

5th June 2019

**Response to Ofcom's First consultation:
"The Future of interconnection and call termination"**

Magrathea welcome the opportunity to respond to this consultation, which we understand to be the initial stages of a more detailed consultation process that will feed into the next Narrowband Market Review period.

Magrathea have attended several meetings at Ofcom on this topic alongside other key stakeholders, as well as representatives of ITSPA, to share our concerns about the future of interconnect. Specifically, we have shared the common and recurring problems associated with future BT interconnect arrangements and our desire to see Ofcom intervene at this stage to ensure an efficient and smooth transition to an all-IP network.

Responses to consultation questions

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?

Magrathea agree this is a risk and are already seeing evidence of increased charges. Without the ability to exchange traffic with BT at their IP nodes (due to the lack of an interconnect product) we have been forced to pay additional transit charges to get calls converted to TDM and passed across the BT network to where we interconnect at the tandem layer.

Even if we were to have access to an IP interconnect arrangement with BT, the lack of visibility of which calls will originate or terminate on IP would make it impossible for us to make sensible call routing decisions.

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

Magrathea would support all of the suggested measures.

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?

It is our opinion that we should all be working towards an efficient network that is based on IP and as such if a network wishes to continue to use TDM and media conversion they should cover their own costs. However, this is only reasonable if a suitable alternative is available.

Magrathea are currently being charged by BT to carry out media conversion within the BT network, however they offer us no alternative despite the fact that much of our traffic starts out as IP and we are having to convert to TDM to deliver to BT which is wholly inefficient. Therefore, we would support the regulation of these charges until such a time as the wholesale interconnect market has got further along the path of migration to all-IP.

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?

No, we don't agree. In an IP network, the physical address of the POI is really not relevant any more due to the specific costs related to distance-based conveyance of a voice call is so close to zero as to be unimportant. Therefore, whilst it may be reasonable to designate a 'virtual' interconnect with a call-server being required for FTR rates on a number range by number range basis, it should be possible to reach these call-servers by interconnecting at any common node between the two parties and then establishing relations to one or more call-servers from the one point of interconnect.

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?

Our view is that the results at these early stages of migration away from BT's TDM interconnect product have been distorted to some extent by, what appears to us to be, strategic positioning of the IP Exchange product to migrate traffic away from a regulated interconnect product onto an unregulated service package.

On that basis we consider it too early to determine the impact on BT's position as a dominant provider of WCO/WCT.

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?

Magrathea strongly disagree with this view. Interconnect has previously been regulated for very good reasons as set out in previous NMRs and all of those reasons remain valid regardless of the technology used to convey the calls. We accept that this picture may change in the future once all networks are migrated to IP, direct routing of calls is common practice and BT over time reduce their SMP in WCO/WCT, however we certainly don't agree that there will be enough significant movement during the next review period to be able to leave BT without a requirement to provide interconnect.

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?

Yes, we agree. As explained above we believe the regulation of interconnect should be technology neutral and it's important to provide stability during this migration period.

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?

Magrathea strongly disagree. We see the current lack of regulation a major barrier for industry to move forward. There needs to be stability and visibility in order to encourage investment and migration from industry.

It is our experience to date that BT are not willing to engage where there is no commercial motivation for doing so and therefore we continue to expand our TDM interconnect with them to service our growing capacity needs. Although we do not consider IP Exchange as a viable alternative to TDM interconnect, even if we were content to become a user of that product we have found BT to be impossible to negotiate with and they appear to be cherry picking networks to offer service to. For this reason, we can see no alternative other than to extend the regulation to be technology agnostic.

In addition, if TDM Interconnect is regulated and IP is not there will be little motivation for network such as us who are reluctant to forego the security of a regulated service for one which is unregulated and not fit for purpose.

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?

When new entrants join the market, in most cases, they will see the need to interconnect with BT primarily. We cannot provide evidence to support our assumptions however, based on our experience, we are certain that BT are still considered the primary point of interconnect and transit in the UK and in particular are considered by many to be the most essential porting partner to be interconnected with due to their previous and current significant market share.

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?

In the future we anticipate that there will be a far wider spread of IP interconnects between carrier networks as well as service providers, however, it is unlikely that every service provider or network will interconnect with every other and therefore there will still be a place for transit providers. Magrathea, for example, have established themselves so that we can help a number of service providers interconnect to us and get access to all of our interconnect partners without the need to manage those relationships directly.

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.

We do not agree that GCA1 alone is sufficient. Magrathea are able to share examples of where compliance with this condition is difficult to enforce and in addition it only requires other networks to 'negotiate' and therefore does not always result in an outcome.

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?

It is our opinion that most networks using IP for some time now have been referring to IETF SIP standards, however these are somewhat open to interpretation and it is clear from some of the faults we handle that not all networks are using the same standards. We would agree that this could result in consumer harm, most likely due to mishandling of CLI information.

Question 6.2: To what extent is there divergence among telecom 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?

Magrathea have experienced a variety of problems as a result the different interpretation of standards and therefore we would suspect this is a fairly widespread issue and if IP is to be adopted as the new favoured technology it would seem prudent to have an industry-wide standard in place.

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?

We are familiar with the work carried out by the NICC and would consider their standards appropriate for the wider industry.

Summary

- We do not consider IP Exchange to be comparable to the existing regulated interconnect product and don't believe it's fit for purpose as such. The lack of reciprocity, call pricing publication as well as the short contract notice period are an example of the differences.
- We believe there is still justification for regulating an IP interconnect product as all the reasons for current regulation of interconnect remain true regardless of signalling protocol.
- If IP Exchange were to be declared as an interconnect replacement then regulation of IP Exchange would be the only remedy to maintain a well-connected and competitive wholesale environment.