General Comments

As a CP we have been looking to migrating our wholesale interconnects to IP via a number of UK CPs. BT's intrinsic position in the market and as a major provider of transit is still the most efficient partner to migrate service to. They are still very much a must have for smaller CPs.

We support the proposal to continue regulation on TDM until 1 April 2025 as the migration to IP will need investment and resources, given the enormity of the TDM network infrastructure and interconnect points. Ofcom's proposals will ensure that TDM costs can be maintained whilst the focus is on IP delivery. In addition, if BT has an obligation to provide transparency to industry of their timetable for IP migration, at the points of interconnection for Wholesale Call Termination, it allows us to align our own migration timetable and plans to BT's.

We would like to highlight to Ofcom that the migration of certain solutions will be a first step into the IP world for many and there is a lack of knowledge in UK marketplace to aid migration, without issue or delay. The industry must find a way to begin an awareness campaign, especially to some particular market sectors where old technology is still being deployed, in order to meet 2025.

Testing of services utilising VBD over IP has proven unreliable due to latency and compression, again we wish to highlight the concern to these services.

IP Reference Offer

By the nature of BTs intrinsic position developed over the past decades many existing processes are now inherent as part of industry functionality which is supported by the Standard Interconnect Agreement (SIA).

Many of the areas included in the agreement, while not regulated, provide the industry benchmarks which are referred to in all other interconnect agreements or are default industry processes. The most notable examples are the Data Management Amendment process ("DMA"), Annex E for AIT (Artificial Inflation of Traffic) and as the default transit operator stated in the majority of porting agreements where CPs do not have direct interconnect with each other.

- **The DMA process -** Every new number range which needs to be made live in the UK is predicated on the DMA process. The DMA process is the cornerstone to the industry notifications for functioning number ranges and as soon as the DMA date is agreed, the CP will use the Yahoo Group to alert all other UK CPs to build these ranges on their network. If the SIA is withdrawn without clear and full industry consultation and engagement, in lieu of a centralised database, how will the numbering process be managed?

- **AIT -** The biennially SIA review process allows industry the ability to work in plenary to discuss the AIT processes to ensure it remains fit for purpose in this ever-changing environment. The industry defers to this ingrained 'rule book' and it is included in every UK porting agreement.

- **Number Portability Transit Operator** - As has been mentioned in previous submissions, BT's position of dominance arises from several key historical aspects and notably this significantly distorts the market for transit. Until IP / a centralised database is uniformly available to all CPs BT will continue to be the porting transit operator of choice.

The SIA, today, is the culmination of decades of industry interaction with the dominant player, where all parties know they are being treated equally and have the same methods to introduce new processes, new products and numerous other subjects which BT is central to.

An overhaul of the SIA would be welcomed where all elements are commercially negotiated. For example, the AERO which only BT seems to charge CPs, should be made reciprocal and there are other areas which would fall under this type of discussions.

If the Reference Offer is to be limited in scope, Ofcom must consider the other multiple aspects on which the removal and 'oversight' to this agreement and associated processes in the round could have far reaching consequences which, within the five-year period of the review, could have devastating consequences. We cannot move too far too fast.

It has been to the UK's credit that Industry has been able to continue to review the terms as a group (biennially) which has ensured that the SIA has remained relevant.

An example, of the inequality between the SIA and BT IPX agreement would be the Termination Clause. In the existing SIA agreement, the termination clause allows a 2 year termination period but in the current BT IPX offer there is a 30 day notice. It does not allow CPs any time to rectify issues and this short notice period creates a risk for a CP moving to BT IPX.

The key risks:

A. A CP cannot physically move away (unravel) an interconnect in 30 days.

   If you assume there is an existing interconnect agreement in place with a CP which you can move to as the [disadvantage] terminated CP, you would still be required to set up, manage and implement the DMA process, as mentioned above. The DMA process would be predicated by needing to submit, to BT, routing plans for all BT originating traffic and transit traffic to be routed to the new transit operator. An amended routing plan takes 15 days for BT to agree to the DMA process and the whole process could take a minimum of a further 90 days.

B. In the context of ported in number ranges to the 'terminating CP', the same DMA process would be used with the addition of:

   All existing Porting agreements utilising BT as the transit operator would need to be amended.

   All porting information on the Planning Databuild Information form (PDIs) would need to be amended with all the CPs we may already be in contract with in order to correctly route imported traffic. The industry timescales for returning agreed PDIs is in the region of 56 working days. However, this can be multiplied exponentially given an individual CPs ability to handle any number of PDIs. Many CPs will limit how much they will do when in order to manage the work load.

   There is no industry process to support moving ranges or huge amounts of numbers which is frequently highlighted with number portability, business ports or the ability for an SP to move CPs. This lack of a process will be compounded with the need to move bulk numbers with a spilt

CP provision due to the IP migration. Therefore, if required, today, any bulk moves would be a disaster and again, all of these moves are predicated on BT's ability to manage these processes.

It is important to remember that BT has seen huge reduction in qualified manpower in this area of recent years and today they will only schedule a number range route one per day.

C. There is potential for customer harm in the magnitude of the move away from one CP to another given the amount of work and timings which would be required with a 'big bang' approach due to a move being instigated under such a timescale.

We think it is too early for Ofcom to understand the evolution of the UK market to IP for the removal of the SIA from the interconnection requirements, at least not until there is a centralised substitute for many of the processes which BT are currently intrinsic to.

Networks and Standards

If it is left to the operators to self-regulate, ensuring the industry standards are used, the majority will be able to achieve this. However, there will be those, like with number portability, who do not believe the standards apply to them and this could cause considerable harm and loss of services. It will be the rogue and oblivious operators that continue to sit outside of the responsible group, often not even realising what their regulatory obligations are, that can impact networks the most and with damaging effect.

Ofcom, at a minimum, should issue guidance on how to design and build reliable networks to help operators provide a good and reliable service to their customers which will not cause harm to other networks. The use of G711 or G729 causes issues today and needs time to be bed in with some oversight from Ofcom of the impacts of different CPs using different approaches. Today's market diversity and IP requires a central role of enforcement. The implementation of such guidance must be investigated across the UK market when reviewed and not just the bigger and more responsible players who engage with NICC etc.

BT IPX Interconnect Port Charge

We request that Ofcom provide further clarification and explanation of the charging elements that make up a BT IPX circuit and Port Charge as referenced in the consultation. A schematic showing the various components that make up this interconnect, complete with each chargeable element, and would be very useful.