SKY'S RESPONSE TO OFCOM'S 2016 'NARROWBAND MARKET REVIEW'

EXECUTIVE SUMMARY

1. Sky welcomes the opportunity to respond to Ofcom's 2016 Narrowband Market Review Consultation ("**2016 NBMR Consultation**").

2. Strong, appropriately-targeted regulation of BT's enduring significant market power ("**SMP**") in key wholesale markets – including Wholesale Fixed Analogue Exchange Lines ("**WFAEL**") and Wholesale Call Origination ("**WCO**") markets – has been instrumental in transforming retail broadband and telephony markets in the UK into the largely vibrant, competitive situation consumers enjoy today. Tight control of the price of essential wholesale inputs has underpinned the wide-scale entry into retail markets by communications providers ("**CPs**"), leading to increased innovation, more choice and lower prices.

3. In the Narrowband Market Review ("**NBMR**") Ofcom has found that BT's market power in WFAEL and WCO remains very high and has not reduced significantly since these markets were last reviewed. Nonetheless, Ofcom is proposing to remove some of this important regulation on BT. Sky considers that these deregulatory steps are not fully justified and risk unravelling the significant benefits that have accrued to consumers and businesses.

4. Specifically, Sky is concerned that Ofcom's proposal to remove the charge controls on Wholesale Line Rental ("**WLR**") and WCO and to instead rely solely on a fair and reasonable charging obligation will impact competition in the provision of broadband and talk services and raise consumer prices. Ofcom incorrectly considers that the only concern arising from BT's SMP in these markets is the risk of BT setting high wholesale charges in order to engage in a price squeeze. However, there is a significant proportion of consumers who have little choice but to rely on BT's WLR and WCO (such as voice-only customers) for whom excessive retail pricing is also a key concern.

5. Not only are Ofcom's proposed deregulatory steps inconsistent with its stated objective of protecting customers from high retail prices – including voice-only consumers – but they would also no longer ensure that efficient wholesale choices are made by CPs competing in downstream retail broadband markets, a key objective of Ofcom's last review. These risks cannot be properly remedied by a fair and reasonable obligation alone. It is important, therefore, that Ofcom continues to apply charge controls to BT's WLR and WCO services.

6. Moreover, Ofcom has also failed to produce sufficient evidence of potential harm to justify its proposal to introduce a charge control on all CPs in the Wholesale Call Termination ("**WCT**") market. Ofcom has a duty to impose regulation only where it is warranted and to not speculatively apply it where no problem exists or is anticipated to occur. There have been no developments in the WCT market that support a change in policy and, therefore, Ofcom should maintain the current regulatory approach.

7. Finally, Ofcom's continued failure to appropriately regulate Internet Protocol ("**IP**") interconnection distorts the market and stifles the migration from Time Division

Multiplexing ("**TDM**") to more efficient IP networks. Until legacy SMP operators are required to bear the full costs of converting IP to TDM and vice versa, they remain sheltered from the consequences of their under-investment.

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BT STILL HAS SMP IN THE WFAEL MARKET

1. Sky agrees with Ofcom's provisional conclusion that BT continues to hold SMP in the market for wholesale fixed analogue exchange lines ("**WFAEL**"). On Ofcom's own evidence, BT retains a market share of 55% (only marginally lower than its market share of 57% in 2013[1]) which includes a share of:

   (a) over 90% at the wholesale level among residential voice-only customers;

   (b) 100% share of WFAELs at exchanges that have not been fully unbundled; and

   (c) 100% share of WFAELs used to supply to split purchasers.[2]

2. While competition from local loop unbundling ("**LLU**") operators such as Sky and TalkTalk since the last market review period has contributed to the marginal reduction in BT's WFAEL market share, it still remains very high and the potential for increased competition from LLU operators in the future is limited because:

   (a) LLU operators' roll-out programmes are ostensibly complete – as recognised by Ofcom ("[the]*remaining unbundled exchanges are in less densely populated areas where it would be more difficult to earn a return that justifies the rollout of costs."*[3]);

   (b) LLU operators' market share growth has slowed within LLU areas and may even reverse as the market transitions to superfast broadband ("**SFBB**") – because Openreach's high charges for wholesale SFBB (Generic Ethernet Access, or "**GEA**") disincentivise LLU operators from promoting SFBB strongly;[4] and

   (c) the transition to SFBB also means that there is little prospect that any new entrants in broadband markets will deploy LLU.

3. Importantly, Ofcom also finds that a significant proportion of consumers have little choice other than to rely on WFAEL.[5] This accords with Sky's experience where a significant minority of Sky's Talk and Broadband customers continue to be supplied via regulated WFAEL products as well (i.e. WLR). [redacted] The main reasons for this are that:

   (a) Sky's LLU footprint does not extend to all geographic areas;

   (b) some customers only want to purchase a voice service, rather than a bundled voice and broadband service;

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1 Paragraph 3.103, Ofcom, 'Fixed Access Market Review Statement' (Volume 1), 26 June 2014, ("**2014 FAMR Statement**").

2 Customers who buy broadband and landline access/calls from different CPs. This is because the separate supply of voice and broadband over a single line requires WLR for voice services.

3 Paragraph 6.9, Ofcom, '2016 Narrowband Market Review Consultation', 1 December 2016, ("**2016 NBMR Consultation**").

4 For further information, please see Sky's submission to Ofcom in relation to the GEA charge control (January 2017).

5 Paragraph 6.14, 2016 NBMR Consultation.

(c) some customers may wish to keep their voice service on WLR as they have a device (e.g. care alarm) which may work more effectively over BT's analogue voice network; and

(d) Sky is unable to provide number porting onto MPF (e.g. because the new customer was previously with a CP with whom Sky has not established number porting arrangements).

4. It is clear, therefore, that BT continues to have a high market share in WFAEL, significant cohorts of consumers remain dependent on WFAEL, and that the scope for further competitive constraint being exerted by LLU is diminishing (or even reversing) in the transition to fibre broadband. In this light, BT's SMP appears little abated since the last market review and, in fact, appears to be entrenching.

IT IS APPROPRIATE TO CONTINUE TO APPLY A CHARGE CONTROL IN THE WFAEL MARKET

5. BT's continuing SMP coupled with its incentive to set excessive prices and to distort competition in retail markets means that Ofcom's proposal to remove the charge control on WFAEL and to rely instead on a fair and reasonable charging obligation risks weakening competition and harming consumers.

Only a charge control can address the risks of price squeeze <u>and</u> of excessive prices

6. While Ofcom has provided little evidence of change since the last review to support its lighter touch approach, it is clear that it has incorrectly omitted to take account of the substantial risk of BT raising its WFAEL prices such that retail prices also rise (and, therefore, cause consumer harm). Instead, Ofcom has incorrectly narrowed its concerns to the risk of BT raising its wholesale prices in order to engage in a price squeeze (where retail prices do not rise, at least in the short run):

> *"Our competition concern in the next review period is that BT could set high charges for access at the wholesale level which amounts to a price squeeze and thus restricts competition in the provision of products and services in the relevant downstream markets … We provisionally conclude that a fair and reasonable charging obligation would provide sufficient constraint on BT's pricing so as to mitigate the risks of harm arising from BT's SMP in the WFAEL market …"*[6]

7. However, not only does BT have an incentive to leverage its upstream market power in WFAEL to engage in a price squeeze in some circumstances but it also has an incentive to raise the wholesale prices of the cohorts of consumers who are dependent on WLR even if that entails concomitant rises in retail prices. For many of these customer segments BT has a high retail share – for instance, for landline only customers or for customers outside of LLU footprints – and therefore BT's profit maximising strategy for these is not to engage in a price squeeze but to instead charge both high wholesale and high retail prices.

8. Ofcom's deregulatory proposals are out of step with its own assessment of BT's market power with regard to these customers:

> *"… BT's market share is still sufficiently high to give rise to a presumption of SMP, especially with respect to wholesale services used for supplying the groups of concern which account for a significant share of all consumers."*[7]

6 Paragraph 7.40, 2016 NBMR Consultation.

7 Paragraph 6.12, 2016 NBMR Consultation.

9. Despite this view, Ofcom provisionally concludes that, due to BT's weakened SMP, its primary competition concern is to *"protect against a price squeeze and protect downstream competition"* rather than to *"address the risk of excessive wholesale pricing"*.[8]

10. However, Ofcom provides little or no evidence to support its position that BT's small drop in market share (a mere two percentage points) since the last market review has been sufficient to negate the requirement to protect consumers and competition from the effects of excessive wholesale prices. In Sky's view, competition in downstream retail markets has not increased sufficiently to warrant a different regulatory approach and the continuing risk of excessive pricing cannot be addressed fully by a fair and reasonable remedy. Only a cost-based charge control can contain the dual risks of: (i) excessive wholesale prices feeding higher retail prices; and (ii) a price squeeze (because a price squeeze can only be profitable to BT if wholesale charges are higher than the cost of provision and a return on capital).

11. In fact, Ofcom acknowledges that since the last review BT has maintained WLR prices at the maximum allowable by the current WLR charge control while its returns have exceeded its cost of capital. Ofcom also notes that this indicates that BT is leveraging its market power by setting prices above the competitive level:

> *"BT has been charging at the regulated cap for WLR … yet over that same period has managed to recover at least its cost of capital. While it is difficult to predict how high BT might price absent regulation in the WFAEL market, in so far as we might expect returns in a competitive market to not exceed the cost of capital in the long-run, we consider that observed pricing and returns appear consistent with other factors that suggest BT may have SMP."*[9]

12. Given this evidence, it appears that there is a strong risk that BT will set excessive prices absent a charge control over the next market review period and the constraint on BT's wholesale prices exerted by LLU-based competition is not strong enough to prevent it.

13. A fair and reasonable charging obligation aimed at addressing the risk of a price squeeze is an inadequate safeguard against the risk of excessive wholesale pricing feeding into higher retail prices. In fact, with this remedy alone it is inevitable that retail prices would rise if there were increases in wholesale prices.

A charge control is a necessary step in addressing concerns over excessive landline-only prices

14. Finally, Sky considers that Ofcom's proposed deregulation of WLR charges risks undermining Ofcom's proposals to prevent standalone landline customers from paying excessive prices.[10] In this respect Ofcom expresses its policy objective to *"ensure that those consumers, who are not the focus of competition and/or more susceptible to price increases, are not left exposed."*[11] Sky considers that removing the cost-based charge control and enabling BT more flexibility to set its prices risks disadvantaging the very consumers that Ofcom wants to protect.

15. Specifically, Ofcom is concerned that standalone landline customers pay high retail prices relative to the relevant wholesale input costs (e.g. WLR). As a result, it is proposing to require BT to reduce its retail prices for standalone landline services. However, Ofcom's objective to prevent these customers from paying excessive prices is likely to be

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8 Paragraph 7.42, 2016 NBMR Consultation.

9 Paragraph 6.21, 2016 NBMR Consultation.

10 Ofcom, 'Review of the market for standalone landline telephone services', 28 February 2017.

11 Paragraph 1.12, 2016 NBMR Consultation.

undermined if WLR charges rise and are no longer cost reflective – which becomes possible if Ofcom no longer applies a WLR charge control.

16. The logic of aiming to resolve market failures such as excessive retail pricing first and foremost with the application of wholesale remedies is acknowledged in the Common Regulatory Framework which requires that national regulatory authorities ("**NRAs**") impose remedies in the most upstream market.[12] It is clear that imposing a cost-based WLR charge control will support Ofcom in its objective of ensuring that standalone landline customers do not pay excessive prices and, as such, should be viewed as a prerequisite to meeting this objective before considering whether retail pricing remedies are also necessary.

Promoting efficient choices by CPs

17. A WLR charge control is also necessary to ensure Ofcom's policy that CPs competing in the same downstream retail market make efficient choices in regulated wholesale inputs.

18. In Ofcom's 2014 Fixed Access Market Review Statement ("**2014 FAMR Statement**"), Ofcom maintained charge controls on <u>both</u> LLU (metallic path facility ("**MPF**") and Shared MPF ("**SMPF**")) and WLR *"in order to address BT's ability and incentive to fix or maintain prices at an excessively high level for these services."*[13] In addition to addressing the risk of excessive prices, Ofcom also considered that the charge controls were necessary to:[14]

    (a) allow CPs to make efficient choices between the substitute WLR+SMPF and MPF wholesale inputs, based on their long run incremental cost ("**LRIC**") differences; and

    (b) reduce the wholesale charges for connecting to WLR+SMPF and switching between MPF and WLR+SMPF to better reflect their efficient costs.

19. In particular, Ofcom stated that:

> *"... setting the charge difference between MPF and WLR/WLR+SMPF equal to the difference in LRIC will promote productive efficiency. This is because the MPF and WLR/WLR+SMPF wholesale products are alternative inputs for the same retail services: broadband and voice services sold to end consumers. Setting the charge differential to be equal to the LRIC differential should induce an efficient choice of wholesale inputs, and so help to minimise overall resource costs."*[15]

20. On this basis, Ofcom considered that:

> *"... charge differentials based on the absolute LRIC differentials will tend to promote efficient future investment choices. This would mean that charge differentials based*

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12 See, e.g., para 21, European Commission 'Commission Recommendation on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC', October 2014 ("the **Relevant Markets Recommendation**") and page 15 of the Explanatory Note to the Relevant Markets Recommendation where the Commission stated that *"[a] retail market should only be subject to direct regulation if it is not effectively competitive despite the presence of appropriate wholesale regulation on each of the related upstream market(s).".*

13 Paragraph 16.1, Volume 1, 2014 FAMR Statement.

14 Paragraph 16.18, Volume 1, 2014 FAMR Statement.

15 Paragraph 3.78, Volume 2, 2014 FAMR Statement.

on LRIC would provide a level playing field between competitors using different wholesale inputs, or 'competition on the merits' …"[16]

21. Sky considers that Ofcom's proposal to remove the cost-based charge control on WLR while retaining the charge control on MPF is an unjustified departure from its approach in the 2014 FAMR Statement. Competition in retail communications markets will remain largely predicated on WLR and LLU over the course of the market review period and, as a result, the objective of promoting productive efficiency and removing the risk of competitive distortions arising between those CPs dependent on WLR (and shared LLU, SMPF) and those who rely on full LLU (MPF) is no less important. There is a real risk of adverse effects stemming from price distortion if BT is allowed to set the price of WLR above or below the difference in LRIC between WLR and MPF. This will undermine the level playing field between competitors using different wholesale inputs and distort competition.

22. Removing the WLR charge control now risks unravelling the gains Ofcom has achieved through strong, appropriately-targeted regulation of WLR and will enable BT to act on its incentive to leverage its upstream market power to set excessive prices to the detriment of consumers.

IT IS APPROPRIATE TO CONTINUE TO APPLY A CHARGE CONTROL IN THE WCO MARKET

23. Given BT's continuing SMP in wholesale call origination ("**WCO**"), Sky considers it appropriate and justified for Ofcom to continue to impose a charge control on BT's WCO. Not only does Sky continue to depend on BT's WCO in order to serve a significant proportion of its customers but – as with WLR – even in the majority of cases where Sky relies on its own call origination, BT's WCO is still relied upon by one of its main retail competitors (BT Consumer). As such, BT continues to have an incentive to leverage its SMP in WCO to distort competition to the detriment of consumers.

24. As described above, around [redacted] retail customers are dependent on wholesale call origination ("**WCO**"). As with WFAEL, this applies to:

(a) customers in low density population areas outside Sky's LLU footprint;

(b) landline customers who only purchase a voice service;

(c) customers that may wish to keep their voice service on WLR as they have a device (e.g. care alarm) which may work more effectively over BT's analogue voice network; and

(d) cases where Sky is unable to provide porting onto MPF.

25. In the 2016 NBMR Consultation, Ofcom appears to have accepted[17] Sky's position that:[18]

(a) a significant proportion of retail customers had limited alternatives to services provided using BT's WCO;

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16 Paragraph 3.97, Volume 2, 2014 FAMR Statement.

17 Paragraph 6.49, 2016 NBMR Consultation, where Ofcom stated *"[w]e consider that the comments made by … Sky are consistent with our proposals in respect of market definition … and in relation to our provisional assessment of market power".*

18 Paragraphs 2.4-2.5, Sky, 'Response to Ofcom's Call for Inputs dated 2 April 2015: Review of Fixed Call Origination and Termination Markets 2016-2019', 15 June 2015.

(b) the market circumstances have not changed since the last review; and

(c) deregulation would likely enable BT to: increase the prices of its products; refuse to supply CPs such as Sky; or change its terms and conditions in a way that may be prejudicial to Sky's business.

26. Despite this, Ofcom states that competitive constraints from infrastructure-based competition and, increasingly, indirect competitive constraints from mobile and IP-based services outside the WCO market are sufficient to justify its proposal to withdraw the charge control.[19] In Sky's view, these putative constraints are insufficient to curtail BT's incentives and scope to distort competition.

27. BT still retains a high market share (49%) and Ofcom has provisionally found that BT continues to have SMP in the WCO market and that *"… the potential for CPs currently using BT's WCO to switch to alternative wholesale services is likely to be limited during the review period."*[20]

28. As Ofcom notes, there are important segments of consumers for which there are limited alternatives to BT's WCO service. Accordingly, any deregulation in the WCO market could negatively impact retail customers' choice and may put upward pressure on the prices they would have to pay for their telephony services.

29. For the same arguments as above,[21] Sky considers that Ofcom has failed to demonstrate that BT will not price WCO in excess of cost, in the absence of a cost-based charge control. A fair and reasonable charging obligation, based on an *ex ante* application of a margin squeeze test is an inadequate safeguard against the risk of excessive wholesale pricing.

30. Finally, Sky strongly objects to Ofcom's proposal to remove the no undue discrimination obligation on BT in the WCO market. Given Ofcom's finding that BT continues to have SMP and the fact that vulnerable customer segments continue to rely on BT's WCO product, Sky considers that there is a significant risk of consumer harm if BT is allowed to engage in discriminatory conduct.

31. Therefore, to avoid the risk of BT leveraging its SMP to set excessive prices and cause harm in downstream markets, Ofcom should continue to apply a charge control in the WCO market.

THERE IS NO REGULATORY BASIS TO INTRODUCE A CHARGE CONTROL ON ALL PROVIDERS IN THE WCT MARKET

32. Sky disagrees with Ofcom's proposal to impose a charge control on all CPs with SMP in the WCT market. Ofcom has failed to produce any evidence to justify departing from the approach taken at the last market review where Ofcom considered that a charge control for CPs other than BT would be disproportionate.[22]

33. As such, a fair and reasonable charging obligation – as applied in the last market review period – is an effective way to regulate the fixed termination rates ("**FTRs**") of non-BT CPs and has the advantage of being well understood and applied by industry. In direct

19 Paragraph 7.44, 2016 NBMR Consultation.

20 Paragraph 6.61, 2016 NBMR Consultation.

21 See paragraphs 7-13 of this response.

22 Paragraph 6.121, Ofcom, 'Fixed Narrowband Services Market Statement', 26 September 2013 ("**2013 NBMR Statement**").

contrast to Ofcom's proposals to impose only a fair and reasonable obligation on BT in the WFAEL and WCO markets, the current fair and reasonable charging obligation on WCT CPs effectively prevents WCT charges from being excessive (as they are required to reflect BT's charge controlled prices unless there is an objective basis for a difference).

34. Sky is not aware of any material consumer detriment that has occurred while this obligation on all CPs has been in place and Ofcom has not outlined any changes in market conditions and risks that would render this approach no longer effective over this market review period.

35. In the 2013 Narrowband Statement, Ofcom concluded that:[23]

    (a) imposing a charge control on CPs other than BT is likely to be administratively costly for both Ofcom and the smaller CPs and would impose a disproportionate regulatory cost on non-BT CPs; and

    (b) relying on a fair and reasonable charging obligation would meet Ofcom's policy objectives and competition concerns with lower compliance costs.

36. Ofcom must have a bias against intervention and, provided that intervention is justified, it must intervene in the least intrusive way.[24] To assess whether intervention is justified, Ofcom must be evidence-led and must weigh up the costs and benefits of all identified options (including retaining the fair and reasonable charging obligation).

37. Ofcom has not produced any evidence to demonstrate that non-BT CPs have charged excessive FTRs over the last review period. In fact, Ofcom concludes that the *"majority of CPs are pricing at the benchmark rate"*.[25]

38. Therefore, Sky considers that retaining the current approach of imposing a charge control obligation on BT and a fair and reasonable charging obligation on non-BT CPs would be less onerous and would be sufficient to achieve Ofcom's regulatory objectives. It would be disproportionate to increase the regulatory burden on non-BT CPs by imposing a WCT charge control on them.

THE COST OF CONVERTING FROM TDM TO IP TECHNOLOGY SHOULD BE BORNE BY LEGACY OPERATORS AND NOT LEFT TO COMMERCIAL NEGOTIATION

39. Sky has a long-held view that Ofcom's failure to regulate IP interconnection products skews the market against migrating from TDM to IP networks and shelters legacy networks from efficient outcomes that would occur in competitive markets. Specifically, Ofcom is incorrect to not require TDM networks to bear the costs of IP-TDM conversion when interconnecting with a next generation network ("**NGN**"). As a result, NGN operators have to bear these costs themselves and/or maintain costly, inefficient TDM technology for the sole purpose of passing voice traffic to these legacy networks.

40. Ofcom appears to base its proposed continuation of this approach on its proposed conclusion that TDM is likely to be an efficient choice for the duration of the market review period. However, TDM is only an 'efficient' choice while Ofcom provides regulatory 'cover' by failing to properly address legacy operators' SMP.[26]

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23 Paragraphs 6.121-6.122, 2013 NBMR Statement.

24 Paragraph 1.1, Ofcom, 'Better Policy Making: Ofcom's approach to Impact Assessment', 21 July 2005.

25 Paragraph 11.81, 2016 NBMR Consultation.

26 Paragraph 16.46, 2016 NBMR Consultation.

41. For the first time at least Ofcom acknowledges that its policy influences CPs' technology choices:[27]

> *"… the current and forecast interconnection between BT and other CPs is influenced by our regulation and as such, a change in regulatory approach to focus on IP interconnect could accelerate the move to IP interconnect."*

42. However, despite this long-overdue concession, Ofcom provisionally concludes that it would not be appropriate to require TDM operators to provide IP interconnection (or at least bear the cost of IP-TDM conversion) because:

    (a) BT has not yet migrated to IP and is unlikely to do so until 2025;[28]

    (b) CPs are under significant commercial pressure to make efficient use of existing assets *"… and this will be a factor in considering when these are decommissioned in favour of alternative infrastructure"*;[29]

    (c) TDM is likely to be an efficient technology choice (even if other CPs have deployed IP technology) because: (i) the majority of voice traffic is still carried over TDM networks (and is forecast to remain so until 2020); (ii) TDM networks represent a largely sunk asset with low forward-looking costs; and (iii) BT is not the only network operator currently using TDM;[30] and

    (d) as TDM and IP networks are likely to co-exist for the duration of the market review period, the provision of IP interconnection should be agreed by commercial negotiation between the interconnecting parties and should not be subject to regulation.[31]

43. None of these arguments are compelling:

    (a) Ofcom's approach should not be based on one operator's dependence on legacy technology – i.e. BT's – which in any event is underpinned by Ofcom's policy to date;

    (b) IP-based CPs are being prevented from making efficient use of their existing assets by Ofcom's policy;

    (c) TDM is widespread because it is used by legacy operators including BT whose SMP (insufficiently constrained by Ofcom's approach) has enabled them to avoid making investments in new, more efficient technology (a commonly acknowledged risk where there is SMP); and

    (d) it is a *non-sequitur* to claim that because IP and TDM will co-exist, IP interconnection should be subject to commercial negotiation and not regulated. The parties have SMP and Ofcom already regulates TDM – there is no basis to exclude IP.

44. The problem with Ofcom's conclusions more generally are that they fail to appreciate that interconnection services are essential inputs to support the provision of services in which

27 Paragraph 16.35, 2016 NBMR Consultation.

28 Paragraph 16.37, 2016 NBMR Consultation.

29 Paragraph 16.44, 2016 NBMR Consultation.

30 Paragraph 16.46, 2016 NBMR Consultation.

31 Paragraph 16.53, 2016 NBMR Consultation.

CPs have SMP – for example, wholesale call termination. A key purpose of SMP regulation of wholesale markets is to impose conditions that mimic outcomes that might be reasonably expected to prevail in more competitive markets. In the case of interconnection, inefficient legacy technologies would be uncompetitive and those CPs that employed them would either have to re-invest in new technology to compete or exit the market.

45. However, as Ofcom's policy continues to shelter legacy SMP networks by allowing them to offer technologies and effective prices for interconnection that would not arise in a competitive market, they will have little incentive to become more efficient – particularly while more modern network operators incur the additional costs of interconnecting with them.

46. Meanwhile, attempts at commercial negotiation have proved fruitless for Sky. Despite Sky and other large CPs operating IP networks, BT still fails to provide viable IP interconnect products. While BT offers an IP interconnect product known as IP Exchange, after close to three years of negotiations with BT, Sky has failed to reach an agreement on the terms and conditions that would allow Sky to viably consume this product.

47. The commercial terms offered by BT make the IP Exchange product uneconomic for Sky as an alternative for Digital Local Exchange ("**DLE**") interconnect via TDM technology because, if Sky were to accept those terms, Sky would: (i) no longer earn circuit rental revenues from BT as it currently does existing TDM ingress circuits; (ii) still have to pay an Average Porting Conveyance Charge ("**APCC**") equal to what Sky pays today on TDM routes; and (iii) have to pay BT an additional fee for each minute of ingress traffic via IP exchange.

48. For these reasons, Sky recommends that Ofcom requires the cost of IP-TDM conversion to be borne by legacy TDM operators such as BT.

Sky **March 2017**