



Consultation on the future of interconnection and call termination

Virgin Media's response

28th June 2019

Non-Confidential response

Future of interconnection and call termination

Consultation Response

Virgin Media welcomes the opportunity to respond to Ofcom's Consultation on the Future of interconnection and call termination ("**the Consultation**").

As the market for voice calls continues to evolve, and with the significant advent of the move to Internet Protocol (IP) technology, now would appear to be an appropriate time for Ofcom to review a number of areas regarding the regulatory approach to this market.

However, we also believe that it is too early for Ofcom to draw conclusions on a number of areas under consideration. The industry's migration to IP interconnection is still at a relatively early stage and the landscape is still forming. Drawing conclusions and/or making changes to the regulatory approach prematurely risks stifling innovation and preventing the full benefits of the migration to be realised.

As these significant changes to the interconnection landscape take place, we believe that there will ultimately be less of a requirement for regulation as barriers and interdependencies fall away across certain areas. However, we consider that during the period of transition from legacy technology to the new IP based technology, there may be a need for targeted regulatory safeguards in order to ensure a fair, level playing field for all players in the market and to prevent BT from leveraging inappropriately any legacy advantage.

Within this response, we set out our position on the matters considered in the Consultation and take each of the sections in turn, before responding to the specific questions laid out by Ofcom.

Section 1: Regulation during migration to IP

The voice market is evolving – due in no small part to the ongoing migration to IP technology. As Ofcom has observed, migration to the latest technology brings significant benefits for consumers, as well as delivering efficiencies and cost savings for providers. It is vital, therefore, that CPs are able properly to plan for such a migration in order to make it as efficient and timely as possible. The migration to IP-based interconnection services is a key component in this overall move to the new technology.

(X)

As such, we believe that there is a case for some safeguards to ensure an efficient and effective migration of BT's interconnection products and services to IP-based technology. Virgin Media appreciates the options presented by Ofcom within the Consultation and we believe that these maybe an effective way to support the IP migration. It is our belief that the key to ensuring the migration to IP runs as smoothly as possible is transparency. Therefore, having reviewed the options presented by Ofcom, we believe that requiring BT to set out a clear timetable for migration, giving all providers the required certainty to align their own network migration is the best choice. Virgin Media believes, however, that any direct regulatory intervention is something that would require further detailed analysis and impact assessment and is not something that should be introduced without such activity.

Throughout this section of the Consultation, the main focus is on how the change to IP technology will significantly impact how this area of the industry operates. Clearly, in this changing world, alterations would need to be made to ensure that providers operate in the best interests of both competition and consumers. Within the Consultation, Ofcom sets out a number of areas that it believes could be impacted and asks for providers' responses. Virgin Media's specific thoughts on these proposals are listed in the final section of this response but it is pertinent at this point to establish that we do, in principal, support many of the suggestions made within the Consultation. We do, however, consider that steps are required to ensure that a sole operator does not wield undue influence over the market during the migration, causing inflated charges and issues to others. We believe also that with each of the proposals made, it is necessary to ensure that the steps taken do not inadvertently lead to further issues and potential exploitation that could see further charges levied or the pace of migration slowed. As with all actions, Ofcom must ensure that the relevant processes are in place to ensure that unnecessary consequences are not allowed to occur.

Section 2: Approach to E2E connectivity

As highlighted within the main body of the Consultation, the migration to IP technology significantly changes the landscape around E2E connectivity. This is particularly pertinent with regard to promoting and maintaining competition and where CPs have a potential choice of transit providers. Although Virgin Media agrees with Ofcom that there is scope for BT's role to be reduced in relation to the provision of E2E connectivity, we believe that it is currently too premature for any firm assertions to be made on just how much this role would reduce. Therefore, this is something that would require on going assessment as we move through the migration. We do however support the idea that although similar physical structures would remain, the rationalisation that will no doubt be achieved through the migration will lead to increased efficiencies and improved capacity for providers.

In relation to this, Virgin Media believes that the General Conditions that already exist are sufficient to allow CPs to obtain interconnection. However, we once again believe that the question of whether access obligations are no longer required to ensure E2E connectivity is premature at this stage and is something that needs to be fully assessed as the migration progresses.

Section 3: Technical standards for IP interconnection

As with the introduction of any new technology, the migration from a TDM network to that of IP technology throws up a number of potential concerns around the quality of service and technical standards. As a provider currently moving to IP technology, the quality of service provided to both existing and future customers is fundamental to our migration and we consistently look to ensure that we are able to provide the best possible service. In light of this, Virgin Media understands the concerns expressed by Ofcom within the Consultation around the technical standards for IP technology and that such standardisation could potentially help to safeguard networks and services.

While there may be some differences between CPs in relation to how IP technology is deployed and implemented, it is Virgin Media's view that sufficient standardisation for IP interconnect already exists within the NICC, to which we adhere when building our IP interconnects. Where differences between CPs are seen, these are resolved on a bilateral basis. This situation is not too dissimilar to what we see in the current TDM world today. Virgin Media believes that, alongside the existing

Regulatory obligations that are in place, if detailed and prolonged testing is performed and providers continue to check and test the IP service as it matures over time, any issues will be sufficiently dealt with. It is in providers' interests to do this. By its very nature, IP technology and elements such as Session Initiation Protocol (SIP) is subject to a variety of interpretations and therefore does not lend itself well to a static form of standardisation. Our experience indicates that to the extent that technical issues arise, they are resolved individually by CPs or via existing partner relationships that allow for relevant solutions to be put in place. Virgin Media firmly believes that as providers migrate to IP interconnection, there are sufficient incentives from both a commercial and customer perspective, to ensure that a high quality service is delivered.

However, although Virgin Media does not believe in the need for the introduction of strict technical standards in relation to IP technology, we do see that there is some scope for agreed approaches that could be seen to address potential risks or concerns. These approaches could cover such things as agreeing CP responsibilities in relation to ingress, egress and transited traffic. Such agreements would require further consultation and discussion before any decisions are made.

With regard to the specific notion of direct regulatory intervention, Virgin Media does not believe that this would be useful at this particular point in time. Due to the current position of the migration to IP technology, any potential redefining of technical standards could lead to significant delays in implementation and severe costs associated with it. There is also the possibility that this could result in a need to reconfigure existing interconnects which would cause further significant delays. Virgin Media believes that as long as CPs follow their existing regulatory obligations and the above mentioned testing and collaboration continues, this should ensure a positive standard across IP technology and protect consumers from any harm.

Consultation Question Responses

Please see below for our response to the specific questions in the Consultation.

Question 4.1: Do you agree that if BT's migration to an IP network is unpredictable, it could result in increased charges for providers routing calls to its network? Are there any other issues that might arise as a result of its migration?

(X)

Question 4.2: Please state which of these measures you consider would be appropriate for securing efficient migration and why?

Virgin Media believes that Ofcom should require BT to publish a clear timetable setting out its planned migration schedule. We believe that this level of transparency and certainty will encourage both BT and CPs to migrate to IP in the fastest and most efficient manner possible.

Question 4.3: Would the regulation of charges for media conversion, switching and conveyance for calls routed via IP networks be an effective means of preventing excessive charges and promoting an efficient migration to IP?

Virgin Media therefore believes that a more proportionate approach would be to impose a regulated cap on charges for the conveyance of calls that span the two technologies, (X)

Question 4.4: Do you agree that it remains appropriate that telecoms providers maintain their discretion to designate a single POI at which the FTR will apply?

Yes, Virgin Media agrees with Ofcom.

Question 4.5: Do you agree with our assessment about how BT's market position in relation to interconnection might change during migration to IP?

As stated within the main body of our response, Virgin Media believes that whilst there is scope for potential reduction in the dependency on BT, it is too early to adequately assess such a reduction. Therefore, we would encourage Ofcom to reassess this position after the migration has taken place.

Question 4.6: Do you agree that there is unlikely to be a need to impose regulation on BT's interconnection circuits once migration to IP is complete?

Once again, Virgin Media would caution against premature decisions being made and would encourage Ofcom to reassess once the migration has been completed.

Question 4.7: Do you agree that we should continue to regulate BT's TDM interconnection circuits as the industry migrates from TDM to IP based networks?

Virgin Media agrees with this proposal. We believe that the current position provides an adequate safety net for providers and ensures that any exploitation from BT is prevented.

Question 4.8: Do you agree that it would not be necessary to impose regulation on interconnection circuits at BT's IP network during migration?

Based on experience to date, VM agrees that it is not necessary. However, Ofcom must maintain a close watching brief on how the market evolves as migration progresses and should be prepared to reevaluate the situation if, for example, BT was able to unfairly exploit the migration to its advantage.

Question 5.1: Do you agree that BT's role is less central to the provision of end-to-end connectivity and that telecoms providers now have a choice of transit providers with whom they can interconnect?

Virgin Media agrees that BT's role is less likely to be central to the provision of E2E connectivity. However, it is premature to provide any firm answer regarding this assertion as it would still depend on how IP migration develops over the coming period.

Question 5.2: How might the transition to IP networks change the pattern of interconnection and how might this affect how E2E connectivity is achieved?

As stated in the main body of this response, the transition to IP technology means that although structures would remain largely as they currently are, the rationalisation that would take place is likely to see an increase in efficiencies. Based on our experience to date, we do not see this jeopardising E2E connectivity.

Question 5.3: Do you agree that General Condition A1 is sufficient to ensure that telecoms providers can obtain interconnection and that additional access obligations may no longer be

required to ensure end-to-end connectivity? If not, please explain why and what obligations you think are necessary.

Virgin Media agrees that the current General Condition is sufficient although it remains too early to adequately answer whether additional access obligations may no longer be required.

Question 6.1: Do you agree with our initial view that a lack of standardisation of IP interconnection may give rise to a risk of consumer harm?

Although we acknowledge the current lack of standardisation across IP interconnection may give rise to differences between CP deployments, Virgin Media does not agree with this initial view as we believe that there already exists sufficient standardisation for IP to use as a basis for interconnection.

Question 6.2: To what extent is there divergence among telecoms providers in respect of the IP standards they are using? Do you consider a lack of standardisation of IP interconnection to be (or likely to be) an isolated issue or more widespread, which may require an industry-wide solution?

As stated in the main body of this response, by its very nature every IP Interconnection is effectively bespoke/non-standard and therefore a granular industry wide solution is not appropriate when dealing with such technology. There will always be some differences between CPs' Vendors' equipment, so at the time of the Interconnect being established the CPs involved will work through any issues encountered to a resolution. Virgin Media is of the belief that the key to maintaining high standards is ensuring that competition is promoted throughout.

Question 6.3: What measures, if any, do you consider may be appropriate to address risks arising from a lack of standardisation of IP interconnection?

As highlighted in the main body of this response, Virgin Media does not believe that strict, wide ranging intervention is required as current standards and obligations, alongside bilateral discussions, and the very strong incentive that providers have to ensure interoperability and the highest quality of service, mean that the risk of consumer harm is very low. However, we would be open to some form of agreed approach between larger CPs that seeks to tackle how highlighted differences can be dealt with upfront.

Question 6.4: Would it be useful to consider the case for intervention in relation to technical standards for interconnection ahead of our next market review?

As stated above, Virgin Media does not believe that it would be useful for Ofcom to consider such a case for granular, industry wide regulatory intervention in relation to technical standards for interconnection.

Question 7.1: What are your views on the factors that we have highlighted as having a bearing on the setting of termination rates? What other developments should we consider?

Virgin Media agrees with Ofcom that the importance of termination rates will diminish over time as retail call bundles and data allowances become more common. However, termination rates should be set at a level that encourages investment in networks.

Although Fixed to Mobile convergence will happen it is at present more of a product packaging phenomenon, rather than a physical network reality.

Question 7.2: What are your views on the options we present for regulating the fixed and mobile call termination markets? Which appears to be the most appropriate regulatory option?

Virgin Media believes that maintaining the current position is a reasonable way forward in the short to medium term. However, the broader context of Ofcom's regulatory plans to encourage network investment needs further consideration when deciding the appropriate approach in the longer term.