FCS Response to Ofcom’s Consultation on the Future of interconnection and call termination

Introduction

The Federation of Communication Services represents companies which provide professional communications solutions to business and residential users. Our members deliver telecommunications services via mobile and fixed line telephony networks, broadband, satellite, wi-fi and business radio. Our members’ customers range from SMEs, consumers, home-workers and micro-businesses up to the very largest national and international private enterprises and public-sector users. FCS is the largest trade organisation in the professional communications arena, representing the interests of around 300 businesses who supply mainly B2B services nationwide.

Overview

We have gathered some specific comments from members and included them in this response. Where we do not have a detailed or consistent member view, we aim to give a strategic answer.

Overall, we believe that changes that CPs have to adopt due to the move from TDM to IP connectivity should at worst be cost neutral and at best should see cost savings.

Work in this area should be linked to the industry roadmap for migration to all IP so that CPs can make informed contract and commercial decisions.

Answers to specific 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?

Our concern about the BT TDM to IP changeover plan is the effect of delays on other networks in how they may wish to swap their Interconnect over to match BT’s plan and the effect this could have on termination rates. Once a plan is notified to all the other Carriers, any subsequent BT delays should not financially penalise any of the other Carriers. BT will have to cover the cost of routing calls and media conversion for the period of the delay. Whilst this is referred to by Ofcom in the document, pinning down the detail will be important: this could cause BT significant costs both in making sure capacity is available in case of delay and in media convertors to enable calls swapped to IP at the appropriate time as planned that will still need to land on the delayed DLE. For some of the larger local exchanges where for example the Vodafone (C&W) capacity might be considered substantial this could cause major planning issues and installation overheads to BT.

The migration to IP needs to be fair and transparent and Ofcom should ensure there are no opportunities for arbitrage.
It is not clear currently whether IPEX is the path for TDM CPs to migrate to but, as this is a commercial, unregulated product we would be concerned if this were the case. Price controls need to be clear and CPs should not incur a greater cost when migrating.

Another consideration that comes into play is the new proposed Number Porting Blockchain project which will greatly simplify Number Porting including the ability to update routing prefixes almost instantly. The FCS policy is that Interconnect in the future should not offer a competitive advantage to any carrier large or small.

On the basis that BT will not be routing any call traffic after 2025 it would seem appropriate to start planning now for a parallel interconnect regime that allows the TDM interconnects to exist as long as required, with regulator intervention along much the same lines as today. The requirements around Interconnect should be reviewed and agreed as soon as possible but must take into consideration the interdependence between the new Number Porting Process (once agreed), Phone Number Review, out payments and Interconnect, which must be looked at in the whole otherwise the opportunity to create a more efficient and functional system could be missed. This would include an effective CLI authorisation methodology to remove CLI spoofing, simplify existing process, reduce costs and enable fair competition.

We would suggest that the concept of “Voice Interconnect Exchanges” (VIE) along the same lines as those available in the Internet world today (www.linx.net for example) should be considered for the IP Interconnect world, where a number of providers could offer the Generic Interconnect Exchange for providers large and small, they would also be responsible for any out payments that are agreed by the regulator and Industry. We would suggest that Ofcom set up a Work Group to investigate further how this model would work. The FCS understand there will be a number of considerations but with the fundamental change that is happening with the move from TDM to all IP, long established processes and methodology should not restrict Industry’s ability to build a fit for purpose IP Interconnect Strategy.

We have detailed our thought around all these areas in our recently released White Paper - http://bit.ly/2GKnRSf

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

We think that it is vital that BT sets out a timetable, with a confirmed end date identifying the transition to all IP. There should be a regulated FTR at both the DLE and an IP PoI to help encourage transition.

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?

The FCS believes that any charges set by BT must be an incentive, rather than a disincentive, to migrate and therefore Ofcom intervention may be required.
**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?**

Some members disagree with the principle of a single nominated POI where only the FTR is charged. As Ofcom has suggested, IP Networks are not distance dependant and therefore they feel that the FTR should be the same for all POI’s in order to avoid abuse. BT earn an amount currently for long hauling geographic calls in the TDM world, the rate is disproportionate compared to the costs and this forces the Smaller Carriers to use IPEX or other carriers for Geographic number call delivery, because they have the infrastructure to all the DLEs. The swap to IP is the time for all of this infrastructure to be removed from the UK telephony network, it should no longer be required and therefore the FTR should be changed to reflect this.

**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?**

We would refer the reader to our response to question 4.1 and the Concept of Voice Interconnect Exchanges, this would have the effect in the medium term (by 2025) to reduce potential market dominance of any one commercial organisation.

For the changeover period and for a reasonable period after the changeover is complete, Ofcom should be guarding against deliberate or inadvertent advantage being made by BT as a result of the changeover. There must be no pricing differential throughout the migration that would cause number blocks that reside on TDM switches to have different termination rates to those hosted on BT’s IP Network.

**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?**

In theory we agree but is does depend on what is put into place; if it is left to chance it might be that somehow BT or another operator might end up in a dominant market position. This is why understanding what the ultimate model will look like is important and should be agreed very quickly as referenced in our answer to question 4.1 and 4.5. Members feel that they need protection till the dust has well and truly settled and they are confident that they still have a viable business at the end of it.

**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?**

We agree that regulation should continue during this time.

**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?**

Regulation may need to be imposed to ensure equivalence for all and to encourage migration.
**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?

With reference to earlier answers to 4.1, 4.5 and 4.6 this will impact whether BT will maintain a significant customer base for transit services and on IPEX, so a requirement for end to end connectivity may remain for some time via BT. Therefore, we would suggest that the requirement on BT to supply remains in place.

**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?

Standards set by Ofcom and the NICC need to ensure that interoperability is available between all CPs to ensure E2E connectivity. A common platform with independent hubs could allow any CP to interconnect and route calls effectively.

**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 agree with this proposition. We assume that Ofcom is confident that interconnect and end to end connectivity will be available to the consumer in a timely and guaranteed way.

**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?

Yes, we agree with this view and, as above, suggest cross industry interoperability standards, directed by Ofcom and managed by NICC.

**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?

Divergence is widespread in the IP kit being used and this points to an urgent need for an enforced UK standard to give as much time to conform as possible. In order to ensure consumer confidence, services need to be plug-and-play rather than bespoke.

**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?

All UK IP interconnect testing that is completed by Regulated Carriers must use the UK Standard required by revised Ofcom Conditions, but only after a reasonable date set in the future. Conditions will also need to address IP Interconnect already installed in the UK to allow conformance over a reasonable period of time.

One major benefit of a well thought through IP Interconnect regime is that of “provider of last resort” (PLR) to simplify the process of re-routing numbers in the case of a Service Provider going bust. With
agreed SIP Interconnect Standards this effectively enables this process of PLR to be easier implemented and managed.

**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?**

Yes, little will happen without intervention and we need to determine this now to give adequate notice to the Carriers to conform.

Issues such as national infrastructure need to be considered when planning technical standards, including SIP interconnect to ensure commonality of approach.

**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?**

There is an opportunity here in the medium term (2025) to review the whole concept of outpayments for voice calls terminating onto 01x, 02x and 07x numbers, we would suggest that this is a legacy process that creates an unnecessary layer of complication and tends to favour the larger carriers at the expense of the smaller players.

In the short term we agree with the merging of FTR and MTR and that it is set equally for all networks. Relying on reciprocity alone would cause chaos and would be unfair for circumstances where traffic is imbalanced and one party is far larger than the other.

With modern technology it is far cheaper to install a mobile network than a fixed network yet the termination rate is the other way around (MTR is far more than FTR). Merging the two should result in a reduction of MTRs rather than an increase in FTRs.

If they do merge it will make bundles, mobile and fixed, much easier to manage and it entirely removes the arbitrage opportunity.

**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?**

In the new world we do not see the need to allow Carriers to charge interconnect rates based on the fact that one Carrier is bigger than the other, this policy again favours the larger carriers. We would encourage Ofcom to mandate that all Carriers large and small must offer interconnect on an industry agreed rate chart. If the concept of “Voice Interconnect Exchanges” is implemented at that stage all carriers would be mandated to interconnect with at least one of the VIE Service Providers and all VIE services providers would have to Interconnect to each other.

We agree with the proposal for mandated reciprocity with fair and reasonable rates for fixed and mobile networks. This could lead to the demise of termination costs over time as no party is able to create an unfair advantage.
Conclusion

We hope that these answers are helpful to Ofcom and would be happy to bring some FCS members to discuss the cost impacts in more detail at a meeting if this would be helpful.