



**SIMWOOD**  
STRAIGHT-TALKING, FORWARD-THINKING, TELECOMS

Simwood House, Cube M4 Business Park, Bristol, BS16 1FX  
[www.simwood.com](http://www.simwood.com)  
0330 122 3000  
team@simwood.com

Ofcom  
Riverside House  
2a Southwark Bridge Road  
LONDON  
SE1 9HA

Dear Sir or Madam,

## **Response to The Future of Interconnects and Call Termination**

### **Introduction**

Simwood eSMS Limited is an alternative carrier offering managed services, voice, data, and mobile exclusively to a channel of other Public Electronic Communication Networks and Services in the UK. Simwood Inc is a Competitive Local Exchange Carrier (CLEC) in the USA and presently building out network assets in all 50 states to become an Interexchange Carrier (IXC). Both companies are wholly owned subsidiaries of Simwood Group PLC and collectively referred to here as "Simwood".

Whilst there will be elements of trade associations' responses to this Consultation that Simwood agrees with, the Office of Communications ("Ofcom") should treat this response, and only this response, as being definitive of our views.

We thank Ofcom for the opportunity to engage on the subject at hand and trust that this response is helpful. My team and I are at your disposal to discuss any matters arising.

### **Misrepresentations**

There is a risk of conflation of terms in the process of getting to an all-IP PSTN; no doubt Ofcom will have already noted that the term "interconnect" has both a very specific broad meaning, being the physical linkage of two networks, and a more generic term used in industry, which encompasses the conveyance of traffic across such a linkage.

We feel it is very important that the language used and the definitions of terms are very specific to avoid confusion, or worse, the exploitation of the situation by those with vested interests.

Having read the Consultation, we fear that BT is exploiting such confusion already in their engagement with Ofcom and marketing. BT's IP Exchange (IPEX) platform has many meanings to many people, and it is vital that Ofcom are clear on what it is when approaching the next Narrowband Market Review.

For many years, BT has marketed IPEX in competition with Simwood (and, by extension, Simwood's competitors such as Magrathea and Gamma) for the provision of a managed service for number range hosting, portability, and an A-Z rate card. It is not, in that form, remotely close to the equivalent of the products and services offered under the Network Charge Control Standard Interconnect Agreement (SIA) on TDM.



Simwood House, Cube M4 Business Park, Bristol, BS16 1FX  
[www.simwood.com](http://www.simwood.com)  
0330 122 3000  
team@simwood.com

We believe that there is an IPEX variant, referred to as “Type B” by BT which may be closer, but as we have found, BT is reluctant to engage in meaningful discussions regarding it. In our experience, BT would only offer “Type B” on terms that resulted in the triple win of more revenue, at greater margin, and increased cost for Simwood. That is before considering the cost-share implications on Simwood of moving BT-owned traffic away from TDM. In short, even if Type B is offered, for us the terms were predatory.

It is therefore imperative that Ofcom understands what, precisely, they might be regulating and is unambiguous in doing so.

### Potential for Exploitation

Ofcom only needs to compare the rates for transit and additional conveyance on the BT network since their deregulation to realise that the competitive constraints relied upon when the Significant Market Power conditions were lifted were not as strong as originally thought.

As the paradigm changes, these competitive constraints are dynamic. Vodafone’s DLE capacity, for example, is only a competitive constraint while it exists, and while they have a motivation to engage in conveyance. From an engineering perspective, it is unlikely, while they unravel their network, that the risk-reward calculation of incremental transit to BT DLEs is worth their time and effort.

Additionally, no-one is going to invest significantly in TDM interconnection with BT this late in the game, so while there may be excess capacity via alternative operators to BT DLEs, it is only relevant from an economic and competition perspective if it can be used, which we do not believe it can. Therefore, the only choice is to discount it in the market review, which means, given BT’s unique position (which it derived courtesy of being the former state-owned monopoly) as the majority terminator and only viable universal transit operator provides the perfect opportunity for predatory behaviour.

We have grave concerns around the rapid bifurcation of the market into ‘BT Resellers’ (IPEX Type A) and ‘BT Resellers who used to be competitors’ (IPEX Type B). Type B operators may have dismantled their TDM capacity to be replaced by commercial IP interconnect terms and thus have no way out of the unregulated commercial dependency on BT. In this scenario, everyone is a BT Reseller, and re-monopolisation is complete. We believe this to be well underway and it progressing further or being given any assistance would be a massive failure by Ofcom.

The certainty that Ofcom proposes about the Fixed Termination Rate (FTR) being available at nominated IP POIs is a step in the right direction, but the sheer scale of the migration of BT’s network to all-IP is such that this certainty doesn’t provide adequate protection to those that are subject to BT’s network rearrangements. After all, the cost causation is entirely on BT’s side, and the urgency of the migration is increasing solely because of BT’s historic lack of investment, preferring instead (it seems to us) to procure sports rights, or having to make pension deficit reparations.



Simwood House, Cube M4 Business Park, Bristol, BS16 1FX  
[www.simwood.com](http://www.simwood.com)  
0330 122 3000  
team@simwood.com

With that in mind, there is a clear moral imperative for BT's competitors to be protected during this project and there needs to be regulation (at least in terms of safeguard caps) on additional conveyance, transit, and physical IP interconnection, to ensure that a smooth transition occurs. It would be entirely improper for an industry that has already heavily invested in IP migration, be somehow required to also fund BT's catch-up here.

The UK is already behind other major economies thanks to BT; relying on Ofcom's ex-post Competition Act 1998 and Communications Act 2003 powers would add more delay to a project already once started and abandoned by BT. We do not see incurring significant harm first and waiting months, or years, for the referee to call a foul and award a penalty as being an option given the state of play today.

For the avoidance of doubt, we are not advocating a return to the regime of 2009 and earlier with extensive charge controls on the relevant products, but a safety net to ensure that BT is unable to profit from a situation of their own making.

We also resist suggestion that media transcoding is a cost to be considered, given it is a standard function of any IP interconnection capability and we fear capability already bought and paid for by competing networks, will be doubly paid for in funding BT's meeting of this cost.

### **Significant Risk to the Integrity of UK Telecommunications**

With our apologies if we missed it in the Consultation, we did not see reference to security standards specifically mentioned. This is, in our opinion, a significant omission by Ofcom.

If any operator can just broadcast traffic via the public internet to the IP address of an IP POI (be that on the BT network or others), then there is a significant threat to the integrity of communications in the UK.

The TDM PSTN, by its very design, has unique properties which shield it somewhat from interference by rogue individuals or nation states. A liberal regime, which Ofcom appear to promote with references to increasing competition in transit, would allow a rogue element to launch a Distributed Denial of Service Attack (DDoS) and disrupt communications to a significant extent, perhaps with disastrous results.

Additionally, the risk of unlawful interception of communications increases markedly. Any credible operator in the UK has a distributed IP network and, in Simwood's case, we do not consider it unreasonable (in fact we would suggest it be mandatory) to require that interconnection with an IP POI be a physical interconnect with rigorous minimum security standards, or across a neutral fabric disconnected from the public Internet.

At the present time, BT IPEX has exactly one POI in a carrier-neutral data centre that is accessible for IPEX Resellers, either privately locally reachable or through various public points of entry to the BT network. Of course, BT sells transport to its other less-accessible POIs but the temptation is for IPEX Resellers to interconnect solely at that one point, and worse only over the public Internet, rather than building out to other IPEX POIs housed in selected DLEs.



Simwood House, Cube M4 Business Park, Bristol, BS16 1FX  
[www.simwood.com](http://www.simwood.com)  
0330 122 3000  
team@simwood.com

The consequences of this were demonstrated in 2016 with the outage of that sole neutral POI with devastating outages for all those dependent on this platform that had not built out resilient capacity. Whilst that risk would remain for IPEX Resellers (Type A) that is not in scope for this consultation, but were Ofcom to take the step of considering IPEX (Type B) to be the foundation for further IP enablement, this would be a major structural weakness.

### Proposed solution

Whilst we have no objection to BT leveraging the same technical platform it uses for resellers (IPEX Type A), IPEX Type B is currently only available to the select few on economic terms that benefit BT, both commercially and strategically. For this reason, operators such as Simwood who are historically IP-based are forced to invest further in TDM to maintain independence<sup>1</sup> of service from BT.

We suggest that the SIA be given regulatory cover to permit the migration of existing charging and billing models (CSI or ISI) to IP. This would enable operators such as Simwood to migrate to an IP Interconnect with BT without substantial cost disadvantage or predatory behaviour by BT. It would also enable those OLOs who have already become IPEX Type B to have some protection from any BT disposition to profiteering, which is necessary to enable them dismantle their TDM interconnects responsibly. Note, from our conversations we do not believe long-term strategic consideration has been given to this wholesale “migration of our BT interconnect to IP” by current Type B operators and this is a risk that they do not fully appreciate.

Technically, we strongly recommend that any IP POIs exist in carrier-neutral data centres, with interconnection over a private transport and not the public Internet. Minimum encryption standards should further apply.

Ofcom could mandate that BT expand IPEX to more carrier-neutral sites than the present one, but in our opinion, BT should not be a provider of this “IP PSTN solution” at all, but rather should have the obligation to interconnect to an independent solution in the same way as any other OLO. We would advocate that Ofcom engages with the London Internet Exchange (LINX) of whom Simwood, and all credible OLOs, are already members<sup>2</sup>. LINX offers metro-distributed switching fabric in four UK cities and could trivially be the neutral (non-profit, member-owned) medium over which IP voice is carried without any material impact on competitive positioning. Of course, OLOs who wish to interconnect in purely private means in other locations should be encouraged to do so to improve diversity further.

We’d advocate a requirement to interconnect in all of multiple distributed and neutral POIs be a requirement to obtain FTR.

We believe that creating a neutral fabric under regulatory protection that compels BT and OLOs to enable IP interconnect is the only way to enable migration to IP without unintended consequences.

---

<sup>1</sup> <https://blog.simwood.com/2018/09/dirty-tricks/>

<sup>2</sup> <https://portal.linx.net/members/list-ip-asn>



Simwood House, Cube M4 Business Park, Bristol, BS16 1FX

[www.simwood.com](http://www.simwood.com)

0330 122 3000

[team@simwood.com](mailto:team@simwood.com)

## Potential Unintended Consequences

We have cautioned over the misuse of the word “interconnect” and indeed the many levels of “IPEX”. We implore Ofcom to recognise IPEX Type A customers as BT Resellers to draw a distinction from those interconnected under the SIA. We believe IPEX Type A attracts Resellers who range from responsible PECS who can’t/won’t invest in TDM, through to pure sales organisations of negligible technical capability and little regulatory respect. It would be a grave mistake for Ofcom to simply regulate IPEX, and in doing so consider these people as PECNs in the same way as parties to the SIA. Doing so would not only cause continued consumer harm but also the completion of what we’ve described as BT’s re-monopolisation<sup>3</sup> where everyone, PECS or PECN, ends up a BT Reseller.

We are also very mindful of the technical harm the current migration within BT and invited Type B participants is causing. We have an ever-increasing incidence of technical issues resulting solely from routing errors between, or more often across, IPEX. As calls are increasingly IP end-to-end (often across IPEX) the mediation role that TDM once provided is being lost and issues with caller ID, call connection, and media conversion are becoming more common<sup>4</sup>.

In our opinion, both could be avoided by a clear neutral point of interconnect to a defined standard in multiple locations. IPEX Resellers could remain IPEX Resellers, but those OLOs capable technically and commercially of interconnecting at all distributed POIs could expect FTR under the protection of the SIA. .

---

<sup>3</sup> <https://blog.simwood.com/2017/08/remonopolisation/>

<sup>4</sup> <https://blog.simwood.com/2019/04/interoperability-meh/>