

Voxyonder welcomes the opportunity to provide feedback to Ofcom's Calls Termination Markets and End-to-End connectivity consultation.

NOTE: This response to the consultation is based on our interpretation and understanding of the current supplier, technological, regulatory and policy landscape as is and may be subject to change.

In this consultation when referring to CP, PECN or PECS unless the context makes clear otherwise, we are referring to a voice Public Communications Provider, Public Electronic Communications Network or Public Electronic Communications Service as defined in Section 151 of the Communication Act 2003. Furthermore, when referring to the Act unless the context requires otherwise, we are referring to the Communications Act 2003¹ and when referring to Security Regulation unless the context requires otherwise, we are referring to the Electronic Communication (Security Measures) Regulation 2022². Where we relate to Code of Practice, this is in relation to the Telecommunications Security Code of Practice³.

This consultation response is segmented in to four parts:

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Overview

During the last review period substantial technical and policy changes have occurred. We believe these will have material effect on the LRIC calculation used for calculating the FTR/MTR. Therefore, we would like to see a new model created and until a new model has been created, the FTR/MTR with indexing to be used. In addition to this, we believe cumulatively smaller CPs combined may have a bigger market share of the WCT than the level Ofcom believe to be the case and are requesting Ofcom to use its information gathering powers to gather the annual WCT volumes for each range holder so that data can then be combined with public information to determine the size of the CP to help get a more accurate understanding of the size and make-ups of the WCT market.

¹ <https://www.legislation.gov.uk/ukpga/2003/21/contents>

² <https://www.legislation.gov.uk/uksi/2022/933/contents/made>

³ https://assets.publishing.service.gov.uk/media/6384d09ed3bf7f7eba1f286c/E02781980_Telecommunications_Security_CoP_Accessible.pdf

Furthermore, during the last review period, substantial security requirements have been introduced that will likely disproportionately affect smaller CPs where compliance cost is directly related to providing WCT. Therefore, as referenced above, a model is required to understand these costs, but also a solution may be a split FTR where larger and smaller CPs have different FTRs to better reflect their cost inputs. As we believe the majority of market participants combined (who would be classed as small CPs) make up a good size of the overall WCT market (20-30%).

Based on the security requirements, we can see that as CPs begin to familiarise themselves with the recently introduced requirements, it could cause substantial changes in how CPs interconnect with each other (e.g. Ofcom's resilience guidance on not interconnecting over the internet or secondary legislation requirements that require the CP (in our view and interpretation) to meet the same security standards of the CP they are supplying WCT to. For example, any CP who interconnects with BT will need to meet the same security standards as BT. There are industry discussions that are needed to be had in relation to this to find the most economical solution and to ensure all CPs are compliant.

Finally, regarding the End-to-End requirement on BT, we feel that until the above has been resolved and for reasons set out in detail in our discussion, we believe for now the End-to-End requirement should remain in place.

Our feedback on WCT/MCT Proposals

New Technologies and no model

Over the past few years the technology interconnect landscape has changed substantially and is now primarily IP following a long migration from TDM (with a recent extension to 2027 for some end use cases). These are very different technologies which have different cost inputs. Furthermore, the requirements put on CPs around security both at a statutory level (Telecom Security Act⁴ and its subsequent Security Regulation² and Code of Practice³ (in consultation to be updated⁵)) along with that of Regulatory requirements (Ofcom's Network Resilience Guidance⁶) has in our view substantially increased (or will soon increase) the interconnect complexities and costs (directly and indirectly) of CPs. Some of these can be directly attributed to WCT and MCT meaning in our view these costs should be directly inputted into the LRIC model. In addition to this, in the past few years (with no signs of improving) we are seeing substantial increases in electrical, data centre, vendor equipment and licencing costs to name a few.

⁴ <https://www.legislation.gov.uk/ukpga/2021/31>

⁵ <https://www.gov.uk/government/consultations/proposals-to-update-the-telecommunications-security-code-of-practice-2022/proposals-to-update-the-telecommunications-security-code-of-practice-2022-what-we-are-consulting-on>

⁶ <https://www.ofcom.org.uk/siteassets/resources/documents/consultations/category-1-10-weeks/272921-resilience-guidance-and-mobile-ran-power-back-up/associated-documents/network-and-service-resilience-guidance-for-communication-providers.pdf?v=385029>

Therefore, we are disappointed that Ofcom has decided not to commission an updated WCT model, but to hold the WCT at the current rates without indexing. In addition, 3G is in the process of being switched off and 5G is increasing. Therefore, we are requesting Ofcom to keep the status quo (current WCT/MCT levels with indexing) until a new WCT/MCT forecast can be undertaken that represents IP technologies and inputs.

The need for more accurate WCT market data and SOLR

In the fixed sector we feel we are at a crossroads whereby the fixed voice sector is reinventing itself similarly to how SMS has. We are seeing more fixed voice CPs enter the market and innovate. Therefore, as time moves on we feel that as overall volumes are decreasing, we feel the total number of small CPs combined are making up an increasing proportion of the market share.

We disagree with your assertions in 5.9. As highlighted by your consultation there are 249 range holders you are proposing have SMP. We feel it's important to point out and ask that where ranges are hosted on BTs network through their IPEX Type A (managed interconnect) offering, we need to understand whether these are included as WCT minutes for BT data (we don't believe they currently are? i.e. Does BTs minutes in the statistics specifically and solely relate to WCT provided directly onto BT number ranges only (not those it hosts on behalf of other CPs)? It would not surprise us that if Ofcom had the WCT annual minutes for each range holder in the UK, then 20-30% of the market minutes would be made up of CPs who would be classed as a Tier 3 CP as per the Security Regulations. Therefore, we would ask Ofcom that moving forward as part of its data requests in relation to WCT, Ofcom requests the WCT minutes for each SMP range holder to help get a better picture of the overall WCT minute volume in the UK. We appreciate this may be a bit burdensome for some CPs, but believe most range holders could generate this data in the short space of a few hours as they are likely to have simpler setups. We feel giving the shifting market that > 90% of SMP CPs are likely to be Tier 3 CPs. As part of Ofcom's transparency and not to unduly discriminate requirements we feel this would be important to attain. We also question whether the data in 3.18 is accurate as there has been an increase in altnets which will likely be using their own in house platform or that of another provider to provide landline services to their customers (this is equally relevant where CPs have looked for WLR alternatives).

Finally, as it is evident that either way the WCT market is getting smaller every year and more and more CPs enter the market (especially new range holders who will ultimately be supplying WCT), we ask Ofcom to consider running a consultation around Supplier of Last Resort (SOLR) at some point in the next 12-18 months. In respect of the direct routing option mentioned in 4.100, we believe in good faith that given the complexities of how CPs route calls today and the sheer volume of CPs and Range Holders involved, we cannot foresee in any situation in practice where direct routing would occur on mass for most if not all CPs. Therefore, in our view direct routing is a non-starter. We feel it is important that a sector known plan is established in the event a range holder (especially larger range holder) fails at short notice and continuity of WCT (especially for those users who have ported numbers) continues.

Disproportionate Effect on smaller CPs from Security Requirements

Over the past few years we have had a range of legal instruments introduced that will require CPs to increase the security of their networks and services. Some of these are:

- Telecom Security Act 2021⁴
 - o Electronic Communication (Security Measures) Regulations 2022²
 - o Code of Practice³
- Ofcom Network Resilience Guidance⁶

A lot of the effects have yet to be felt in the sector as they do not necessarily need to be implemented yet based on the Code of Practice glidepath or CPs have yet to implement changes. Although a lot of the requirements in our view is good network design and practice, in some cases maybe unnecessary for smaller CPs or outright market changing. We do have concerns that smaller CPs will be disproportionately affected.

There are 3 key issues (not necessarily limited to 3) we see that could have a material impact on the LRIC calculation of primarily WCT (some may also be applicable to MCT):

- Lower Tier CPs need to meet the security requirements at the interconnect interface of the Tier of CP they supply to (i.e. WCT) (this is our interpretation)
- Encryption
- Migrating away from internet-based interconnects

Regulation 7 (4)(a)(ii) of the Security Regulation states *“where the third party supplier is itself a network provider and is given access to the primary provider’s network or service or to sensitive data, takes appropriate measures for the purposes mentioned in section 105A(1) of the Act, in relation to goods, services or facilities supplied, provided or made available by the third party supplier to the primary provider, which are equivalent to the measures that the primary provider is required to take in relation to the primary provider’s network or service”*⁷

Our understanding is also reinforced by the Explanatory Memorandum *“7.12 Regulation 7 ... Where a third party supplier given access to sensitive data or equipment is also a network provider, that provider must take the equivalent steps as the primary provider it is supplying in relation to that data or equipment.”*⁸

Finally in the Code of Practice (Interpretation of regulation 7(4)(a)(ii)) *“6.37 Where a network provider supplies its services to a different provider in a higher tier, it is expected that only the part of the network or service that is being supplied needs to meet the security standards of the provider in the higher tier. Where this is the case, providers also need to ensure that the relevant parts of the network or service are sufficiently segregated*

⁷ <https://www.legislation.gov.uk/ukxi/2022/933/regulation/7/made>

⁸ https://www.legislation.gov.uk/ukxi/2022/933/pdfs/ukxiem_20220933_en.pdf

from the rest of their operations. This will avoid the risk of bringing the wider operations of the provider in a lower tier into the scope of regulation 7(4)(a)(ii) and having to hold more of their operations to the security standards of a higher tier.”⁹

Therefore, as an example, if Telco A who is tier 3, supplies WCT to Telco B who is a Tier 1, then Telco A’s network that is used for interconnection must meet the same security requirements as Telco B (based on our understanding). Therefore, in this scenario regulation has not only a direct impact in relation to LRIC input, it can create a dramatic cost variation between CPs based on size. i.e. smaller CPs are likely to have a significant cost input in relation to their overall WCT provision when compared to a larger CP. Furthermore, for the reasons set out prior, the proportion of WCT which is made up of smaller CPs we believe is far larger than what Ofcom’s data is showing and thus the impact will be larger across the market.

As BT would be classed as a Tier 1, then in our view anyone who interconnects AND supplies WCT to BT would (based on our understanding) need their interconnection network (where BT connects to) meets the same security standards as BT. This is an incredibly high bar for a small CP. This is a significant challenge in security, skillset, cost and administration for smaller CPs (when compared to larger CPs). As this is directly related to the supply of WCT, we believe it should form part of the LRIC calculation.

For larger CPs these costs would be negligible and part of the generic requirements they have to meet. However, for smaller CPs, its likely it could be substantial, putting the smaller CP at a significant financial disadvantage as this is solely related directly to the provision of WCT.

For reasons set out above, the only solution we can come up with currently to appease this would be to have a dual or split FTR, where CPs with a relevant turnover of less than £50,000,000 (tier 3 threshold) have a higher FTR to that of larger CPs to reflect the disproportionate impact on them. We don’t think an “averaged” FTR would work as we do not know the overall WCT market size among Tier 3 CPs. We appreciate there would be complexities here as this would need further consideration and discussion. This is also why we think it is important for a new model to be created, as a model can forecast different scenarios and this could be one of them. We believe that it is wrong to imply that 2.4% of the WCT participants (i.e. 6 out of 249 range holders) has most of the WCT without checking. We agree historically this may have been the case (5-10 years ago), but believe in good faith this has now increased.

Another large cost input we see that will have a financial impact on the LRIC is encryption. Based on our understanding by 31st March 2028, CPs will be required to encrypt calls between themselves¹⁰. Although we are advocates for encryption, we are also aware that encryption presents challenges on multiple fronts. In relation to WCT, encryption is more processing intense. This means (from our experience) the calls a piece of equipment can

⁹ Clause 6.37 in the Code of Practice

¹⁰ Regulation 5(4) of the Security Regulations, Clause 3.28 and M18.06 in Signalling Plane 4 with completion date by 31 March 2028 in the Code of Practice.

handle will be less, thus more equipment is needed to handle the same number of calls when they are encrypted. Furthermore, encryption has high overheads in terms of network (albeit small per call; but could be noticeable based on volume, setup and encryption methodology used) and power. There may also be licencing costs depending on vendors and generally more man hours required for the administration of the interconnect (excluding the time required to re-interconnect). All this will feed into LRIC calculations.

Finally, Ofcom consulted and put out guidance last year that essentially, in our view bans interconnection over the internet through its network resilience guidance¹¹. We should add although only guidance. Ofcom typically does incorporate their enforcement/penalty decisions based on such so in our view are effectively sacrosanct requirements.

Over the past decade and beyond, we have had an explosion of CPs enter the market. In our view conservatively we believe there to be at least 5,000 CPs, of which there are at least 1,000 networks (i.e. a PECN as per the Act) and several hundred range holders where most range holders will have SMP.

This explosion in sector growth has been good for customers, competition and innovation. A large part of this in our view has been part of the low entry costs to market (either through being a PECS or a PECN). For better or worse, a large portion of interconnect traffic is over the public internet. If Ofcom used their information powers to ask range holders who to and how (internet or physical dedicated link) they provide WCT to, we believe by volume >95% of all individual voice interconnects will be over the internet. As highlighted in 9.21 and 9.22 of your consultation we would agree the migration to IP has substantially reduced the cost of direct interconnection.

This creates a major problem when we have been told to stop doing this.

Historically when going for what we would call a regulatory interconnect (i.e. reference offer interconnect on SMP and regulated grounds), it was the Standard Interconnect Agreement (SIA). As highlighted in the consultation, the SIA is TDM and SIPIA is IP. In the TDM network as highlighted in 6.19 of your consultation there were over 600 locations a CP could interconnect. Furthermore, as part of the SIA offering BT could essentially build a link to the CP¹². As noted in 6.24 in the IP interconnection options with BT as part of your consultation, this is not an option. In fairness given BT is probably the biggest internet

¹¹ Ofcom Network Resilience Guidance – 3.3.4 “Non-internet interconnections include use cases such as voice telephony interconnects and international carriage”. 4.2.4 “Regarding non-internet-related interconnects, communications providers are expected to also make use of resilient network elements when connecting to their interconnect partners... ..voice/VoIP/IMS interconnection between networks should be separate from the Internet.”. 4.5.1 “Furthermore, as stated in section 4.2.4, voice/VoIP/IMS interconnects between networks are likely to carry emergency calls and other essential calls. In order to maintain appropriate service level reliability, these interconnects should be separate from the Internet.”

¹² <https://www.ofcom.org.uk/siteassets/resources/documents/consultations/uncategorised/94764-narrowband-market-review/associated-documents/final-statement-narrowband-market-review-annexes-1-8.pdf?v=322875> – A2 Glossary “Customer Sited Interconnect (CSI): A type of interconnect circuit. BT builds a link to the telecoms provider’s site and uses it to provide individual 2Mbit/s interconnect as required. It is used in conjunction with IBCs.”

provider in the UK (in our view), voice interconnect by internet mixed with the other options we'd believe is fairly reliable to compensate for there being only 14 exchanges (instead of 600+ prior) and 1 neutral access point. However, if we take away the internet option. Then all of a sudden we have a scenario where all CPs are going to be required to essentially have physical direct link interconnects to each other which is incredibly expensive and cost prohibitive (especially for smaller CPs), along with unnecessarily harmful impacts to the environment (including potential disruption to the public through ground and roadworks), we also have a likely situation where CPs who interconnect with BT go from having a large meshed resilience (internet) potentially mixed with other types (Exchange or Neutral Access Point) to needing to some-how physically connect their network at 1 or more (of the only 15) locations. There is no CSI equivalent in the IP world. As explained above, if this was TDM, BT could build out to the CP rather than the CP having to build to BT.

There is a potential redemption that we see. The resilience guidance (based on our understanding) does not see internet traffic going over an internet exchange between members of said exchange as the internet¹³. Therefore, if the CP and BT are both members of an exchange (BT is a member of at least 1 internet exchange in the UK), then from our understanding this would not be classed as the internet. However, it would require both the CP and BT to agree to "peer" at the exchange. Furthermore, we find that many of the managed data centre providers in the UK (i.e. who provide servers, colocation with an internet connection) themselves already peer at at-least 1 internet exchange. Therefore, in theory (if BT were willing), they could peer with those providers and thus in our view would potentially meet the requirements of the network resilience guidance. This is similarly applicable between other CPs who interconnect among themselves.

Yet this solution has 3 core issues. For example, we can see BT is a member of the London Internet Exchange (LINX). The first issue is they have a restrictive/selective peering policy¹⁴. Secondly, should the exchange connection between a CP have an issue (planned or otherwise) then that traffic will likely reroute via a transit ISP thus be then in breach of the network resilience guidance based on how the internet routes (BGP). Thirdly, many CPs in the UK are not ISPs or their networks are completely closed and

¹³ <https://www.ofcom.org.uk/siteassets/resources/documents/consultations/category-1-10-weeks/272921-resilience-guidance-and-mobile-ran-power-back-up/associated-documents/statement-on-network-and-service-resilience-guidance.pdf?v=403683> – Statement for Network Resilience Guidance – Clause 5.125 *"We are aware of alternative measures that can be taken to support a good level of resilience for voice interconnection. For example, in response to Ofcom's Wholesale Voice Markets Review, industry respondents who also raised concerns about the risks of voice interconnection over the internet, noted that a number of steps could be considered to ensure that providers interconnect securely, including:*

i) private direct interconnects,

ii) IP peering at a UK internet exchange,

iii) or a private VLAN at a UK internet exchange." 5.126 *"Whilst we do not consider it is appropriate to specify any particular measure, our view is that any, or a mix of, the measures above would be likely to represent appropriate measures to support a good standard of resilience."*

¹⁴ <https://portal.linx.net/members/members-ip-asn> - Accessed October 2025 – British Telecommunications Plc (ASN 5400 (restrictive policy)/ ASN 2856 (selective policy))

therefore it may not be possible for them to get their ISP provider to peer with their interconnecting CP over an exchange.

However there may be situations either with BT or generically between CPs where this may not be possible and thus therefore physical links and point to point connections will need to be established over a vast distance where 2 CPs are in different data centres for instance. Again, this is why we believe a new model is required as we believe these costs could materially impact on the WCT costings.

These changes in our view would materially affect the LRIC input (especially again for smaller CPs who would be disproportionately affected).

Therefore, in relation to Interconnect with BT and recent policy changes, we believe further discussion and consideration is required to determine the best way smaller CPs can be supported in continuing to interconnect with BT (for example this could include BT reintroducing a CSI based option for IP interconnects) if the general internet is to be banned (especially for smaller CPs who may struggle to build out to BTs exchanges. Especially when this has gone from 600+ to 14). It would be helpful if the consultation team work with the network resilience team to seek further guidance, clarification and issue a statement on this which will help the sector understand where further policy work maybe required on this.

Our feedback on BT's End-to-End Connectivity Proposals

We have mixed feelings on this. On one hand, we would agree it is no longer required due to other conditions requiring connectivity, access etc. However, on the other hand if you look at the nuances of the instruments and consider in relation to call flow in our view there are situations that theoretically could happen, but are highly unlikely to happen. However, if you then take those scenarios and consider them in scope of the recent security changes and what we have discussed in this consultation response, then the likelihood could be a lot higher, not because BT is necessarily wanting to be difficult, but various legal factors could force BTs hand.

In response to 9.13 and 9.18 we believe that save for the security requirements this is correct, however given the recent changes at a statutory and regulatory level, this may create issues that actually raise costs higher than TDM because in relation to interconnection with BT, there is no CSI option in the IP world for BT (based on our understanding).

In response to 9.23-9.26, it would be interesting to know if there are any (what you are calling) access networks or CPs who host ranges on behalf of other CPs who do NOT interconnect with BT. If there are, how do they it?

Furthermore, with the Security Regulation requirements of smaller CPs meeting the larger CPs security requirements and Network Resilience Guidance effectively banning internet connectivity for interconnects, it could create a situation where larger CPs

maybe required to cease interconnects with smaller providers for the larger provider to meet their legal requirements or are unable to economically justify the cost of a point to point link.

We will discuss the different policy instruments you refer to and break them down in terms of call flow.

These are based on our interpretations and viewpoints:

- GC A1.2 – obligation to negotiate an interconnect
 - o This only refers to the establishment of an interconnect. It does not refer to call flow and what is necessarily sent in relation to WCT.
- GC B4.2 – provide access to numbers
 - o In our view this does not obligate a CP to send WCT directly to the requestor. That third CP just needs to find another way to send said traffic to those ranges. It could be via transit (this approach is key to some points made below).
 - o It is also best efforts only in that it is only where technically and economically feasible.
- SMP/Network Access
 - o Similar to GC A1.2 but mandates a CP who has SMP to provide access on fair and reasonable terms and cost.
 - o BT must provide WCT (not buy)

As noted above and based on our understandings of your proposals, BT must provide network access (i.e. an interconnect) and BT must provide WCT (these are its SMP obligations from our understanding). BT must (as with any CP) where technically and economically feasible provide its customers access to the other CPs number ranges, but without the E2E (end-to-end) obligation, there is nothing requiring BT to buy WCT from the range holder directly.

In plain English, BT could say yes we will provide you network access and WCT to BTs ranges, but refuse to buy WCT from that CP. This would then require the CP to go to another CP to ask them to “host” their ranges. This could create problems where that CP does not want a “managed hosted” relationship or they themselves want to operate (what you have called in 4.96) an access network (i.e. not rely on other CPs for things like managed porting etc). In our view this is “theoretically” possible, but extremely unlikely save for the security requirements.

However, if we add the requirements set out in 7(4)(a)(ii) of the Electronic Communications (Security Measures) Regulation 2022, then actually BT could be forced to act like this where a CP (most likely smaller CP) is unlikely to meet the security requirements that BT have to abide by because these only (in our view) apply if BT were to send call traffic to that CP (thus making that CP a supplier to BT). Therefore, a CP can easily interconnect (save for the resilience guidance requirements) with BT and the higher requirements do not apply as long as that CP does not receive call traffic from BT (i.e. BT does not buy WCT from that CP).

Furthermore compound this with the requirement that the resilience team want CPs only interconnecting with each other physically (not via the internet), then this compounds that risk and potentially puts CPs in a position where in practice they are unable to economically interconnect with BT (let alone potentially with others), but then if a CP does interconnect physically with BT, nothing is requiring BT to be reciprocal and send WCT to that CP (based on what you are proposing).

In addition, even if a CP was able to meet the security requirements, BT would potentially need to audit/verify the requirements are being met which can take time (including costs being incurred) which then may mean it is not economically feasible (thus GC B4.2 wouldn't apply?) to send them WCT (because of on-going security costs etc.).

A solution to this (obviously requires substantial industry discussion), as discussed prior in this consultation response, is to require BT to provide an IP Customer Sited Interconnect/Intra Building Circuit (similar to the TDM way)¹⁵. In our view this *could* tick a lot of boxes from both meeting the same security requirements (its BTs equipment provided to the customer to connect to and it's thus likely to be BT security responsibility; this needs further thought/consideration with how this inter-plays in practice with the various requirements). In addition, in our view it meets the resilience requirement for not having an interconnect over the internet.

Given that there may need to be a wholesale shift in how networks interconnect with each other (which overall would likely substantially reduce the overall interconnects), for overall telecommunication resilience in the United Kingdom, CPs (especially smaller CPs) need a single guaranteed core interconnect (which has historically been BT) and on this basis would be returning us to a situation that was the status quo about 10-15 years ago (or in some cases fairly recently for those CPs who utilised SIA).

Either way, this needs considerable further regulatory and industry discussion and consideration.

Therefore, for the reasons set out above at this time we feel given the security changes, now would definitely NOT be the right time to revoke the end-to-end connectivity obligations on BT.

¹⁵ <https://www.ofcom.org.uk/siteassets/resources/documents/consultations/uncategorised/94764-narrowband-market-review/associated-documents/final-statement-narrowband-market-review-annexes-1-8.pdf?v=322875> – A2 “*Intra Building Circuit (IBC): A 2 Mbit/s connection between a telecoms provider’s transmission infrastructure and switch. For interconnection with BT, an interconnect circuit comprises an IBC at either end with the transmission link being provided by a CSI, IEC or ISI circuit.*”

Direct Answers to Ofcom's Questions

Question 4.1: Do you agree with our proposed market definition in relation to WCT?

Yes, although please see our comments in our discussion.

Question 4.2: Do you agree with our proposed market definition in relation to MCT?

Yes, although please see our comments in our discussion.

Question 4.3: Do you agree with our provisional view that it is appropriate to identify the WCT and MCT markets we have provisionally identified for the purpose of considering whether to make a market power determination, on the grounds that they meet the three-criteria test set out in section 79(2B) of the Act?

Yes

Question 4.4: Do you agree with our provisional conclusion that each provider of WCT has SMP in the market served by that provider?

Yes

Question 4.5: Do you agree with our provisional conclusion that each provider of MCT has SMP in the market served by that provider?

Yes

Question 4.6: Do you agree with the competition concerns arising from SMP in the WCT and MCT markets that we have provisionally identified?

Yes, although please see our comments in our discussion.

Question 5.1: Do you agree with our proposals to maintain a network access obligation on all WCT providers and additional obligations that would be specific to BT's provision of WCT?

Yes

Question 5.2: Do you agree with our proposed charge control on WCT?

No. Please see our comments in our discussion. To summarise, a new model is required. Until then the charge control should be kept where it is with indexing and a new model should look at the differences between larger and smaller CPs to determine if there is any material difference in relation to security requirements etc. and potentially introduce a split FTR.

Question 5.3: Do you agree with our proposal to maintain a network access obligation on all MCT providers?

Yes.

Question 5.4: Do you agree with our proposed charge control on MCT?

No, please see our comments in our discussion. To summarise, a new model is required. 3G is currently being withdrawn and 5G has been introduced. It is important to see what affect this will have on the MTR.

Question 5.5: Do you agree with our proposal to maintain a reciprocity condition on the termination of international calls, subject to changes and clarifications set out in this document?

Yes.

Question 6.1: Do you agree with our proposal to maintain the current network access condition requiring all WCT providers to provide interconnection, accommodation and related services required to access WCT and to maintain Ofcom's guidance in relation to the technical standards used by telecoms providers for IP interconnection?

Yes

Question 6.2: Do you agree with our proposal to update Ofcom's guidance about BT's interconnection and accommodation charges?

Partially, however in relation to port charges (regardless of access method), we believe where WCT is being carried on these ports, then each party should cover their own costs. Where mixed traffic to be carried (e.g. WCT and non-WCT call traffic) then a rebate should occur which is to be commercially negotiated. It's unclear what your proposed changes in 6.55 would have.

Question 6.3: Do you agree with our proposed remedies that would be specific to BT's provision of interconnection, accommodation and related services required to access WCT? These proposed remedies include: (i) a requirement not to unduly discriminate, (ii) a requirement to publish a Reference Offer, (iii) a requirement to notify changes to charges, and (iv) a requirement to publish certain quality of service information (supplemented by a direction about BT's provision of interconnection).

Yes

Question 6.4: Do you agree with the quality of service KPIs in relation to its provision of IP interconnection services that we are proposing BT should be required to publish?

Yes

Question 7.1: Do you agree with our proposed regulatory reporting requirements on BT?

Yes

Question 8.1: Do you agree with our proposed market definition in relation to 070 WCT?

Yes

Question 8.2: Do you agree with our provisional view that it is appropriate to identify the 070 WCT markets we have provisionally identified for the purpose of considering whether to make a market power determination, on the grounds they meet the three-criteria test set out in section 79(2B) of the Act?

Yes

Question 8.3: Do you agree with our provisional conclusion that each 070 termination provider has SMP in the market served by that provider?

Yes

Question 8.4: Do you agree with the competition concerns arising from SMP in the 070 WCT markets that we have provisionally identified?

Yes

Question 8.5: Do you agree with our proposed charge control on 070 WCT?

No. Please see our WCT/MCT response.

Question 8.6: Do you have any initial view about the ongoing effectiveness of the service designation of 070 numbers as personal numbers and, more generally, on the future of the 070 number range?

In our view, the 070 has now outlived its usefulness and see very little traffic to these ranges. We believe they should be retired.

Question 9.1: Do you agree with our proposal to revoke the End-to-End Connectivity Condition with effect from 1 April 2026?

No. DEFINITELY NOT. Please see our comments in our discussion. In summary with all the recently introduced requirements around interconnect security etc, for reasons set out in our discussion, it may end up being the End-to-End requirement is the only thing that keeps the fixed voice sector together.

Question A8.1: Do you agree with our assessment of the likely impact of our proposals?

Partially. As highlighted in our discussion, we believe proposed changes around removing the indexing of WCT and not conducting a new model considering new technologies and security requirement inputs on costing (which are directly related to WCT) would likely have a substantial higher impact on smaller CPs. Therefore, we do feel that the impacts here have not been fully appreciated and considered in detail (compounded by the fact that there are 249 WCT Markets and Ofcom has only collected volume data on 6 – i.e. 2.4% of the market).

Question A8.2: Do you agree with our assessment of the potential impacts on specific groups of persons?

Partially. There are many CPs in the sector that service a specific niche. By definition of this, it is likely to be smaller CPs doing this given the large amount of PECS and PECNs in the market and thus carve themselves a specific niche and target market. In some cases this target market could meet the protected characteristics threshold of the Equality Act. Changes that are likely to impact smaller CPs more than large CPs financially increase the likelihood of those protected characteristics being negatively impacted either through higher cost (because the CP themselves face higher regulatory cost) or the CP has to leave the market as it is too expensive to remain due to compliance input costs (thus reducing competition for the niche who may fit within the protected characteristics definition).

We believe in good faith that for the reasons set out in this consultation, there is an increased likelihood of (potentially due to intended consequences through failure to consider some of the issues we have raised) causing impacts to specific groups of persons (upon some of which may be groups of persons who used bespoke networks/services setup for those who would have protected characteristics).

Question A8.3: Do you agree with our assessment of the potential impacts on the Welsh language?

As per A8.2, we feel there is an increased risk. Especially as there will be only a smaller selection of CPs who focus on the Welsh language. We acknowledge that some larger CPs do commit to supporting Welsh language customers. However, there being less CPs who focus on Welsh language customers puts a greater emphasis on making sure those smaller CPs are not negatively affected when compared to their larger competitors when there maybe only a handful of options available that could end up distorting the local market. We feel more data is required here to assist in understanding the options available to Welsh language subscribers and in some respects see them as a separate market pool.