered that MVNOS do not compete for a large proportion of business subscribers.

2.4 The "*strong presence of MVNOS*" was identified by the European Commission as one of two key reasons why the UK retail mobile market has been very competitive (the other reason being the existence of a large number of efficient distribution channels).²⁰ In particular, the European Commission has recognised that MVNOS play a "*significant role*" in the UK retail mobile market on the basis that they "*not only compete on price and consumer service with their host networks but they also stimulate competition by introducing innovative business models.*"²¹

2.5 Examples of MVNOS with innovative business models include:

- **Virgin Mobile**, which was the first mobile operator to offer (a) unlimited "08" number allowances in mobile plans (January 2014); and (b) its mobile services alongside fixed services. It was also one of the first mobile operators in the UK to offer split finance and airtime handset deals with the launch of Freestyle in Q4 2014. In addition, Virgin Media has developed a free mobile app (WiFi Buddy) which makes it easier for its mobile customers to use Virgin WiFi networks whenever they are available;²²

¹⁷ PFs, Summary, para. 13. See also PFs, paras. 10.61, 11.81, 14.255, 14.260, and 14.274.

¹⁸ PFs, para. 2.49, reporting data set out in Ofcom's Initial Submission at para. 4.3.

¹⁹ Figure 1 of Ofcom's Response to the Issues Statement.

²⁰ See *T-Mobile/Orange*, para. 53.

²¹ See *T-Mobile/Orange*, para. 46.

²² This means that those customers use much less cellular data and can downgrade to a (cheaper) lower data inclusive tariff.

- **Tesco Mobile**, which was the first mobile operator to offer "Capped Contracts" in October 2009;
- **FreedomPop**, which recently launched in the UK (23 September 2015) with a free-SIM only deal.²³ FreedomPop was originally founded and launched in 2011 in the USA. The UK is the first overseas market targeted by FreedomPop, which highlights the importance of the UK market for innovative MVNO-based solutions.

2.6 More generally, MVNOs have been an important driver of innovations in the SIM only segment and regularly offer price-leading propositions on the back of major marketing campaigns. In this regard, Virgin Media notes that EE's CEO, Olaf Swantee, recently commented that "[the] *MVNO market is typically a very healthy environment, one that amounts to around 40% of the acquisition on SIM only.*"²⁴

2.7 Virgin Media makes a particularly important contribution to ensuring effective competition in the UK. Evidence of the competitive constraint Virgin Media provides is set out in more detail at section 6 below. However, by way of illustration:

- it offers particularly attractive and compelling retail propositions with low prices in direct competition with MNOs;
- it offers the lowest entry point on a number of the latest handsets;
- it offers the UK's best-priced SIM only offering with no fixed contract term;²⁵
- it provides a particularly significant constraint in those areas within its cable network footprint, with [X] per cent of households seriously considering Virgin Media when choosing a mobile provider, ranking above two of the MNOs ([X] and [X]);²⁶ and
- it has been ranked as the number one MVNO supplier two years in a row in the Mobile Choice Awards and four years in a row in the What Mobile Awards.²⁷

2.8 In light of the competitive contribution outlined above, Ofcom has maintained a consistent standpoint that the existence and viability of MVNO arrangements are "*an important indicator of [the] competitive health of the [retail mobile] market.*"²⁸ In addition, Ofcom has "*welcomed the benefits that Mobile Virtual Network Operators (MVNOs) can bring to consumers.*"²⁹ These benefits include factors such as additional choice, the availability of innovative products and lower and/or alternative retail price options.

2.9 In summary, Ofcom views MVNOs as an important means to ensure effective downstream retail competition by providing scope for competition over more service dimensions and fostering retail competition from other entities.³⁰ The European Commission has also reached the view that the UK retail mobile market is competitive, and characterised by a significant level of switching between different mobile service providers as well as pricing

²³ See <http://uk.engadget.com/2015/09/23/freedompop-uk-launch/>. Basic calls and data packages are free, with fees payable for plans with larger data and voice allowances.

²⁴ See <http://www.mobiletoday.co.uk/news/industry/38348/ee-ceo%E2%80%99s-virgin-med>

²⁵ [X].

²⁶ VM Tracker September 2015.

²⁷ See <http://www.mobilechoiceuk.com/awards/2015-winners/38076/mcca-2015-virgin-media-wins-best-value-network.aspx#.VkyHBqTmb8>; and <http://www.whatmobile.net/news/mobile-awards-2014-results-winners-chosen/>

²⁸ See, for example, **Mobile Evolution: Ofcom's mobile sector assessment, 17 December 2009**; Ofcom's Response to the Issues Statement, para. 4.24.

²⁹ Strategic Review of Digital Communications Discussion Document, 8 October 2015, paras. 1.44 and 4.28.

³⁰ Ofcom Second Consultation, Annex 6, para. 2.20.

and service innovation.³¹ In light of the above, it is clear that, contrary to the suggestion in the PFs, MVNOs act as an important constraint in the UK retail mobile market.

B. Full MVNOs play a particularly important role

2.10 As highlighted in the PFs, there is a wide range of MVNO business models. However, MVNOs can broadly be classified under one of two alternative categories:

- (a) "Light" or "Thin" MVNO - comprising MVNOs which rely on the hosting MNO to provide the core network, real time charging engine and most of the required business systems. As recognised by the CMA, this is often the entry-level position; or
- (b) "Full" or "Thick" MVNO – comprising MVNOs which own/operate their own core network and manage most of the required business systems but remain reliant on the hosting MNO for access to the MNO's radio access network ("**RAN**"). As recognised by the CMA, considerable capital investment on the part of the MVNO is required to become a full MVNO. However, full MVNO status brings a number of benefits, including being able to switch customers to another MNO host without the need to replace the customer's SIM card.

2.11 The CMA distinguishes between the competitive position of light and full MVNOs on the basis that it is "*significantly easier to change network partner (partly because a light MVNO will need to carry out a SIM swap, which is costly and tends to lead to customer churn, whereas a full MVNO will not; and partly because the full MVNO will operate its own billing systems and avoid a systems handover)*".³²

2.12 [REDACTED].

2.13 [REDACTED],³³[REDACTED]:

- (a) [REDACTED];
- (b) [REDACTED]; and
- (c) [REDACTED].

2.14 [REDACTED].

2.15 In order to maintain and enhance effective competition in the UK retail mobile market, it is important to ensure that additional barriers are not created which could jeopardise the ability of Virgin Media, and other MVNOs on EE's network, to convert from a light MVNO to a full MVNO status (see section 6 below) thereby inhibiting the greater retail competition that full MVNOs may be expected to drive.

C. In a scenario in which fixed-mobile bundles become more prevalent, fixed-MVNOs will become more important

2.16 As noted above, all MVNOs already provide an important competitive constraint in the UK retail mobile market. However, in the scenario being considered by the CMA in which combined fixed-mobile purchasing becomes more prevalent, fixed-MVNOs will become an

³¹ See *T-Mobile/Orange*, para. 53.

³² PFs, para. 14.236.

³³ See, for example, Virgin Media's Observations on the Anticipated Acquisition by BT of EE, dated 3 June 2015 ("**Virgin Media's Initial Submission**"), paras. 4.14 to 4.16 and Virgin Media's Response to Q 12(b) of the CMA's Information Request of 24 June 2015.

important competitive constraint. In such a scenario, demand will be most easily met by providers that can offer attractive fixed and mobile propositions.

- 2.17 In this regard, it is noted that one of the key rationales for the Proposed Transaction was to ensure that BT was "*better equipped than anyone else in the UK to offer these [converged] services and meet the changing needs of UK consumers*".³⁴ Virgin Media also understands that this is the reason that Vodafone, TalkTalk and Sky have recently taken steps to ensure that they are able to offer the full complement of communications services. As Virgin Media observed in its hearing with the CMA: "*Sky was clearly doing it [entering into mobile] because it saw that BT was going to do its own mobile deployment. Sky had described it in that fashion, as an offensive-defensive move*".³⁵
- 2.18 In this regard, Virgin Media was the first fixed line communications provider to start offering mobile services on an MVNO basis following the acquisition of Virgin Mobile UK by NTL:Telewest on 4 April 2006.³⁶ Around half of Virgin Media's mobile customers also subscribe to its fixed services. Based on recent data, over 60 per cent of new mobile pay monthly acquisitions already subscribe to its fixed services. Virgin Media is, therefore, an established fixed-MVNO provider with a strong track record in the UK market.

D. MVNOs must however have access to wholesale mobile services on competitive terms

- 2.19 The competitive constraint imposed by MVNOs is, however, [X] dependent on the terms of supply of wholesale mobile services. In order for MVNOs to be effective competitors in retail mobile markets, there must be effective competition in the supply of wholesale mobile services.
- 2.20 If there is limited competition in the supply of wholesale mobile services, MVNOs will be unable to secure services on terms that enable them to compete effectively on either price or non-price terms. In such circumstances, if MVNOs can secure access to wholesale mobile services at all, there is a risk that their role is limited to offering differentiated products, usually for niche customer groups (i.e. a retail offering which poses less of a threat to the MNOs).
- 2.21 In this regard, Ofcom has observed that:
- "In order to provide a retail offering that appeals to mainstream consumers, entities such as sub-national RAN operators and MVNOs need wholesale access to national RANs on terms that allow them to compete. Competition at the national wholesale level is likely to be a prerequisite for this access to be obtained commercially."*³⁷
- 2.22 Moreover, Ofcom considers that if wholesale markets were to develop such that it would be difficult for MVNOs to obtain wholesale access to national networks, then "*there could be a significant reduction in competitive intensity in the retail market compared either to today or to what it could be*".³⁸
- 2.23 It follows that the continued viability of, and competitive constraint provided by, MVNOs is dependent on securing long-term access to wholesale mobile services on competitive

³⁴ See PFs, Appendix H, paragraph 26(j); PFs, para. 6.10; and <http://www.mobileworldlive.com/featured-content/top-three/bt-boasts-50000-consumer-mobile-subs/>

³⁵ Summary of CMA's Hearing with Virgin Media on 30 August 2015, para. 71.

³⁶ The combined business was rebranded "Virgin Media" on 9 February 2007.

³⁷ Ofcom Second Consultation, Annex 6, para. 2.20.

³⁸ Ofcom Second Consultation, Annex 6, para. 2.10.

terms. If competitive access to these inputs is jeopardised, the competitive constraint imposed from MVNOs would be seriously undermined.

- 2.24 In light of the above, and for the reasons set out in section 3 below, if the merged entity employs a strategy of total or partial foreclosure, this may be expected to lead to a lessening of the competitive constraints imposed by MVNOs, and a lessening of retail competition.

E. European Commission precedent supports the need for MVNOs to be able to access competitive wholesale mobile services

- 2.25 The European Commission considers that MVNOs can contribute to effective retail competition. However, the European Commission also recognises that MVNOs can struggle to obtain reasonable and sufficiently competitive terms under negotiated access.³⁹

- 2.26 In particular, the European Commission has recognised that strengthening MVNO access terms can contribute to disciplining prices at the retail level and replacing the competitive constraint arising from the loss of an independent MNO following a merger. In consequence, in several recent telecommunications mergers, the European Commission has accepted commitments aiding the continuation of MVNO competition (for instance by prolonging contracts, by offering access to new technologies and regulating access prices) in order to impose a competitive constraint in retail mobile markets.⁴⁰

- 2.27 In light of the above, the logical corollary is that causing harm to MVNOs through total and/or partial foreclosure strategies would have appreciable adverse effects on retail competition.

³⁹ See, for example, *Case No COMP/M.6497 Hutchison 3G Austria/Orange Austria, 12 December 2012; ("Hutchison 3G Austria/Orange Austria")*, para. 296; *Case No COMP/M.6992 Hutchison 3G UK/Telefonica Ireland, 28 May 2014 ("Hutchinson 3G/Telefonica Ireland")*, para. 184.

⁴⁰ See, for example, *Hutchison 3G UK/Telefonica Ireland, Hutchison 3G Austria/Orange Austria* and *Case M.7018 Telefonica Deutschland/E-Plus, 2 July 2014 ("Telefonica Deutschland/E-Plus")*.

3. FLAWS IN THE CMA'S FRAMEWORK FOR THE ANALYSIS OF FORECLOSURE

A. Overview

3.1 The Proposed Transaction will combine BT, the largest provider of fixed telecommunication services in the UK, with EE, owner of the largest share of mobile spectrum and the largest **MNO infrastructure**. **BT owns the UK's biggest fibre network** and EE runs the UK's most advanced 4G network. Reflecting their relative positions in terms of control of key assets (and capacities) in the fixed and mobile markets, BT and EE also account for the largest shares of customers at the retail level in the provision of fixed and mobile services respectively. The combination of the two businesses will put the merged entity in a unique position to serve customers who want to purchase such services from a single provider.

3.2 BT has repeatedly stated from the moment the Proposed Transaction was announced its expectation that the demand for joint purchases of fixed and mobile services from a single provider will strongly increase, and that positioning itself for this expected market development was the central rationale for the Proposed Transaction. As explained by BT's CEO Gavin Patterson:

"We expect significant demand in the market for fixed and mobile converged products, and we will [be] better equipped than anyone else in the UK to offer these services and meet the changing needs of UK consumers".⁴¹

3.3 BT's press release announcing the Proposed Transaction described BT's long-term network vision as building *"a single, seamless, converged platform, supported by a single IP network, that is able to serve customers with no distinction between fixed and mobile"*, and noted that the assets the Proposed Transaction brings together *"will help BT to be the network of choice for voice and data connectivity, wherever customers are, and whichever device they choose to use"*.⁴² It is therefore evident that BT evaluated the Proposed Transaction on the assumption that the demand for combined fixed and mobile offers in the UK will evolve very rapidly to much more advanced levels in the near future.

3.4 The CMA has explicitly acknowledged that, should customer demand for combinations of fixed and mobile services develop in a way that is consistent with BT's strategic vision, *"the merger might change EE's ability and incentive to harm MVNOs which would compete with the merged entity across mobile and fixed services"*.⁴³

3.5 This potential change in incentives is of particular relevance for fixed-MVNOs which would be the primary sources of competitive constraint on the merged entity for customers who want to purchase fixed and mobile services from the same provider. Among fixed-MVNOs, Virgin Media's position has particular significance in the scenario envisaged by BT: as the owner of the second largest fibre network providing cable broadband and telephony service to nearly 5 million customers, and the largest independent MVNO, Virgin Media is capable of acting as an especially effective low-cost competitor to BT for customers with combined demand for fixed and mobile services.

Changes in trade-offs between wholesale and retail revenues

3.6 The competition concern that arises directly from the demand developments that BT expects to occur in the market is that the trade-off between taking profits through wholesale revenues and through retail revenues *changes* for the merged entity, relative to a standalone EE. More specifically:

⁴¹ See for example <http://www.mobileworldlive.com/featured-content/top-three/bt-boasts-50000-consumer-mobile-subs/> or <http://www.btplc.com/Sharesandperformance/Presentations/downloads/EEAnnouncementPresentationFINAL.pdf>

⁴² <http://www.btplc.com/News/Articles/ShowArticle.cfm?ArticleID=845B68FF-E7CD-4FD9-B90B-6C4D0E3D1E3B>

⁴³ PFs, para. 22.

- (a) absent the Proposed Transaction, if Virgin Media's retail mobile offer⁴⁴ was to become less attractive as a result of facing an increase in the wholesale price for mobile services (or other change in wholesale access conditions), some of its retail mobile subscribers would switch to EE. In setting wholesale access terms to Virgin Media, EE thus faces a trade-off between wholesale and retail profits. On a standalone basis, EE would set the terms of access to Virgin Media at the level that best trades off (from EE's perspective) wholesale margins and retail margins on mobile-only customers (because each retail customer of Virgin Media could be a potential EE retail customer for mobile services);
- (b) post-merger, this trade-off changes (as acknowledged in the PFs).⁴⁵ The merged entity will set access terms by comparing the wholesale margin on mobile services provided to Virgin Media, with a higher retail margin that ***includes a margin contribution from fixed services***. This occurs because of the presence of consumers who want to buy fixed and mobile services from the same supplier. Faced with an **increase in Virgin Media's retail price for mobile services (if Virgin Media receives worse wholesale access terms)**, such customers can switch ***both*** purchases (mobile and fixed) to alternative providers in particular the merged entity (which will be the largest MNO, with an overwhelming incumbent position in the retail mobile and fixed markets); and
- (c) when such customers switch the merged entity will thus expect to earn not only a larger margin on mobile sales, but also an additional margin on fixed sales.⁴⁶ The larger the proportion of customers who want to buy fixed and mobile services together, the more important is the gain of the fixed service margin on the average switching customer. This means the Proposed Transaction ***changes*** the relevant calculus for the merged entity when setting wholesale access terms to its network, as it increases the benefit of inducing Virgin Media (and other fixed-MVNOs) to charge higher mobile prices to customers. Put differently, post-merger, an attempt by the merged entity to "raise rivals' costs" through higher wholesale prices will be rewarded with a higher average retail margin due to the recapture of customers that switch ***both*** their mobile and fixed service purchases from the fixed-MVNO to the merged entity.

3.7 This effect is a matter of basic economic and business logic: as long as there are customers willing to switch ***both*** their fixed and mobile contracts to the merged entity in response to an increase in retail mobile prices by Virgin Media, there is an additional benefit from diverting customers away from Virgin Media through less favourable wholesale terms that force Virgin Media to reduce the attractiveness of its mobile services offer to customers.

3.8 Note also that less favourable wholesale terms do not only mean higher wholesale prices, but can be achieved through other strategic options, e.g. by restricting improvements to Virgin Media's retail service that are limited through the design of wholesale products which are under the control of the merged entity. Even if it is not profitable for the merged entity to completely deny wholesale access to Virgin Media (for example, where it is bound by an existing contract in the short-term), this effect may be expected to be relevant.

⁴⁴ Virgin Media is used as an example, but the intuition would apply to any fixed-MVNO that is, or could be, supplied by EE.

⁴⁵ PFs, para. 14.243.

⁴⁶ As indicated in the PFs, this additional margin arises from both (i) extra wholesale margin on all customers who switch their fixed line services from Virgin Media to communication providers using BT inputs; and (ii) extra retail margin on all customers who switch fixed services to the merged entity. PFs, para. 14.243.

Failure adequately to consider the risks of "raising rival's costs"

- 3.9 Against this background, what the CMA needed to determine in assessing its Theory of Harm 3 (i.e. input foreclosure in wholesale mobile services) is whether the order of magnitude of the expected change in wholesale terms will be sufficiently strong to generate a substantial lessening of competition.
- 3.10 Disappointingly, while the incentives for the merged entity to raise rivals' costs clearly exists (given the assumptions underpinning the rationale for the Proposed Transaction), the framework of analysis adopted by the CMA to assess the size of the effect has not been appropriately specified in the PFs.
- 3.11 The PFs focus their analysis primarily on a strategy of **total** refusal to supply fixed-MVNOs with mobile wholesale services, rather than the more natural concern of "raising rivals' costs".⁴⁷ The PFs refer to this as "total foreclosure", and exclude it on the basis of a "vertical arithmetic" ("**VA**") analysis which attempts to compare the costs and benefits of a refusal to supply strategy under various assumptions.⁴⁸ The potential for the merged entity to "raise rivals' costs" by worsening the terms of supply (rather than denying access altogether) is acknowledged under the heading of "partial foreclosure", but is dealt with summarily on grounds that this would be a less profitable strategy for the merged entity relative to total foreclosure, and therefore is less likely to be adopted.⁴⁹
- 3.12 As a matter of economic analysis, however, raising rivals' costs will be a more profitable strategy in more cases than total foreclosure. Total foreclosure is particularly unlikely when products (such as in this case) are not homogeneous but differentiated.⁵⁰ Differentiated products do not just compete with existing products, but tend to expand demand. By raising the wholesale price to a fixed-MVNO like Virgin Media enough, the merged entity ensures that the "cannibalisation" of its own products is eventually very small (i.e. because demand for Virgin Media's product is limited to those with strong preferences for Virgin Media that would be difficult for the merged entity to attract as retail customers in any event). At that point, it tends to be preferable for the merged entity to serve the residual customers on a wholesale basis (whilst earning high wholesale margins), instead of fully foreclosing Virgin Media.
- 3.13 Despite the obvious advantages of a partial foreclosure strategy in the context of differentiated products, the CMA has made no credible attempt to quantify the "raising rivals' costs" effect, which is the most obvious and natural theory of harm to explore (as is correctly acknowledged by the dissenting Members).⁵¹ The long discussion of refusal to supply in the PFs and the VA analysis cannot rectify the lack of a proper assessment of raising rivals' costs against industry specifics and data. This constitutes a major shortcoming of the PFs.
- 3.14 [X].
- 3.15 [X].

⁴⁷ [X].

⁴⁸ See, for example, PFs, paras. 14.177 to 14.183 and Appendix I.

⁴⁹ PFs, paras. 14.191 to 14.193.

⁵⁰ When retail products are differentiated, some customers of the downstream firm (whose access is restricted) may prefer not to buy the service any more or may reduce their purchases. By not refusing to supply but restricting **wholesale supply an upstream monopolist still benefit from wholesale margins relating to these customers' purchases.**

⁵¹ PFs, para. 14.278, "These members considered that the merged entity would have the incentive to harm fixed-MVNOs, either by refusing to supply them, or, more probably, by restricting the range and quality of services provided" (emphasis added).

- 3.16 Note also that a concern about raising rivals' costs in the context of existing contracts cannot be eliminated (as relied upon by the PFs)⁵² by the prospect of competition for a future contract from other wholesale providers, precisely because the relationship between an MVNO and its host involves specific investments on the part of the MVNO, and these make it much harder to switch wholesale supplier at the time of contract renewal (see section 4). Moreover, Virgin Media sets out in section 6 why there is reason to doubt the availability of credible alternative (and competitive) wholesale supply arrangements post-merger.

B. The PF's analysis of foreclosure is incomplete and flawed

- 3.17 The PFs contain an analysis of total foreclosure (which, in the language of the PFs, means full refusal to supply) conducted through a VA exercise.⁵³ The potential for "raising rivals' costs" is dealt with under "partial foreclosure", but is not formally modelled.
- 3.18 While the PFs note that "[i]t is not necessarily the case that if the merged entity has an incentive for total foreclosure, it will for partial foreclosure or vice versa",⁵⁴ the analysis performed by the CMA does not reflect that insight at all. Indeed, directly contrary to this statement, the PFs establish a notional ranking of the two strategies, concluding that, because total foreclosure would allegedly harm the fixed-MVNO rival more for the same cost, it would be more profitable, and therefore more likely to be adopted during future contract negotiations.⁵⁵ On this basis, the PFs proceed to focus mostly on the analysis of total foreclosure as the main concern, with partial foreclosure as a variant (limited to within an existing contract) which is largely dismissed.

Incomplete analysis

- 3.19 The basic premise of this approach is incorrect. Just because total foreclosure would "harm the rival more", it does not follow that it is the most profitable foreclosure strategy. Even if total foreclosure was not profitable, a "raising rivals' costs" strategy can in fact still be profitable. And while the finding of an incentive for total foreclosure is sufficient to support a foreclosure concern in a market, the **absence** of such incentive does not establish the absence of partial foreclosure concerns.
- 3.20 The analysis of the CMA is therefore, at best, incomplete. The main thrust of its assessment consists of calculating the increase in the MVNO's access charge that the merged entity would have to bring about in order to make total refusal to supply profitable – described as the "critical cost increase". This is done with a simple VA model of the merged entity's respective margins in MVNO hosting and joint retailing of mobile and fixed products, under various assumptions. This exercise determines the minimum increase in wholesale charges that the merged entity would have to put in place for total foreclosure to be profitable (i.e. the "critical cost increase") under various scenarios. The PFs note that the scale of the critical price rise remains uncertain but would be lower if three factors occurred simultaneously.⁵⁶ The PFs then consider that one or more of these factors would not arise and conclude that it was **"not more likely than not"** that the merged firm would have an incentive to engage in a total foreclosure strategy.⁵⁷
- 3.21 While VA can be a useful tool to investigate the potential for total foreclosure in a market, **it cannot be used to assess "raising rivals' costs" concerns, which are central to this case.**

⁵² PFs, para. 14.227 "... the threat of switching to a different MNO supplier at the end of the agreement may be important for Virgin Media's ability to ensure it receives the quality and service it requires."

⁵³ PFs, Appendix I.

⁵⁴ PFs, para. 14.245.

⁵⁵ PFs, para. 14.193.

⁵⁶ PFs paras. 14.177 and 14.178.

⁵⁷ PFs, para. 14.181.

It is a fairly blunt instrument, which uses observed data from the market today to measure certain relevant parameters (for example demand elasticities) in the model. But these are necessarily only "local" data measured under current market conditions and, as such, are not informative for assessing the "limit case" of total foreclosure.⁵⁸

- 3.22 Further, in the scenario that BT anticipates, in which demand moves towards joint purchases of fixed and mobile services, a key parameter is the elasticity of demand (and relevant diversions) for joint purchases of both fixed and mobile services. This will differ from the current values observed for mobile-only purchases. Indeed the PFs indicate that the CMA has *"not received direct evidence from third parties about the elasticity of demand for fixed-mobile bundles."*⁵⁹

Flawed analysis

- 3.23 Most importantly, the reasoning in the PFs whereby, if one finds no incentives for total foreclosure, this also *implies no incentives for "raising rivals' costs", is incorrect.* This conclusion is based on a naive comparison, which assumes that the "cost" of the two options (total and partial foreclosure) is the same because the wholesale contract is (incorrectly) assumed to be lost in both cases.⁶⁰ However, outright refusal to supply (total foreclosure) is believed by the CMA to generate greater benefits than partial foreclosure because it reduces the competitive pressure on other MNOs supplying wholesale mobile services so that they offer worse terms and harm the fixed-MVNOs.⁶¹ These two claims necessarily lead the CMA to the conclusion that total foreclosure will always be the "dominant strategy", so that there will be no incentives for partial foreclosure if there are none for total foreclosure.
- 3.24 Both claims are incorrect. A partial foreclosure strategy which increases the cost of wholesale access will tend to lead to higher retail prices, but there is no reason to believe this will induce an MVNO to switch to a different MNO host with certainty. As long as there is some uncertainty about the conditions of a rival MNO (for example due to known capacity constraints and the need for costly investment to alleviate those constraints), and there are some perceived switching costs (which is always the case), partial foreclosure will just lead to a change in the probability of such a switch. At the same time, the expectation by all market participants that the merged entity is likely to increase wholesale charges will also lead – in an imperfectly competitive market like this one – to rival MNOs increasing their own wholesale prices (as discussed further in section 4). Partial foreclosure will therefore also reduce the competitive pressure on rival MNOs.
- 3.25 Set out below is a brief discussion of the appropriate conceptual framework that should have guided the analysis. Section C first discusses a simplified setting in which EE's incentives are considered in the hypothetical case of it being the sole supplier of wholesale mobile services. The discussion is then extended to take account of the impact of competition between MNOs in the supply of wholesale services.
- 3.26 **Consideration is also given to the effects of a strategy of "raising rivals' costs" not just in terms of supply conditions that specified in contracts (such as price), but also in terms of supply conditions that are less easily specified ex ante in contracts and are, therefore, subject to ex-post negotiation.** The ex-post market power arising from these elements

⁵⁸ The CMA's VA exercise calculates the required increase in fixed-MVNOs costs for a "refusal to supply strategy" to break even by equating average wholesale margin to retail margin gained per unit of wholesale cost increase, thus it assumes that the local trade-off when increasing the wholesale price by 10 per cent applies all the way up to 240 per cent (in Table 7 of Appendix I).

⁵⁹ PFs, Appendix I, para. 23.

⁶⁰ PFs, paras. 14.192 and 14.193.

⁶¹ PFs, para. 14.193 *"We considered that the harm would be greater if it refused to bid (i.e. total foreclosure) than if it pursued a strategy of weak bidding, and therefore even if, contrary to our provisional view on total foreclosure, it did have an incentive to harm the fixed-MVNO, it would not do so by bidding weakly."*

can lead to a "hold-up" issue that means that the Proposed Transaction may well create a **"raising rival's cost" problem even within the timeframe of existing contracts (and not just at the time of contract renegotiation).**

C. The "Raising Rivals' Costs" Effects of the Proposed Transaction

- 3.27 To illustrate the flaws in the PFs' approach it is useful to start thinking of a stylised market where, prior to the Proposed Transaction, EE was the only supplier of wholesale mobile services to MVNOs. In such a setting, EE would supply access to MVNOs at prices which equalise its returns from increasing wholesale supply, and the reduction in retail mobile profits resulting from the implied increase in retail supply by fixed-MVNOs.
- 3.28 Note that EE, as a competitor to the MVNO on the mobile retail market, already has an existing incentive to raise rivals' costs to some extent in order to appropriate the full retail margin from customers supplied on a wholesale basis. However, the incentive is softened by product differentiation: to the extent that MVNOs have a somewhat different image, and target specific customer groups, there will be greater benefits to an MNO from hosting differentiated offers at (monopoly) wholesale prices than to fully exclude the MVNO (as discussed at paragraph 3.12 above).
- 3.29 Differentiated offerings bring some additional customers to the market and thus generate additional business. As long as wholesale prices are high enough, such that these offerings do not cannibalise the MNO's own retail services too much, they will add to its profits. Thus even as a hypothetical monopolist supplier of hosting services in a differentiated market, EE would typically have no incentives to totally foreclose, but would just want to charge a monopoly wholesale price that sufficiently compensates for the cannibalisation effect at the retail level.
- 3.30 Now consider the effect of EE merging with BT. It is natural to expect an additional **"raising rivals' cost" effect (i.e. more partial foreclosure)** from the merger of a fixed-line operator with EE, in a scenario in which there is demand for joint purchasing of fixed and mobile services from the same company. The reason (which is explained in detail at paragraph 3.6) is that a strategy of "raising rivals' costs" can now deliver for some customers both the mobile and the fixed margin to the merged entity, instead of just the mobile margin. At the same time the loss in margin on the wholesale contract remains the same. As a result, after the Proposed Transaction, the access terms will be worse because the benefit from moving customers from the MVNO's offering to the offering of the merged entity has increased.
- 3.31 Now assume EE is no longer a hosting monopolist, but there is competition between MNOs for MVNO contracts. The effect is not qualitatively different. As in the hypothetical EE monopoly case, there is already pre-merger some incentive for EE to raise the costs of rival MVNOs like Virgin Media because it can make a higher margin on the customers it sells to directly, relative to those that are served through Virgin Media. Competition between MNOs will reduce the size of this effect, but not eliminate it completely. The reason is that each MNO will be somewhat uncertain about the offers its rivals make – which will depend on:
- (a) the capacity constraints they effectively face, and other cost features – as well as performance characteristics and strategic considerations;⁶²
 - (b) how the MVNOs evaluate differentiated wholesale inputs that are offered at different prices, and how they internally assess perceived switching costs between MNOs.

⁶² The PFs refer to the wholesale mobile market as opaque (para. 14.28) and argue that the MNOs may not even be able to identify who else is competing for an MVNO contract. The PFs characterisation of the wholesale market is consistent with a framework where an MNO does not know the exact price at which it would win an MVNO contract against rival MNOs.

- 3.32 From the perspective of the MNO host, a higher wholesale access price will not lead the MVNO to switch to a rival with certainty, but will affect the probability of such a switch. If it becomes more attractive to sell directly to customers than to sell through an MVNO, the MNO will be willing to slightly increase the probability of losing the MVNO customer to a rival through raising the wholesale price.⁶³
- 3.33 **It follows from this that the precise impact of the "raising rivals' cost" incentive of an MNO will very much depend on market circumstances.** For example, if the remaining MNO rivals are very tightly capacity constrained, and have high costs of expanding capacity and maintaining quality in order to attract an MVNO (see section 4 below), they would not bid very aggressively to win an MVNO from the merged entity because their costs of hosting an additional MVNO are very high. Virgin Media is also a very large MVNO that would require a relatively large amount of capacity on the network of a host MNO. In such a case the increase in probability that the MVNO switches to a competitor in response to a slight increase in wholesale charges is lower, because MNOs that are capacity constrained will not be expected to bid very aggressively for an additional MVNO that would be very costly to host. **The "raising rivals' cost" strategy is then less costly for the merged entity than if its rival MNOs were less capacity constrained.**
- 3.34 What this discussion shows is that one cannot infer anything about whether the Proposed Transaction will give rise to a substantial lessening of competition from an analysis that shows that total foreclosure will not happen as a result of the merger. In fact, one would expect any anticompetitive effects to arise with much higher likelihood from **"raising rivals' costs" incentives, and higher wholesale access prices offered to MVNO customers.** The primary concern of an MVNO like Virgin Media is therefore not just that the merged firm will refuse to provide access, but also that it will be subject to far higher operating costs and thus become a far less effective competitor. Due to its significant customer base and associated capacity requirements, Virgin Media cannot readily switch to another provider (particularly where remaining MNOs have incentives to bid aggressively for Virgin media's business). In light of this, incentives of the merged entity to raise rivals' costs may be expected to be particularly large.
- 3.35 This is the concern the CMA should have analysed thoroughly and rigorously in a Phase 2 review before reaching its provisional conclusions. Surprisingly, the CMA has instead focused its efforts on the limiting case of refusal to supply, and this is entirely insufficient to support the conclusions in the PFs on the likelihood of the merged entity engaging in a foreclosure strategy.
- 3.36 Note also that this argument extends fully to non-price conditions of access. Reducing the quality of access to the MNO network would either reduce the quality of an MVNO service **relative to competing MNOs, or raise the MVNO's costs by requiring additional investments** into quality. Delays in the implementation of improvement measures that require the consent of the host MNO and delays in contract negotiation can have a profound impact on the competitive position of the MVNO. The effect of non-price conditions are therefore at least as important (if not more so) when one assesses **"raising rivals' costs" effects as any impact on the wholesale prices.**
- 3.37 Again, before reaching conclusions in a Phase 2 review the CMA should have thoroughly **and rigorously analysed "raising rivals' costs" effects in a coherent framework capable of covering both price and non-price aspect.** Surprisingly, the CMA has greatly narrowed its quantification efforts to the limiting case of refusal to supply, which is insufficient to support the provisional conclusions that the Proposed Transaction does not give rise to a substantial lessening of competition in the wholesale mobile market.

⁶³ In fact, the benefits of raising rivals costs are even bigger, since the probability of losing a customer can be reduced by the MNO host making its own offers of mobile services more attractive at the same time because the win of a consumer generates extra margin on fixed sales when customers have a preference to buy both together.

D. Raising rivals' costs in on-going MVNO contracts: the worsening of hold-up

- 3.38 The "raising rivals' cost" effects of the Proposed Transaction can be particularly important in the context of on-going contracts – such as the MVNO Agreement. An MVNO contract cannot typically provide for all possible contingencies and changes in the market, like, for example, a merger involving the MNO, changes in available technologies etc. Multiple contractual adjustments are typically necessary after such events, which have to be negotiated in the framework of an on-going contract as part of the commercial relationship. In such "within-contract" negotiations, the threat to switch to a rival MNO is much lower (at least for exclusive MVNO contracts) relative to ex-ante contracting, because such a switch takes time, involves risks and leaves "stranded" any investment made by the MVNO that are specific to its MNO host. This is often referred to as a "hold-up" problem.
- 3.39 Significant changes in the market can therefore have a large impact on the investments of an MVNO. As the CMA knows well, the merger that formed EE led to the decision to close down the network of T-Mobile. [REDACTED]. Another example is the significant increase in subscribers' adoption of 4G, which has led to rapid market developments to which MVNOs have had to respond. [REDACTED]. These instances (discussed in more detail in section 6 below) show that even a wholesale deal concluded under effective competition can become problematic because it cannot make provisions for unforeseen market developments.
- 3.40 **More generally, an MVNO's ability to adjust to fast-changing market conditions to remain competitive always depends on cooperation from the host MNO. Where the MNO's supply behaviour is less affected by strategic considerations about its downstream revenues, it will be more willing to preserve the competitiveness of the MVNO. Thus if the MNO sees the MVNO as a player in a niche segment and not a close substitute for its own potential retail customers, it will be more likely to cooperate. But if the MNO sees the MVNO's offer as a close substitute to its own, it will be more likely to limit cooperation and hinder the market adjustments of the MVNO. The incentive for the MNO to cooperate fall, and the hold-up problem becomes larger.**
- 3.41 [REDACTED].⁶⁴ [REDACTED].
- 3.42 [REDACTED].

⁶⁴ [REDACTED].

4. ABILITY OF MVNOS TO SECURE COMPETITIVE TERMS FROM REMAINING MNOS

- 4.1 The level of competitive constraint exercised by MVNOS in relation to MNOs depends on the availability of competitive wholesale access terms. Indeed, this principle has informed the European Commission's approach to remedies in previous transactions between MNOs.⁶⁵ It is essential, therefore, that the effect of the Proposed Transaction on the wholesale access terms that MVNOS can achieve from MNOs in the market is properly assessed by the CMA.
- 4.2 The PFs consider the ability of fixed-MVNOS to secure competitive terms for wholesale mobile services post-merger as part of its assessment of total foreclosure and partial foreclosure.
- 4.3 The PFs identify that if the merged entity chose not to bid for wholesale mobile services contracts, the extent of any price increase (or quality degradation) that might result from such a refusal to bid, would depend on how other MNOs would react.⁶⁶ In this regard, the PFs address:
- (a) whether the merged entity could credibly commit to withdraw from bidding in any MVNO tender process; and
 - (b) factors affecting the likelihood and willingness of MNOs to bid, in particular, capacity constraints and strategic drivers.⁶⁷
- 4.4 The availability of credible alternative MNO suppliers post-merger is also relevant to the (limited) analysis of partial foreclosure in the PFs. In particular, the ability of Virgin Media to switch to an alternative MNO at contract renewal (which is assumed) is considered relevant both to the ability of Virgin Media to ensure it receives the quality and service it requires through contractual means, and to the likelihood of Virgin Media exiting the market due to any partial foreclosure.⁶⁸
- 4.5 The CMA provisionally concludes that "*MVNOS would be able to gain wholesale contracts from the three remaining MNOs, but could face higher wholesale prices (and/or lower quality) for their wholesale mobile input.*"⁶⁹ The PFs further suggest that competitive offers may remain available even in circumstances in which bids are made by fewer than three MNOs.⁷⁰
- 4.6 Whilst the PFs indicate that a loss of a rival would normally be expected to reduce competition in a way that would be expected to make customers worse off through the worsening of quality or a higher price,⁷¹ a number of mitigating factors are identified (or inferred) which are considered to limit the extent to which such harm would occur, namely:

⁶⁵ See, for example, *Telefonica Deutschland/E-Plus*.

⁶⁶ PFs, para. 14.115.

⁶⁷ PFs, para. 14.23.

⁶⁸ PFs, para. 14.227, "the threat of switching to a different MNO supplier at the end of the agreement may be important for Virgin Media's ability to ensure it receives the quality and service it requires, if the merged entity wishes to retain Virgin Media as a customer at that point." and para. 14.261 "we consider it unlikely that a partial foreclosure strategy would lead to Virgin Media exiting the market given that it can switch to an alternative MNO."

⁶⁹ PFs, para. 14.121.

⁷⁰ PFs, para. 14.122, "*the nature of the tender process for wholesale services may still enable some fixed-MVNOS to obtain competitive terms with the participation of only two MNOs*". PFs, para. 14.61, "*even if Telefonica became the only credible supplier, this [the desire to access fixed-mobile customers] may limit its incentive to increase substantially the wholesale price it charges to fixed-MVNOS.*"

⁷¹ PFs, para. 14.113.

- (a) the prospect of alleviation of any MNO capacity constraints;⁷²
 - (b) the MVNO's control over the tender process and their ability to create the perception of more competition than might actually be available;⁷³ and
 - (c) the strong incentive of mobile-only MNOs (i.e. Telefonica and H3G) to wholesale mobile services to fixed-MVNOs to gain access to their customers that would otherwise be difficult for the mobile-only MNOs to attract directly.⁷⁴
- 4.7 Virgin Media considers that the factors identified in the PFs as driving incentives to bid competitively (with fewer numbers of bidders) are not robust or well supported. Indeed, the suggestion in the PFs that competitive wholesale offers may remain available even in circumstances in which bids are made by fewer than three MNOs is inconsistent with the view reached by Ofcom (following a number of detailed reviews of the sector). Ofcom's competition assessment of the mobile sector in 2009 and 2012 highlighted the importance of national wholesale competition with at least four credible competitors in order to support both: (i) direct competition at the retail level between vertically integrated providers; and (ii) competition to supply MVNOs which then compete in the retail market. In 2012, Ofcom stated "***we have decided that UK consumers will be likely to benefit from better services at lower prices in future if following the Auction there continue to be at least four credible national wholesalers of mobile services.***"⁷⁵
- 4.8 More specifically, Virgin Media is concerned that the PFs incorrectly rely on specific mitigating factors which would mean that, if the Proposed Transaction is cleared without remedies, MVNOs (and customers) will be exposed to a significant risk of higher prices and a degradation of service, in particular:
- (a) capacity constraints (which already exist to some extent for most MNOs) will continue going forward (given the explosive growth in data requirements) and, with the current asymmetry in spectrum holdings, the other MNOs will need to invest earlier than the merged entity to alleviate these constraints. The amount of capacity each of the three MNOs would allocate to host MVNOs, when their spare capacity is limited and which would require significant investment to grow, is highly uncertain;
 - (b) it is fanciful to suggest that MVNOs will be able to extract competitive offers by creating a perception that more competition exists than in reality. All the remaining MNOs will act on the basis that the merged entity's incentives to supply have changed, and they will be impervious to any suggestion by the MVNOs to the contrary. MNOs have already indicated to the CMA their expectation of a change in the merged entity's incentives;
 - (c) no reliance can be placed on the incentives of mobile-only MNOs to supply fixed-MVNOs in order to gain indirect access to their customers. Any such incentive is not specific to the Proposed Transaction. The incentive to supply on attractive terms will, however, change reflecting the lower constraint exercised by EE. In any event, it cannot be assumed that MNOs will prefer a strategy of seeking indirect

⁷² PFs, para. 14.116 and Appendix G.

⁷³ PFs, paras. 14.113 and 14.122.

⁷⁴ PFs, para. 14.117 to 14.120.

⁷⁵ Ofcom, Assessment of future mobile competition and award of 800 MHz and 2.6 GHz, Statement, 24 July 2012, para. 1.10. "***We continue to believe that the main level in the value chain at which we should promote competition is the national wholesale level. This is because it supports retail competition both directly, as national wholesalers are also major competitors supplying retail mobile services to consumers and; indirectly, via wholesale access provided to other retailers such as Mobile Virtual Network Operators (MVNOs). As a result, we have decided that UK consumers will be likely to benefit from better services at lower prices in future if following the Auction there continue to be at least four credible national wholesalers of mobile services.***"

access to customers purchasing fixed and mobile services together through fixed-MVNOs given the benefits available if they develop their own fixed offering (using BT's access products), in particular the opportunity to earn margin on fixed services; and

- (d) the European Commission's potential future remedy process cannot be relied on to guarantee immediate competition amongst MNOs.

A. Incentives to supply for MNOs facing capacity constraints are unclear

- 4.9 The PFs identify that "*the merged entity might be more likely to be able to cause a price rise by withdrawing if other MNOs faced future capacity constraints.*"⁷⁶ It appears, however, that a provisional view has been reached that there is scope for the alleviation of any such future constraints. Although the CMA's conclusions on this issue are largely redacted, the PFs do observe that "*... although some MNOs face challenges, should these constraints occur they would not be enduring.*"⁷⁷
- 4.10 Virgin Media agrees that the degree to which capacity is constrained is a key factor in assessing the likelihood of the merged entity to engage in a strategy of foreclosure of MVNOs. However, in assessing the ability of MVNOs to gain wholesale contracts from the remaining MNOs in the event that EE chose not to bid for future contracts (and the terms of any such offers), the PFs fail to take account of the current asymmetry between MNOs' spectrum holdings and the implications for different MNOs' future costs to serve large MVNOs such as Virgin Media.
- 4.11 In particular, the PFs have not sufficiently explored the timeliness, feasibility and cost effectiveness of potential solutions to capacity constraints. More importantly, little consideration is given in the PFs to the potential deterioration in wholesale offers by the remaining MNOs given that their future capacity solutions are likely to be costly and much less effective in delivering wholesale mobile services, in terms of performance, speed and capacity, than the service offered by EE pre-merger.
- 4.12 The current spectrum holdings of the MNOs are asymmetric.⁷⁸ EE's acquisition of 70 MHz of 2.6 GHz spectrum and 10 MHz of 800 MHz spectrum at the last spectrum auction took its spectrum holdings up to the maximum allowed by Ofcom with a holding of 210 MHz which is significantly higher than O2 (at 87 MHz) and H3G (at 70 MHz). The merger would increase the holding to 265 MHz (45 per cent of total UK spectrum) thereby exacerbating the asymmetry in spectrum ownership, particularly with respect to the high-frequency spectrum (the merged entity will own 66 per cent of all 2.6 GHz spectrum).⁷⁹
- 4.13 Moreover, it is no longer the case that "*MNOs usually have spare capacity on their network to address increases in demand within a medium term*" as identified by the European Commission as part of its consideration of the T-Mobile/Orange transaction in 2010:⁸⁰

⁷⁶ PFs, para. 14.116.

⁷⁷ See PFs, Appendix G, Figure 2.

⁷⁸ See PFs, Appendix G, Figure 2.

⁷⁹ Virgin Media's Initial Submission, paras. 7.19 to 7.25.

⁸⁰ In *T-Mobile/Orange*, for example, the European Commission identified that "*MNOs usually have spare capacity on their network to address increases in demand within a medium term, and consequently, in particular in a situation like in the UK where there are already a significant number of MVNOs present in the market, do not have the incentive to foreclose MVNOs, as the losses that they would incur in doing so (by losing revenue from the wholesale agreements with MVNOs) exceed any retail revenues they would pick up should these MVNOs exit the market*", para. 70.

- (a) Telefonica has indicated to the CMA that it does not have, as a standalone entity, enough high capacity spectrum to act as a real competitive constraint;⁸¹
- (b) Three has indicated that its ability to acquire new customers and grow its market share is very limited, again, as a standalone entity.⁸² Three's recent drive to deploy the spectrum it already owns throughout the UK has reflected the need for Three to "*improve reliability by adding some much needed capacity in congested areas*";⁸³ and
- (c) Vodafone has submitted that the merged entity will have significant capacity but that "*Vodafone and the other MNOs will face significantly greater capacity constraints with regard to spectrum thereby constraining their ability to compete effectively with EE.*"⁸⁴
- 4.14 In short, current spectrum holdings are asymmetric and this will be exacerbated post-merger. The remaining MNOs have confirmed that they are currently capacity constrained relative to EE and, in particular, the merged entity.
- 4.15 Going forward, Cisco predicts that mobile data traffic growth will have a CAGR of 54 per cent between 2014 and 2019.⁸⁵ The options which exist, in principle, for increasing capacity in response to this demand growth are as set out in the PFs, namely, deployment of existing spectrum at more sites; refarming of spectrum; densification of sites/cell sectorisation and purchase of additional spectrum.⁸⁶
- 4.16 It is likely that the current asymmetry in spectrum holdings means that the remaining MNOs will need to deploy some, or all, of these solutions much sooner than the merged entity in order to keep pace with demand. In these circumstances, the trade-offs the remaining MNOs will face in hosting MVNOs can be expected to be very different to that EE (and other MNOs in the past) would face where wholesale arrangements with MVNOs are deemed to contribute incremental revenues whilst using spare capacity at close to zero marginal cost.
- 4.17 Virgin Media considers that the remaining MNOs will carefully evaluate additional investment in spectrum, network build strategies and technical solutions and for each level of capacity they want to reach they will pursue the lowest cost option to deliver that level. Beyond this, MNOs are unlikely to find hosting MVNOs attractive in circumstances where it will drive the need for significant investment (for example new macro cellular build) as the business case for such investment is unclear on the reasonable assumption that ARPUs will not keep pace with increasing demand because customers expect their data requirements to be met without a significant increase in price.
- 4.18 [X].
- 4.19 A large MVNO such as Virgin Media is much more likely to drive the need for significant investment. [X]⁸⁷ [X].

⁸¹ PFs, Appendix G, para. 28.

⁸² PFs, Appendix G, para. 126.

⁸³ <http://www.threemediacentre.co.uk/news/2015/three-boosts-4g-speeds.aspx>

⁸⁴ PFs, Appendix G, para. 31.

⁸⁵ http://www.cisco.com/assets/sol/sp/vni/forecast_highlights_mobile/index.html#~Country

⁸⁶ PFs, Appendix G, para. 39.

⁸⁷ The traffic is likely to reach peak for the traffic of both MNOs and MVNOs during the same period.

Chart 1: [REDACTED].

[REDACTED].

Source: [REDACTED].

- 4.20 More specifically, the scope for addressing capacity constraints through the acquisition of new spectrum is highly speculative⁸⁸ because:
- (a) not all new spectrum is suitable for immediate use by MNOs;⁸⁹
 - (b) it cannot be assumed that auctions will be timely;⁹⁰ and
 - (c) it cannot be assumed that the outcomes of any auctions will sufficiently resolve asymmetry in spectrum holdings, in particular, as these will not be subject to spectrum caps. If more than one bidder is successful in acquiring spectrum at any future auction, this may not reduce the high degree of asymmetry which exists pre-merger and which is exacerbated by the Proposed Transaction.
- 4.21 In summary, it is highly speculative for the PFs to conclude that capacity constraints can be addressed by the remaining MNOs without affecting incentives to supply MVNOs and/or resulting in significant wholesale price increases. Given the asymmetry in spectrum holdings, the remaining MNOs (unlike EE) do not currently appear to have spare capacity (which has previously driven incentives to host MVNOs). In circumstances where investment is needed to meet increases in demand, but where the economics of such investment are challenging, it is unlikely that MNOs will want to host MVNOs (particularly large MVNOs) which might drive the need for significant investment (or indeed, bring that investment forward).

B. MVNOs cannot create a perception of greater competition than exists in reality

- 4.22 The PFs appear to envisage that MVNOs could still obtain competitive terms from MNOs (even with the participation of only two MNOs) by convincing the remaining MNOs that the merged entity is still actively bidding such that the remaining MNOs continue to make offers at pre-merger levels. If these bids are not significantly different to those that EE was able to make pre-merger, the MVNOs would not be significantly worse off even with a reduced number of bidders.⁹¹
- 4.23 The proposition above is commercially implausible. All rational market participants (including the remaining MNOs) will act on the basis that the merged entity's incentives to supply have changed. In particular, any attempt by an MVNO to portray the merged entity as bidding as aggressively as a stand-alone EE would be ineffective because the remaining MNOs will rationally expect less competitive bidding by the merged entity (based on the facts available on the transaction), and will re-calibrate their bids accordingly.

⁸⁸ BT has stated "*In practice the amount of spectrum available is limited*" http://www.btplc.com/Sharesandperformance/downloads/PDFdownloads/BT_IR_Technology_teach_in_3_October_2011.pdf. See Annex A for slides 34 to 35.

⁸⁹ The PFs state "As each spectrum band is released, it may not necessarily be suitable to provide immediate substantial capacity to operators" "*While the 1.4 GHz spectrum has already been traded, and the 2.3 and 3.4 GHz spectrum is expected to be auctioned by Ofcom in the short term, it will not all be immediately useful.*", PFs Appendix G, paras. 65 and 68.

⁹⁰ Previous auctions have been subject to legal challenges and delay, as in the case of the most recent 2.6 GHz auction which was delayed by several years due to legal challenges.

⁹¹ PFs, para. 14.113 "*...we believe that the impact of a loss of a competitor might be mitigated by the MVNO's control over the structure of the tender process, if the MVNO can convince one bidder that it has another strong bid. The merged entity's withdrawal from contention, if credible, is likely to make it more difficult for MVNOs to convince MNOs that it has another strong bid, but not impossible.*" See also PFs, para. 14.122.

- 4.24 MNOs have already indicated their expectation of a change in the merged entity's incentives in the evidence they have provided to the CMA. Telefonica's hearing summary indicates its belief that the merged entity will have changed incentives/propensity to bid for wholesale mobile services contracts. It states "*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 (i.e. '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.*"⁹²

C. No reliance can be placed on the incentives of MNOs to supply fixed-MVNOs

- 4.25 In addressing the scenario in which mobile-fixed bundles become more prevalent, the PFs place considerable reliance on the incentives of Telefonica, H3G and, to a lesser extent, Vodafone to supply fixed-MVNOs in order to gain access (indirectly) to customers with a preference for purchasing fixed and mobile services together that the MNO could not readily attract at the retail level. For example, the PFs state:

*"the more important fixed-mobile bundles become, the stronger incentives some other MNOs might have to bid aggressively to supply wholesale mobile services to a fixed-MVNO who can attract customers that the MNO cannot at the retail level, and therefore the smaller the likely effect of this foreclosure strategy on a fixed-MVNO."*⁹³

- 4.26 As noted above, this observation is relied on heavily in the PFs in concluding that the merged entity would not be expected to engage in a strategy of total or partial foreclosure in respect of MVNOs in the event that combined purchasing of fixed and mobile services became more important.

- 4.27 Virgin Media considers that:

- (a) any such incentive would not arise as a consequence of the merger and even if MNOs were to offer wholesale access to fixed-MVNOs, it does not follow that they would have a strong incentive to bid aggressively for these contracts.⁹⁴ To the contrary, since the remaining MNOs will rationally expect the merged firm to bid less aggressively for fixed-MVNOs they will adjust their bids for the corresponding reduction in competition; and
- (b) to the extent that MNOs would wish to gain revenue from fixed-mobile sales (in a scenario in which there is greater demand for purchasing fixed and mobile services from the same provider), they are more likely to adopt alternative strategies which offer higher margins than selling through a fixed-MVNO (in particular, by further fixed-mobile consolidation or by developing their own fixed offering based on available fixed-line inputs).

- 4.28 In summary, the existence and strength of any such incentive is highly uncertain and speculative and, in these circumstances, the CMA must err on the side of caution as set out in section 7.

Incentives to supply fixed-MVNOs are not merger specific and would still be affected by the loss of EE as a strong competitor

- 4.29 The relevant question in the context of a foreclosure analysis is whether the Proposed Transaction will change the wholesale terms which the remaining MNOs are prepared to

⁹² Telefonica's hearing summary, para. 51.

⁹³ PFs, para. 14.122

⁹⁴ PFs, para. 14.122.

offer in circumstances where the merged entity refuses to supply, or offers worse terms for, its wholesale mobile services.

- 4.30 The alleged incentive for MNOs to enter into wholesale arrangements with fixed-MVNOs in order to gain access to customers with a propensity to buy combined services is not merger-specific. In other words, if this incentive existed it would apply both pre- and post-merger. Therefore the alleged incentive to supply is not directly relevant to the assessment of how the bidding incentives of the remaining MNOs could change due to the Proposed Transaction.
- 4.31 The PFs state that those MNOs seeking indirect access to fixed-mobile bundles would have an incentive to offer wholesale terms that allowed the retail providers of these bundles to remain competitive against the merged entity in the downstream market.⁹⁵
- 4.32 In designing their bids, mobile only MNOs would take into account the impact of wholesale access terms on the competitiveness of the MVNO in the downstream markets both with and without the Proposed Transaction. There is no reason to expect that their regard for the competitiveness of MVNOs in downstream retail markets will improve due to the merger.
- 4.33 The primary impact of the Proposed Transaction on the wholesale offers of mobile-only MNOs will arise as a consequence of changes in their expectations of how aggressively the merged entity will bid. Mobile-only MNOs will expect the merged entity to bid less aggressively (in order to raise the price of wholesale mobile services) and they, in turn, will bid less aggressively to benefit from the reduction in the competitive constraints they face.

Mobile-only MNOs are likely to prefer to develop their own fixed offerings

- 4.34 The incentive for MNOs to supply fixed-MVNOs which is identified in the PFs arises in a scenario where fixed-mobile purchasing grow in prevalence an anticipated by BT (through cross-selling to a fixed base) and where MNOs without a fixed base will potentially lose revenues to the merged entity and to fixed-MVNOs unless they are (i) able to create their own fixed-mobile bundles; or (ii) generate wholesale revenue from the fixed-mobile sales of another operator (in particular fixed-MVNOs who cannot self supply the mobile input). The PFs acknowledge that wholesale supply is not the only option for MNOs seeking to profit from sales to consumers that may prefer to buy fixed-mobile bundles. It states that:

*"Telefonica and H3G could potentially choose to provide fixed services directly (perhaps through a merger with an existing fixed operator, or by buying fixed line inputs on regulated terms from BT as many other CPs do..."*⁹⁶

- 4.35 Further, the PFs describe Vodafone's activity in the consumer fixed services markets, in particular the launch of consumer broadband and super-fast broadband ("**SFBB**") services with a TV service due to launch next year.⁹⁷ Vodafone supplies fixed services using the fixed assets acquired from Cable & Wireless (which have been expanded) as well as using BT's VULA product to provide SFBB to customers. Vodafone's broadband service is now offered nationwide covering 22 million premises across the UK (95 per cent of BT's fibre footprint) which is comparable to Sky and TalkTalk. Vodafone's total broadband customer base now stands at 75k.⁹⁸ Vodafone has also begun a new marketing campaign, promoting its Home Broadband propositions.

⁹⁵ PFs, para. 14.61.

⁹⁶ PFs, para. 14.168.

⁹⁷ PFs, paras. 14.161 to 14.162.

⁹⁸ Vodafone results Q3 2015.

- 4.36 Although the PFs acknowledge the alternative strategies would be available to MNOs to gain revenue from any fixed-mobile sales, and describes the extensive plans of Vodafone in this regard, it appears to place significantly more weight on the adoption by, and commitment to, a wholesale supply strategy by MNOs in order to deliver these revenues (either on its own, or in parallel with the organic growth of a fixed offering).
- 4.37 The PFs do not sufficiently demonstrate why, in a scenario featuring greater sales of fixed-mobile propositions, the CMA relies on a wholesale strategy being favoured by MNOs, and remaining attractive in the medium term, given the advantages to a mobile-only MNO of developing alternative strategies for reaching its own fixed-mobile customers and "owning" the customer relationship (which are likely to outweigh the upfront costs). In particular, an MNO which develops a fixed offering using BT's regulated input could replicate the retail offer of a fixed-MVNO and make a greater margin than selling mobile inputs on a wholesale basis to fixed-MVNOs.
- 4.38 Aside from the advantages of earning a higher margin and gaining a direct customer relationship (in particular with customers that are less likely to churn), there are incentives for MNOs in owning, or having access to fixed assets in order to facilitate traffic offloading strategies and alternative backhaul options. BT states in this regard:
- "Various predictions of mobile traffic show exponential growth but LTE on existing sites can only provide modest capacity growth in line with new spectrum. To match predicted growth, operators will need to move to a different architecture with many more basestations – i.e. many small cells. This makes the fixed network increasingly relevant to mobile... Wi-Fi and Superfast Broadband play a key role in this future." (emphasis in original)⁹⁹*
- 4.39 In a fluid market which has seen many developments of this nature, the CMA cannot rely on a finding which depends on the MNOs adopting a particular commercial strategy and continuing to adopt this approach in the longer term (which the CMA acknowledges is the correct period for assessing the transaction). This is particularly so given that:
- (a) the rationale given by BT and EE for the Proposed Transaction. Gavin Patterson has stated, for example, *"when mobile is combined with the fixed subscription there is some quite significant attachment rates being achieved in many countries across Europe. And that will be key, we think, to driving ultimately the revenue growth that ultimately we think we can get to"*¹⁰⁰
 - (b) the history of mobile market developments indicates many notable changes in commercial direction, in particular by BT which exited from the retail mobile market and has subsequently re-entered and by O2 which existed the consumer broadband market but could re-enter; and
 - (c) other market participants (Vodafone) are already adopting alternative strategies.
- 4.40 In conclusion, any supply by mobile-only MNOs to fixed-MVNOs will be influenced by the removal of the merged entity as a strong competitive constraint. Moreover, in a world in which demand for buying from one source increases strongly, mobile-only MNOs would have strong incentives to enter into the supply of fixed services at the retail level (either through organic growth using BT's input or through acquisition). In these circumstances not only would the mobile-only MNOs be less constrained by the merged entity but it will not wish to offer wholesale terms which might enable the fixed-MVNO to compete more effectively with its own combined fixed-mobile offer.

⁹⁹ http://www.btplc.com/Sharesandperformance/downloads/PDFdownloads/BT_IR_Technology_teach-in_3_October_2011.pdf. See Annex A for slides 34 to 35.

¹⁰⁰ EE announcement transcript, page 9.

D. The restoration of effective competition through a remedial process may expose MVNOs to significant risk

- 4.41 The European Commission's potential future remedy process cannot be relied as a fool proof guarantee that effective competition amongst MNOs will be maintained after the O2/H3G transaction.
- 4.42 As regards the O2/H3G transaction, the PFs state *"to the extent the acquisition would significantly impede effective competition...in the wholesale market, the European Commission would prohibit the merger or accept commitments offered by H3G and O2 that would restore effective competition"*.¹⁰¹ In other words, the PFs proceed on the basis that there will be no change in the ability of MVNOs to secure competitive offers as a consequence of the O2/H3G deal because the deal will either be blocked or remedies will be put in place to ensure that effective competition is restored.
- 4.43 To the extent the remedies accepted by the European Commission in previous mobile transactions have been able to facilitate competition, such effects have not occurred immediately.¹⁰² Even assuming that attempts are made to address any such shortcomings as part of the consideration of O2/H3G, there can be no guarantee that any remedies will restore effective competition immediately by ensuring that a large MVNO such as Virgin Media has available to it, within relevant timescales, the range and quality of offers for wholesale mobile services as those which have been offered pre-merger. [§].
- 4.44 [§].

¹⁰¹ PFs, para. 14.17.

¹⁰² <http://uk.reuters.com/article/2015/06/09/uk-mobile-europe-m-a-idUKKBN0OP0ET20150609>

5. FLAWS IN THE CMA'S DEMAND SIDE ANALYSIS

- 5.1 The PFs observe that the Proposed Transaction would be more likely to create or enhance the merged entity's ability and incentive to engage in a strategy of foreclosure if certain developments in the market arise. Specifically, the PFs state that "*the price rise necessary to make such a strategy [i.e. foreclosure] profitable would be lower if: fixed-mobile bundles become prevalent; mobile services become a major driver of customers' choice of fixed service provider ... and the merged entity can recapture a high proportion of those customers lost by the fixed-MVNO that chooses to continue purchasing fixed-mobile bundles.*"¹⁰³ However, in the PFs, the CMA highlights uncertainty relating to those future developments.¹⁰⁴
- 5.2 Set against this, and as set out earlier in this submission, BT has made clear that its expectations in relation to these markets developments are central to the rationale for the Proposed Transaction. As explained by BT's CEO Gavin Patterson, "*We expect significant demand in the market for fixed and mobile converged products, and we will [be] better equipped than anyone else in the UK to offer these services and meet the changing needs of UK consumers*".¹⁰⁵
- 5.3 It appears that the uncertainty referred to (repeatedly) in the PFs arises because the evidence is finely balanced with respect to the relevant future market developments. In this regard, it is clear from the PFs that, even if it were to be accepted that there may be "*strong arguments against the likelihood of many of those future developments occurring*",¹⁰⁶ the CMA has also received considerable evidence suggesting that the relevant future developments will occur.
- 5.4 In short, the PFs do not sufficiently demonstrate why the evidence that points to future developments not occurring has been preferred to evidence which suggests that those developments will occur and, therefore, why the provisional conclusion is reached that the Proposed Transaction will not create or enhance the merged entity's ability and incentive to engage in a foreclosure strategy.¹⁰⁷
- 5.5 This section highlights, for each of the main developments relating to fixed-mobile purchasing, the uncertainty identified in the PFs, and the mix of evidence in each case in order to show that the CMA has placed undue weight on the "*arguments against the likelihood of many of those future developments occurring*"¹⁰⁸ rather than the evidence which suggests otherwise.¹⁰⁹

A. Likely future extent to which customers will buy fixed and mobile services from the same provider

- 5.6 The PFs reach no firm conclusion on this issue: "*We therefore concluded that the number of customers buying fixed and mobile products from the same provider may increase over time, but that there was uncertainty over the likelihood, speed and extent of the*

¹⁰³ PFs, para. 14.178.

¹⁰⁴ PFs, para. 14.182.

¹⁰⁵ See for example <http://www.mobileworldlive.com/featured-content/top-three/bt-boasts-50000-consumer-mobile-subs/> or <http://www.btplc.com/Sharesandperformance/Presentations/downloads/EEAnnouncementPresentationFINAL.pdf>

¹⁰⁶ PFs, para. 14.182.

¹⁰⁷ PFs, para. 14.182.

¹⁰⁸ PFs, para. 14.182.

¹⁰⁹ See PFs, chapter 7 for a discussion of the implications of uncertainty and conflicting and/or unavailable evidence for the CMA's assessment and provisional conclusions.

increase."¹¹⁰ However, the PFs do highlight a number of factors which are suggested point to more limited growth.¹¹¹

5.7 The PFs are unclear as to why the CMA has decided to place less weight on other evidence put to it, and described in the PFs, which suggests a more significant increase in the number of customers buying fixed and mobile products from the same provider. This evidence includes the following:

- (a) that the rationale for the Proposed Transaction is motivated by the increased opportunities for cross-selling and bundling¹¹² and the conclusion in the PFs that *"the merger will lead to additional customers purchasing fixed and mobile services from the same supplier, by virtue of bringing together large suppliers of each product, and because additional customers may be persuaded to do so through additional opportunities for cross-selling and bundling"*; ¹¹³
- (b) evidence that a range of fixed-mobile propositions are currently available from a number of players in the market,¹¹⁴ and that several operators are planning launches soon which will allow them to offer both fixed and mobile services to consumer and business;¹¹⁵
- (c) evidence presented by Sky that the *"experience in other European countries (such as Spain) shows that a determined incumbent supplier, which is also a major MNO, can push a market towards bundled offers at dramatic speed"*; ¹¹⁶
- (d) operator forecasts, including those of Virgin Media, of the number of customers which are expected to take fixed and mobile bundles over the next few years which indicates *"very substantial growth"*.¹¹⁷ The PFs state *"[i]n combination, the forecasts of BT, Virgin Media, Sky TalkTalk and Vodafone imply that operators are planning for and investing in substantial growth in consumer purchases of fixed and mobile products from the same provider"*; ¹¹⁸
- (e) internal documents and external reports provided to the CMA which suggest that *"growth is anticipated"*,¹¹⁹ in particular *"BT submitted several internal document that suggest that BT expects significant growth in sales of fixed-mobile bundles."*¹²⁰ In a document prepared by The Boston Consulting Group for BT it is noted that *"there are several players with strong motivation to bundle"*; ¹²¹

¹¹⁰ PFs, para. 14.144. The PFs also state, *"There is considerable uncertainty over the likely future extent to which customers will buy fixed and mobile services from the same provider"*, PFs, para. 14.179, first bullet.

¹¹¹ These are: (i) differences in the triggers for purchasing mobile and broadband services; (ii) the low uptake of bundles offered by Telefonica and EE in the past; (iii) differences in the extent of uptake between other European countries; and (iv) incentives for big discounts may not be supported by cost savings offered by bundling and existing profits. PFs, para. 14.143.

¹¹² PFs, para. 14.141. As indicated in section 4, Gavin Patterson has stated, *"when mobile is combined with the fixed subscription there is some quite significant attachment rates being achieved in many countries across Europe. And that will be key, we think, to driving ultimately the revenue growth that ultimately we think we can get to"*. EE announcement transcript, page 9.

¹¹³ PFs, Appendix H, para. 22.

¹¹⁴ PFs, Appendix H, para. 14.

¹¹⁵ PFs, Appendix H, para. 12.

¹¹⁶ PFs, Appendix H, para. 10(c).

¹¹⁷ PFs, Appendix H, para. 20.

¹¹⁸ PFs, para. 14.141.

¹¹⁹ PFs, Appendix H, para. 25 and footnote 17.

¹²⁰ PFs, Appendix H, para. 26.

¹²¹ PFs, Appendix H, para 10(e).

- (f) the significant degree of uptake amongst Virgin Media's customers – Virgin Media sells fixed services to around half of its mobile customers, and Virgin Media's consumer research indicates an extensive customer interest in quad play including from customers of BT (62 per cent) Virgin (72 per cent) and Sky (81 per cent);¹²² and
- (g) evidence that for business customers "*fixed-mobile bundles and/or converged fixed-mobile services are likely to be important for a growing proportion of businesses.*"¹²³

5.8 In summary, it appears from the PFs that the CMA has been provided with significant evidence indicating a likely increase in the number of customers buying fixed and mobile products from the same provider over time, together with a clear indication that fixed-mobile providers are planning for, and investing in, their capability both to meet demand and drive further uptake. In this context, the PFs do not sufficiently demonstrate why the CMA has placed greater weight on evidence suggesting possible limits to the extent of this growth, rather than the evidence suggesting otherwise.

B. The extent of unbundling

- 5.9 The PFs state "[t]here is even greater uncertainty over the proportion of customers for whom the offer of mobile services is likely to affect their choice of provider of fixed services (as opposed to simply buying mobile from their fixed operator). The evidence we have seen suggests that fixed providers are cross-selling mobile to their existing customer's rather than using mobile to attract new customers."¹²⁴
- 5.10 The PFs indicate that the CMA has "*no evidence on how customers that currently buy fixed and mobile services from the same supplier respond to an increase in the combined prices of those services, or in the price of the mobile element*".¹²⁵ Despite this lack of direct evidence, the PFs point to "*a number of factors which would lead to some customers unbundling a fixed-mobile bundle in response to an increase in the price of the mobile element*".¹²⁶ These relate to consumer preferences for particular fixed providers, and factors potentially limiting the attractiveness of fixed-mobile propositions for customers.¹²⁷
- 5.11 These PFs seem only, therefore, to reflect observations on current market conditions rather than identifying how customer preferences and behaviour might change under the market conditions which will emerge post-merger. In particular, the CMA does not sufficiently take account of the changes which can be expected once the merged entity implements its stated strategy "*to offer these services and meet the changing needs of UK consumers*".¹²⁸
- 5.12 In this regard, the PFs fail to demonstrate why the CMA has decided to place less weight on a range of other evidence before it, suggesting that customer switching behaviour will change in response to changed market conditions and new propositions, for example:

¹²² PFs, Appendix H, para. 25.

¹²³ PFs, Appendix H, para. 36.

¹²⁴ PFs, para. 14.179, second bullet.

¹²⁵ PFs, para. 14.146.

¹²⁶ PFs, para. 14.155.

¹²⁷ More specifically, evidence suggesting that, at present, fixed-MVNOs are differentiated in relation to their fixed offering (suggestive of strong preferences for particular fixed providers) and that cross-selling mobile products to fixed customers is easier than vice versa (PFs, para. 14.150) and factors which potentially limit the attractiveness of fixed-mobile bundles for customers: (i) a lack of compelling converged fixed-mobile offering; (ii) a lack of price differentiation compared to stand alone offerings; and (iii) potentially higher switching costs when more products are switched (PFs, paras. 14.151 to 14.153.)

¹²⁸ See para. 1.2 and footnote 1 above.

- (a) survey evidence (from three surveys) indicating that "*on balance...consumers are open to the idea of such bundling*";¹²⁹
- (b) evidence from Ofcom which notes that "*recent market developments may presage a rapid increase in the importance of competition between providers of bundles*" and that competition in bundles will become more important to providers (consistent with Ofcom's findings in its Wholesale Broadband Access Review in 2014);¹³⁰
- (c) evidence that cross selling is a commercially attractive strategy where fixed is attached to mobile (notwithstanding that the reverse strategy might be stronger). Gavin Patterson has stated, for example "*There's a clear path from, I think, mobile being attached to fixed. But there's also some good example of fixed being attached to mobile, though probably not as strong. So that's, I think, the key on the revenue side*";¹³¹
- (d) benefits to suppliers of fixed-mobile bundles which may drive potential discounting and/or quality improvements thereby increasing the attractiveness of bundles:
 - (i) the PFs conclude, for example, that "*there is some support for the view that bundling reduces churn*".¹³² [§<];¹³³
 - (ii) a range of new customer benefits are identified in the PFs that depend on combined fixed-mobile offers (such as common voicemail for fixed and mobile numbers; improved call quality in buildings; and hybrid solutions allowing substitution between stationary and mobile devices depending on the user's situation).¹³⁴

5.13 In summary, the evidence relied upon in the PFs in relation to the drivers of consumer choice is anchored by current customer/supplier behaviour. The CMA does not explain why it has placed weight on this analysis rather than a range of other evidence described in the PFs indicating that customer switching behaviour is likely to change in response to changed market conditions and new propositions.

C. Recapture of customers

5.14 The PFs state "[e]ven with EE's exit, all the fixed-MVNOs would be able to get wholesale contracts meaning that they would be present in the downstream, providing bundles. Each fixed-MVNO forecasts a substantial share of supply in fixed-mobile bundles, and their combined presence will tend to reduce the proportion of customers that the merged entity would recapture."¹³⁵

5.15 This statement is unfounded and circular as it presumes the absence of a foreclosure effect when the analysis (of which this statement forms a part) is intended to explore whether such a strategy would be profitable.

5.16 In any event, as set out in section 4 above, the CMA's provisional conclusion that fixed-MVNOs would be able to secure wholesale contracts is unfounded and the PFs fail to establish that any such supply would be on terms which would enable fixed-MVNOs to

¹²⁹ PFs, Appendix H, para. 78. [§<].

¹³⁰ PFs, Appendix H, para. 86.

¹³¹ See EE announcement transcript, page 9 and cited in Sky's submission to the CMA of 18 March 2015 at Annex 5.

¹³² PFs, Appendix H, para. 47.

¹³³ [§<].

¹³⁴ PFs, Appendix H, paras. 80 and 82.

¹³⁵ PFs, para. 14.179, third bullet.

compete effectively in the retail market. In these circumstances, recapture rates could be significantly higher than indicated in the PFs because fixed-MVNOs would not be able to offer sufficiently attractive fixed-mobile propositions to be able to compete effectively with the merged entity for any switching customers.

6. FLAWS IN THE CMA'S ANALYSIS OF PARTIAL FORECLOSURE

6.1 Section 3 above addresses the flaws in the framework used by the PFs in the analysis of foreclosure and explains why the primary concern arising from the Proposed Transaction is not one of total foreclosure but, instead, that the merged entity will have an increased incentive to raise the costs of fixed-MVNOs and thus ensure that they become less effective competitors. That is the issue that the PFs should have analysed, but did not.

6.2 This section explains why, putting aside the flaws in the CMA's framework of the analysis for foreclosure, the substantive analysis of partial foreclosure in the PFs is deeply flawed.

A. Summary of CMA's provisional findings on partial foreclosure

6.3 A provisional conclusion is reached in the PFs that EE has, and the merged entity would have, the **ability** to:

- (a) harm Virgin Media through a delay to its transition to full MVNO; and
- (b) degrade Virgin Media's quality of mobile service, albeit the PFs consider that the extent of this ability (given the provisions of the contract) is unclear.¹³⁶

6.4 The PFs also indicate the possibility that the Proposed Transaction may increase the merged entity's **incentives** to partially foreclose Virgin Media during its current contract, although the CMA does observe that there are uncertainties in relation to that conclusion.¹³⁷

6.5 However, the PFs observe that, even if the merger would lead to partial foreclosure of Virgin Media, the **effects** on the downstream retail market would be limited on the basis that:

- (a) the merger would be unlikely to have significant effects on competition in the supply of mobile services on a stand-alone basis;
- (b) consumers would still have a choice of a number of alternative providers of fixed-mobile bundles and stand-alone services; and
- (c) the effects on Virgin Media are likely to be time limited (i.e. up until the MVNO Agreement renewal).¹³⁸

6.6 In relation to MVNOs other than Virgin Media, the PFs indicate that fixed-MVNOs are not more likely to be partially foreclosed than Virgin Media on the basis, in part, that:

- (a) other fixed-MVNOs would have greater incentives than Virgin Media pre-merger to secure contractual protection in any future contracts; and
- (b) even if the merged entity had the ability and incentive to pursue a partial foreclosure strategy, it was unclear whether this would lead to a substantial effect on competition at the retail level.¹³⁹

6.7 **Against this background, Virgin Media considers that the CMA's substantive analysis is flawed and materially understates:**

¹³⁶ PFs, para. 14.226.

¹³⁷ PFs, para. 14.254 (see also paras 14.229 to 14.253).

¹³⁸ PFs, para. 14.264.

¹³⁹ PFs, para. 14.274.

- (a) the ability and incentive of the merged entity to engage in a strategy of partial foreclosure in relation to Virgin Media;
- (b) the ability and incentive of the merged entity to engage in a strategy of partial foreclosure in relation to other fixed-MVNOs; and
- (c) the adverse impact on retail competition in circumstances in which Virgin Media and other fixed-MVNOs are adversely affected by a strategy of partial foreclosure on the part of the merged entity.

B. Ability to engage in a strategy of partial foreclosure

- 6.8 Virgin Media strongly agrees with the provisional conclusion that EE has, and the merged entity would have, the ability to harm Virgin Media through a delay to its transition to a full MVNO.¹⁴⁰ [§<].¹⁴¹
- 6.9 Virgin Media also agrees that EE has, and the merged entity would have, the ability to harm Virgin Media within the contract (in addition to a delay to MTP).¹⁴² [§<]:
- (a) [§<];¹⁴³
 - (b) [§<];¹⁴⁴ and
 - (c) [§<].¹⁴⁵
- 6.10 These examples all took place prior to the announcement of the Proposed Transaction. **That ability to degrade Virgin Media’s service will remain post-merger.**

C. Incentive to engage in a strategy of partial foreclosure

- 6.11 For the reasons set in section 3, the PFs have adopted a flawed and incomplete conceptual framework for assessing the incentives of the merged entity to engage in a strategy of **partial foreclosure (i.e. raising rival’s costs)**.
- 6.12 This is particularly apparent in the PFs erroneous observation that any incentive on the part of the merged entity to engage in partial foreclosure as regards Virgin Media may be lessened if either:
- (a) EE wishes to retain Virgin Media as a wholesale customer after the expiry of the MVNO Agreement; and/or
 - (b) if such an action would make the merged entity less attractive to other MVNOs that it wishes to supply.¹⁴⁶
- 6.13 These statements misrepresent the actual choices of the merged entity. The relevant question is not whether the merged entity would like to retain Virgin Media as an MVNO customer, but on what terms the merged entity will seek to retain Virgin Media (and supply other MVNO customers). When considering partial foreclosure, there will always be terms on which the merged entity will be willing to supply wholesale mobile services.

¹⁴⁰ PFs, para. 14.226.

¹⁴¹ [§<].

¹⁴² PFs, para. 14.226.

¹⁴³ [§<].

¹⁴⁴ [§<].

¹⁴⁵ [§<].

¹⁴⁶ PFs, para. 14.247.

- 6.14 In this regard, as was shown in section 3, it is likely that the merged entity will seek, post-merger, to supply Virgin Media, and other fixed-MVNOs, on less favourable terms. Other fixed-MVNOs will understand that the incentives of the merged entity are such that, post-merger, they will be offered less favourable wholesale access terms by the merged entity. Similarly, this will also be understood by competing MNOs.
- 6.15 In addition, the analysis in the PFs is factually flawed. If the merged entity has an incentive to retain Virgin Media's business then engaging in a strategy of partial foreclosure within the term of the MVNO Agreement would increase the likelihood of that outcome. [X].
- 6.16 Accordingly, Virgin Media considers that the PFs materially overstate uncertainties about the incentives of the merged entity to partially foreclose Virgin Media.

D. Effects of partial foreclosure

- 6.17 In concluding that a strategy of partial foreclosure in relation to Virgin Media would have limited, temporary, effects on downstream retail competition, the CMA relies on a number of propositions:
- (a) it is unlikely that Virgin Media imposes a significant additional constraint on other mobile operators;¹⁴⁷
 - (b) most of the effects of partial foreclosure would apply only within the MVNO Agreement, and Virgin Media would be able to migrate to a new host on expiry of the MVNO Agreement;¹⁴⁸
 - (c) although Virgin Media could lose some actual or potential customers as a result of partial foreclosure there is no reason to think that the effects of that would persist beyond migration to a new host;¹⁴⁹
 - (d) it is unlikely that the merged entity would be able to "lock-in" Virgin Media for a further term by preventing Virgin Media from converting to a full MVNO;¹⁵⁰
 - (e) even if Virgin Media was partially foreclosed, there would still be a choice of alternative providers of fixed-mobile bundles;¹⁵¹ and
 - (f) partial foreclosure would not lead to Virgin Media exiting the market given that it can switch to an alternative MNO on contract renewal.¹⁵²
- 6.18 Virgin Media considers that the PFs materially understate the adverse effects on competition that would arise as a consequence of partial foreclosure of Virgin Media by the merged entity. In particular, the above propositions in the PFs are erroneous and unsupported.

Virgin Media's constraint on other mobile operators

- 6.19 The PFs assert that Virgin Media does not impose a significant constraint on other mobile operators, in particular, due to its lack of "owner economics".¹⁵³

¹⁴⁷ PFs, para. 14.255.

¹⁴⁸ PFs, para. 14.257.

¹⁴⁹ PFs, para. 14.257.

¹⁵⁰ PFs, para. 14.258.

¹⁵¹ PFs, paras. 14.259 and 14.260.

¹⁵² PFs, para. 14.261.

- 6.20 This is an extremely surprising provisional conclusion as no MVNO has "owner economics". Virgin Media is the largest independent MVNO in the UK with in excess of 3 million customers, and the competitive pressure that it, and other MVNOs, are able to exert has been acknowledged by European regulators and Ofcom (as discussed in section 2).
- 6.21 In reality, it is clear that MVNOs, and Virgin Media in particular, are an important competitive constraint in the UK mobile sector and have a history of driving innovation and choice to the benefit of customers (see section 2 above). As regards Virgin Media specifically, there is a wealth of evidence that shows that it is a very effective constraint at the retail level:
- (a) **Virgin Media's share of pay-monthly contracts** has grown steadily. This has been driven through the growth of Virgin Media's fixed base and active targeting of fixed customers with attractive mobile offers. Virgin Media's current share of year to date new pay monthly sales is [X] per cent, and [X] per cent for SIM only offers;¹⁵⁴
 - (b) Virgin Media represents a particularly strong constraint within its core cable footprint, with [X] per cent of those households "seriously considering" Virgin Media when choosing a mobile provider, which is above both [X] and [X];¹⁵⁵
 - (c) **Virgin Media's Project Lightning**,¹⁵⁶ will increase the number of homes in the UK that are able to access fixed services from Virgin Media, which is anticipated also to drive growth of mobile customers;
 - (d) Virgin Media offers particularly attractive retail propositions with low prices that compete directly with those of the MNOs. Several of the handsets Virgin Media currently retails are offered at the lowest entry price in the market and Virgin Media has regularly been able to market that it is **offering the UK's best value SIM only offering**, and the best priced phones in the UK. Examples of these marketing campaigns are included at Annex C;
 - (e) Virgin Media is the only MVNO to be able to compete effectively with the recent BT mobile proposition that combines BT mobile with the provision of wi-fi hotspots for free to BT's broadband customers. BT has long recognised the advantages of combining wi-fi and mobile propositions.¹⁵⁷ Virgin Media has the second largest wi-fi hotspots network behind BT [X].¹⁵⁸ Other fixed-MVNOs, and indeed other MNOs, are unable to compete with such converged propositions because BT's wi-fi network is not a regulated product that BT Openreach is required to offer to competitors on equivalent terms. As such, Virgin Media is the primary competitive constraint on BT's latest proposition; and
 - (f) Virgin Media is specifically identified by Ofcom, in its consultations and reports on the mobile sector, as a direct competitor to MNOs.¹⁵⁹

¹⁵³ PFs, para. 14.255.

¹⁵⁴ GfK data.

¹⁵⁵ VM Tracker September 2015.

¹⁵⁶ See Virgin Media's Response to Q 16 of the CMA's Information Request of 24 June 2015; Virgin Media Hearing Transcript, pages 6 to 11 and 43 to 48.

¹⁵⁷ http://www.btplc.com/Sharesandperformance/downloads/PDFdownloads/BT_IR_Technology_teach-in_3_October_2011.pdf. See Annex A for slides 34 to 35.

¹⁵⁸ [X].

¹⁵⁹ See Ofcom Mobile Call Termination Market Review 2015-18: Statement on the markets, market power determinations and remedies, 17 March 2015.

6.22 In summary, Virgin Media strongly disagrees with the proposition in the PFs that MVNOs, and Virgin Media in particular, do not impose a significant constraint on other mobile operators at the retail level.

Effects of partial foreclosure would not be time limited

6.23 The first reason indicated in the PFs for concluding that any effects arising from partial foreclosure of Virgin Media would be time limited is that they would be [X].

6.24 [X].

6.25 [X].¹⁶⁰ [X].¹⁶¹

6.26 [X]:

(a) [X].¹⁶² [X].¹⁶³ [X].¹⁶⁴ [X];

(b) [X];

(c) [X].¹⁶⁵ [X]; and

(d) [X].

6.27 [X].

Loss of customers would have enduring effects

6.28 The PFs recognise that a migration to a new host might result in a loss of actual or potential customers. However the PFs assert that there is no reason to consider that the effects of that loss of potential customers would persist beyond migration to a new host MNO. Again, this is an unsupported assertion that does not reflect the reality that such a loss of customers could be very significant, and that the resulting adverse effects would be enduring. By way of example:

(a) [X];

(b) [X]; and

(c) [X].

Ability of EE to "lock-in" Virgin Media

6.29 The PFs suggest that it is unlikely that the Proposed Transaction will result in the merged entity preventing Virgin Media from converting to a full MVNO and thereby "locking in" Virgin Media for a further term.¹⁶⁶ [X]:

(a) [X]; and

(b) [X].

¹⁶⁰ [X].

¹⁶¹ [X].

¹⁶² [X].

¹⁶³ [X].

¹⁶⁴ [X].

¹⁶⁵ PFs, Annex J, para. 19.

¹⁶⁶ PFs, para. 14.258.

6.30 [X].

Limited choice of fixed-MVNO providers following foreclosure of Virgin Media

6.31 The PFs assert that even if Virgin Media was partially foreclosed there would still remain a choice of alternative providers of fixed-mobile propositions, and also a choice of suppliers of services on a stand-alone basis.¹⁶⁷ The PFs assert that, given this level of residual competition, it is unlikely that, even if Virgin Media was partially foreclosed, this would lead to a substantial lessening of competition at the retail level.¹⁶⁸

6.32 Virgin Media does not consider this conclusion to be sustainable for the following reasons:

- (a) given that the scenario being considered in the PFs (i.e. purchasing of fixed-mobile propositions becoming prevalent and an important driver of the choice of fixed services),¹⁶⁹ Virgin Media considers it extremely surprising that the CMA would conclude that entities that are only able to supply either mobile services or fixed services separately would represent a viable constraint to providers of combined propositions (i.e. that conclusion is inconsistent with the identified scenario);
- (b) alternative providers of fixed-mobile bundles (including TalkTalk, Sky and Vodafone) would all be reliant on the merged entity for key inputs for their fixed services. Indeed some providers of fixed-mobile bundles may also be reliant on the merged entity for the provision of key fixed inputs to provide mobile services;
- (c) as noted in section 2 above, Virgin Media is one of the largest providers of fixed and mobile services in the UK and is one of only two providers of fixed services that have "owner economics" in relation to the provision of those fixed services. This means that Virgin Media has much more flexibility in relation to the pricing of the fixed element of a fixed-mobile bundle and more options for developing fixed-mobile hybrid solutions than other MVNOs, to the benefit of retail customers. In this context, Virgin Media considers it very surprising that the CMA should be so unconcerned about the possibility of Virgin Media being foreclosed;
- (d) in circumstances in which Virgin Media is subject to partial foreclosure, the same risk should be assumed in respect of other MVNOs that provide fixed services (in the medium term as their current contracts expire). In other words, there is no basis for the PFs to assume that, in circumstances in which Virgin Media suffers from partial foreclosure due to the Proposed Transaction, that other fixed-MVNOs would not also suffer; and
- (e) as regards the above point, the PFs attach considerable weight to the conclusion that the merged entity would be cautious in inflicting harm on Virgin Media (through a strategy of partial foreclosure) as, if it were to do so, this would reduce its chances of renewing its agreement with Virgin Media and winning contracts with other fixed-MVNOs.¹⁷⁰ As explained in section 2 and paragraphs 6.11 to 6.16 above this proposition is entirely misconceived.

Partial foreclosure does not require Virgin Media to exit the market

6.33 For the reasons set out in section 3, Virgin Media does not accept the implication in the PFs that adverse effects on the market are contingent on Virgin Media's exit from the market. Virgin Media considers that an inability on the part of Virgin Media to compete

¹⁶⁷ PFs para. 14.259.

¹⁶⁸ PFs, para. 14.260.

¹⁶⁹ PFs, para. 14.259, (first sentence).

¹⁷⁰ PFs paras. 14.249 and 14.265.

effectively as a consequence of a partial foreclosure strategy will inevitably have adverse effects on the market given Virgin Media's significant competitive presence in the market. Further, in circumstances in which the merged entity adopts a partial foreclosure strategy in respect of Virgin Media, it can be expected to adopt similar strategies in relation to other fixed-MVNOs.

6.34 [X].

E. Partial foreclosure of fixed-MVNOs other than Virgin Media is likely

6.35 Virgin Media considers that the assessment in the PFs of partial foreclosure in relation to fixed-MVNOs other than Virgin Media is also flawed.

6.36 In this regard, we note that the two Group Members who did not provisionally agree with the PFs on this theory of harm indicated that MVNOs would be reluctant to risk their long term security of supply by being hosted by their main rival in mobile and fixed telecom markets.¹⁷¹

6.37 That observation aside, Virgin Media does not agree with the assertions in the PFs that:

- (a) other fixed-MVNOs would seek to secure specific protections to prevent the merged entity engaging in a strategy of partial foreclosure;
- (b) even if the merged entity pursued a strategy of partial foreclosure it was unclear that this would lead to a substantial lessening of competition at the retail level.¹⁷²

6.38 As regards the ability of other fixed-MVNOs to protect against poor in-contract service through contractual terms, their ability to do so will be dependent on their negotiating position. Virgin Media considers it implausible that, post-merger, fixed-MVNOs will be in a better position than Virgin Media prior to the merger to protect their position through contractual terms under the MVNO Agreement. In particular:

- (a) [X]. Accordingly, even if post-merger other fixed-MVNOs were able to attract bids from four MNOs (which the PFs acknowledge is doubtful) there is no reason to expect that those fixed-MVNOs will be better placed to secure better terms than Virgin Media;
- (b) for the reasons set out in sections 3 and 4 above it is very possible that, post-merger, there will be a reduction in competition between MNOs in relation to the supply of wholesale mobile services. In these circumstances other fixed MVNOs will be in a worse position than Virgin Media was prior to the Proposed Transaction. In these circumstances, it is very unlikely that other fixed MVNOs will be able to secure even the same contractual protections as were achieved by Virgin Media;
- (c) in any event, it is unlikely that even the most carefully negotiated contract will enable a MVNO to protect itself against every possible eventuality as discussed in section 3. Indeed, the PFs expressly recognise this risk.¹⁷³

6.39 Further, Virgin Media strongly disagrees with the CMA's suggestion that it is unclear that partial foreclosure of fixed-MVNOs would lead to a substantial effect on competition at the retail level.¹⁷⁴ In summary:

¹⁷¹ PFs, para. 14.278.

¹⁷² PFs, para. 14.274.

¹⁷³ PFs para. 14.227.

¹⁷⁴ PFs para. 14.274.

- (a) as set out in section 2, MVNOs play an important part in the competitive ecosystem in relation to the supply of mobile services (whether on a standalone basis or as part of a bundle);
- (b) in the scenario considered by the CMA (i.e. there is an increased prevalence customers purchasing fixed and mobile services from the same provider), fixed-MVNOs will play an increasingly important part in the competitive dynamic;
- (c) in circumstances in which the Proposed Transaction results in harm to the competitiveness of Virgin Media, it will also result in harm to the competitiveness of other fixed-MVNOs;
- (d) in circumstances in which it will be expected by other MNOs that the merged entity's incentives to supply fixed MVNOs have changed, there will be a lessening of competition between the remaining MNOs that are prepared to offer wholesale mobile services to fixed-MVNOs; and
- (e) as regards this latter point, in circumstances in which there is an increasing propensity for fixed and mobile services to be purchased together, it is highly plausible that other MNOs that do not currently offer fixed services will seek to respond to that development by offering their own bundles of fixed and mobile services rather than seeking to target customers indirectly through arrangements with fixed MVNOs (see section 4 above).

6.40 On the basis of the above, Virgin Media considers that the provisional conclusion that the merger is not likely to lead to partial foreclosure of fixed-MVNOs under any future contracts with the merged entity is unfounded.

6.41 In final conclusion, and for the reasons set out above, Virgin Media supports the position of the dissenting Group Members who considered that the Proposed Transaction would be likely to give rise to a substantial lessening of competition in relation to supply of wholesale mobile services. Virgin Media considers that the Proposed Transaction is likely to lead to a reduction of competition in the wholesale mobile market, which would not be neutralised by the remaining MNOs and which would lead to an inevitable reduction in competition at the retail level.

7. THE NEED FOR A CAUTIOUS APPROACH

7.1 In assessing whether the Proposed Transaction may be expected to result in a substantial lessening of competition as a result of a foreclosure strategy pursued by the merged entity in the supply of wholesale mobile services, the CMA should adopt a cautious approach. This is on the basis that:

- (a) there is a clear divergence of views on the key issues between the four Members of the Group;
- (b) the provisional finding that the Proposed Transaction may not be expected to result in a foreclosure strategy by the merged entity in relation to the supply of wholesale mobile services is based on a large number of speculative forward looking assumptions that are, in many cases, insufficiently supported by evidence and/or where it is unclear why so much weight has been placed by the CMA, on certain assumptions, given that the evidence is very finely balanced; and
- (c) the risks for consumers of the CMA reaching the wrong decision are asymmetrical. A Type I error (clearing the transaction without remedy) will have significantly worse adverse consequences for consumers than a Type II error (clearing the transaction with proportionate remedies).

7.2 Each of these issues is considered in turn below.

A. Disagreement amongst the Group

7.3 The CMA notes that two out of the four Members have reached entirely the opposite view to that set out in the PFs on the question of whether the merged entity would have the incentive to engage in a foreclosure strategy in the wholesale mobile market.¹⁷⁵ Further, this disagreement does not relate to minor or peripheral issues.

7.4 Instead, the two Members are of the opposite view to that set out in the PFs on all of the key issues considered in connection with the likelihood of a significant lessening of competition in the supply of wholesale mobile services. It should also be emphasised that the dissenting Group Members have reached their position having considered precisely the same evidence as that which has been considered by the other Members of the Group, and on which the PFs are based.

7.5 In circumstances in which there is such clearly divergent views between the four Members of the Group, the interpretation placed on relevant evidence and the appropriate weighting of relevant evidence becomes crucial.

B. The provisional findings are heavily reliant on speculative forward-looking assumptions

7.6 In many instances the PFs highlight uncertainty about future outcomes as a reason to conclude that the Proposed Transaction should not be expected to result in a substantial lessening of competition as a result of a foreclosure strategy by the merged entity in the supply of wholesale mobile services.¹⁷⁶ For the reasons set out above, Virgin Media considers that many of those claimed uncertainties are materially overstated.

7.7 However, when considering the basis of the finding that the merged entity should not be expected to engage in a foreclosure strategy in the wholesale mobile market, the PFs themselves rely very heavily on speculation as to likely future outcomes and future

¹⁷⁵ PFs, paras. 14.277 to 14.280.

¹⁷⁶ For example, see PFs paras. 14.122, 14.138, 14.143, 14.144, 14.155, 14.181, 14.182, 14.226, 14.250, 14.254, 14.265 and 14.275.

conditions of competition. In many cases these key assumptions and assertions are insufficiently supported by empirical or qualitative evidence or have been relied on without clear justification in circumstances where there is a significant amount of conflicting evidence.

CMA's assessment in relation to total foreclosure

- 7.8 The CMA's conclusions in relation to the likelihood of the merged entity engaging in a total foreclosure strategy (i.e. refusing to supply wholesale mobile services to fixed-MVNOs) rely heavily on the following speculative propositions:
- (a) fixed-MVNOs would, post-merger, still be able to secure competitive wholesale mobile services from three MNOs.¹⁷⁷ For the reasons set out in section 4 above, Virgin Media considers this conclusion to be unfounded;
 - (b) fixed-MVNOs may be able to obtain competitive terms with only two participating MNOs if the tender process is successfully structured to create the perception of more competition.¹⁷⁸ For the reasons set out in paragraphs 4.22 to 4.30 above, Virgin Media considers this assumption to be implausible;
 - (c) in a scenario in which fixed-mobile bundles become more prevalent, O2 and H3G (who do not offer fixed services) would have strong incentives to supply fixed-MVNOs, as a means of obtaining indirect access to customers seeking to purchase fixed and mobile services from the same provider.¹⁷⁹ [§<];
 - (d) Vodafone would have incentives post-merger, to provide wholesale mobile services to MVNOs.¹⁸⁰ [§<];
 - (e) it is not clear that the merged entity would attract enough customers from MVNOs to make a refusal to supply wholesale mobile services profitable.¹⁸¹ As noted in section 5 above, Virgin Media considers that the CMA's findings on this issue are based on evidence that is anchored by reference to current market conditions and by current customer/supplier behaviour. In a scenario in which demand for fixed-mobile proposition becomes more prevalent, customer and supplier behaviour will change. In addition, it is unclear why little weight is afforded to strong evidence on future developments which points towards a foreclosure strategy being profitable in the medium to longer run;
 - (f) the merged entity would face sufficient competition from other providers of fixed-mobile packages to make a foreclosure strategy unprofitable. For the reasons set out in section 3, Virgin Media considers that the overall framework set out in the PFs for considering the issue of foreclosure, to be flawed. That issue aside, for the reasons set out in section 4 above, the CMA's assumptions in relation to the degree of competition that the merged entity would face in the future are speculative and do not reflect the fact that, in a world in which fixed-mobile propositions become more prevalent, both customer and supplier behaviour would change.

CMA's assessment in relation to partial foreclosure

- 7.9 As in the case of the PFs analysis of the likelihood of the merged entity engaging in a strategy of total foreclosure, the PFs analysis of the likelihood of the merged entity

¹⁷⁷ PFs, para. 14.121.

¹⁷⁸ PFs, paras. 14.113 and 14.122.

¹⁷⁹ PFs, paras. 14.61, 14.100, 14.106, 14.118 to 14.119.

¹⁸⁰ PFs, paras. 14.85 and 14.106.

¹⁸¹ PFs, paras. 14.143 to 14.145, 14.147 to 14.155, and Appendix H.

engaging in partial foreclosure is both flawed and relies heavily on the following additional speculative propositions:

- (a) it is unlikely that the merged entity could prevent Virgin Media from converting to a full MVNO and thereby "lock-in" Virgin Media for a further term.¹⁸² [X];
- (b) the merged entity would have no incentive to harm Virgin Media as this might prevent it from winning Virgin Media's business in the future and cause the merged entity to lose other wholesale contracts.¹⁸³ [X];
- (c) any harm to Virgin Media arising from the merged entity engaging in a strategy of partial foreclosure would be temporary (as it could switch to another, MNO provider).¹⁸⁴ [X];
- (d) other fixed-MVNOs could protect contractually against poor in-contract service (thereby preventing them being subject to a strategy of partial foreclosure).¹⁸⁵ [X]; and
- (e) even if Virgin Media and other fixed-MVNOs were the subject of a strategy of partial foreclosure by the merged entity, this would not result in a substantial effect on competition at the retail level.¹⁸⁶ For the reasons set out in paragraph 6.39 above, Virgin Media finds it extraordinary that the PFs could conclude that the partial foreclosure of Virgin Media and other fixed MVNOs would not be expected to have a substantial effect on competition at the retail level given acceptance by other competition authorities and regulators as to the critical importance that MVNOs play in the retail market.

7.10 The above examples are only illustrations of the scope and scale of the assumptions that are required for the PFs to conclude that the merged entity would be unlikely to engage in a foreclosure strategy vis-a-vis Virgin Media and other fixed-MVNOs. Quite apart from the fact that Virgin Media disagrees with those assumptions, and that, in many cases, there is insufficient evidence to support those assumptions and/or strong counter-evidence, it is clear that the conclusions on wholesale mobile services set out in the PFs are highly contingent on a particular view of likely future developments.

7.11 Given the importance of the Proposed Transaction to the communications sector in the UK, the significant potential impact on consumers, and the divergence of views between the Group Members on this issue, Virgin Media considers that it is unsafe for the CMA to base its conclusions on this important issue on such a wide range of speculative assumptions where relevant evidence is unavailable or, to the extent it exists, does not clearly point in the direction suggested in the PFs.

C. The risks of a wrong decision are asymmetrical

7.12 In circumstances in which the Group is split and the evidence relied on in PFs highly contingent, the CMA must give greater regard to the risks for consumers of reaching the wrong decision. This is particularly the case given that the risks of a wrong decision are asymmetrical.

7.13 Should the Proposed Transaction be cleared in circumstances in which that is the wrong decision (a Type I error), the adverse consequences for consumers will be significant and

¹⁸² PFs, para. 14.258.

¹⁸³ PFs, paras. 14.234, 14.237, 14.253, 14.259, 14.263 and 14.271.

¹⁸⁴ PFs, paras. 14.257, 14.261, 14.264.

¹⁸⁵ PFs para 14.273.

¹⁸⁶ PFs, paras. 14.259 to 14.261, 14.264, 14.265 and 14.274.

largely irreversible. In particular, should the merged entity engage in a strategy of foreclosure (total or partial) that has the effect of causing Virgin Media and other fixed-MVNOs to become ineffective competitors, consumers will be disadvantaged in terms of higher prices, less innovation and less choice for the foreseeable future. The structure of the market will have been very heavily skewed in favour of particular business models, and there will be no opportunity for the CMA to rectify its mistake. In that event, consumers will suffer.

- 7.14 In contrast, should the Proposed Transaction be cleared subject to proportionate remedies in circumstances in which such remedies were not required (a Type II error), there will be no or very minimal adverse consequences for consumers. This is on the basis that any remedies will be designed to facilitate and promote competition at the retail level which would benefit consumers. More importantly, however, that type of error is capable of being quickly remedied. Under section 92 of the Enterprise Act 2002, the CMA has a duty to keep under review all final merger orders and undertakings (i.e. merger remedies), with a view to considering whether, by reason of any change in circumstances, orders or undertakings previously imposed or accepted are no longer appropriate and need to be varied or revoked and released. In this regard, there is no minimum time period within which such remedies could be reviewed. Accordingly, should the Proposed Transaction be cleared subject to remedies that turn out not to be required, the CMA would be able to review any remedies and vary, revoke or release them as appropriate.
- 7.15 In this regard, it should be noted that there are proportionate remedies available to the CMA to address the risk of the merged entity engaging in a foreclosure strategy in connection with the wholesale mobile market which would not require the proposed merger to be blocked. A range of potential remedies has already been suggested by Virgin Media in its previous submissions to the CMA.¹⁸⁷ Virgin Media would also observe that remedies designed to preserve the ability of MVNOs to continue to offer effective competition to MNOs have been a feature of a number of previous mergers in the telecommunications sector.¹⁸⁸ The availability of proportionate remedies also lowers risk of adverse effects arising from a Type II error because they would be unlikely to result in irrevocable market changes.
- 7.16 In conclusion, in circumstances in which the CMA has found the issue surrounding the effect of the Proposed Transaction on the supply of wholesale mobile services to be finely balanced, and the PFs are based on speculation on future outcomes and competition, the CMA should have regard to the asymmetric risks for consumers of the CMA clearing the Proposed Transaction without remedies. In short, the CMA should reverse the conclusion in the PFs and find that the merged entity may be expected to engage in a strategy of foreclosure in respect of the supply of wholesale mobile services with resulting adverse effects on competition.

¹⁸⁷ See, for example, Virgin Media's Initial Submissions.

¹⁸⁸ See, for example *Hutchison 3G UK/Telefonica Ireland; Telefonica Deutschland/E-Plus*.

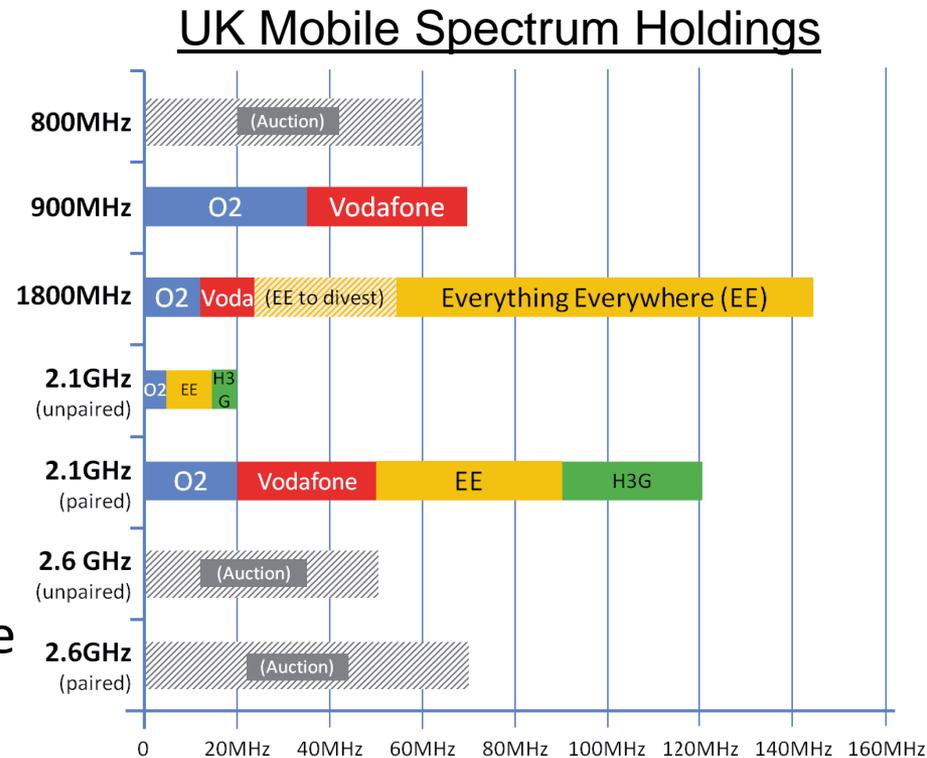
Annex A

Although the very high peak rates offered by LTE are impressive, they do not necessarily translate into high cell capacities...

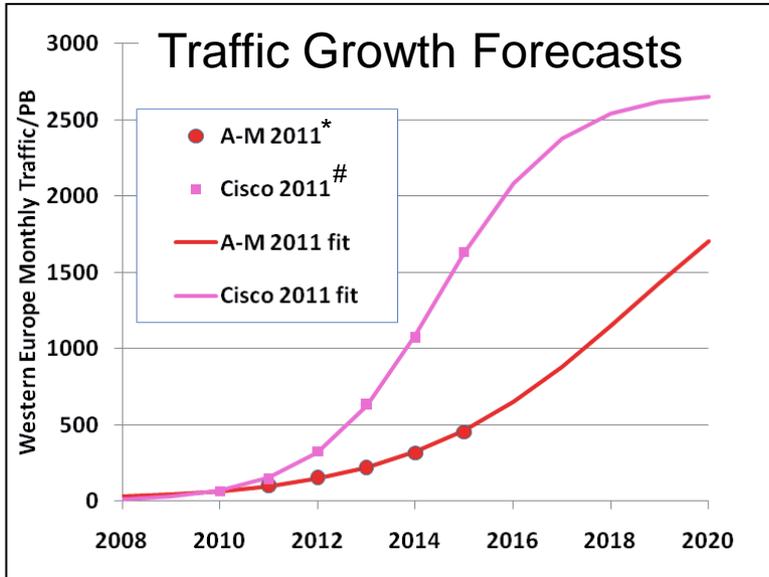
The 'average sector throughput' is lower than some of the headlines might suggest because:

1. *The high headline rates are only achieved VERY close to the basestation.*
2. *Access bandwidth is shared between all of the users in the 'sector'.*
3. *In practice, the amount of spectrum available is limited.*

If operators want to radically increase their network capacity, they need to (a) buy more spectrum and/or (b) move to much smaller cells.



To meet future demand, operators must move to smaller cells...

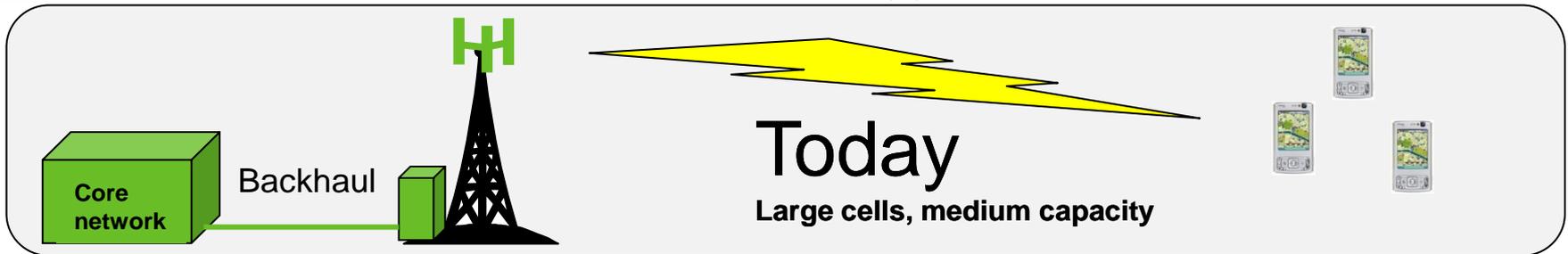


Various predictions of mobile traffic show exponential growth BUT LTE on existing sites can only provide modest capacity growth in line with new spectrum. To match predicted growth, operators will need to move to a different architecture with many more basestations – i.e. many small cells.

This makes the fixed network increasingly relevant to mobile... Wi-Fi and Superfast Broadband play a key role in this future.

*Analysys Mason, May 2011: "Wireless network traffic worldwide: forecasts and analysis 2011–2016";

http://www.cisco.com/en/US/solutions/collateral/ns341/ns525/ns537/ns705/ns827/white_paper_c11-520862.html



Annex B

ANNEX C



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