

[X] Submission to Ofcom's Wholesale Voice Market Review 2021-2026

Introduction

[X] has seen two issues with the migration from TDM to IP:

- the uncertainty of costs of traffic provisioned via IP interconnects
- the impact of utilising both TDM and IP in the call path

[X] is pleased to be able to respond to Ofcom's consultation on the Wholesale Voice Markets Review 2021-26 ("WVMR") and we have highlighted below the areas from the consultation we believe will have the most impact on the [X] market especially as the migration to IP increases.

Background

[X].

We have consistently worked with our primary TCP to rationalise costs associated with our traffic (moving from TDM to IP incentivised by cost mitigation started in January 2017). This migration was completed in 2020. We would hope Ofcom will note how long this major technology migration takes to enable and complete a successful migration without impact to the services.

[X].

Since late 2016, there has been a cumulative price increase across the [X] service of 322% due to the BT Pence Per Call ("PPC") cost introduction on TDM - a cost increase imposed by BT, as we understand, because of the ongoing operating cost derived from its historic failure to invest alongside the rest of the industry in new technology. [X].

The increases in question to transit costs (and, where appropriate, to BT's double-dipping AERO charge) are compounded by the lack of incentives for the Originating Communication Provider ("OCP") to route traffic efficiently. We note that the NGCS regime requires the Terminating Communication Provider ("TCP") to build efficiently, however, they remain beholden to the whims of the OCP which can change routing with neither consultation with nor regard for the impact on the TCP. Indeed, for a diversified Communications Provider ("CP"), this can extend to deliberate gaming to artificially raise the cost base of its competitors, a matter which we believe evidence and examples of were provided to Ofcom during the NGCS review. We would like to see Ofcom review the NGCS regime and the impacts of the money flows which is currently a one-sided environment leaving Service Providers at the mercy of the OCP.

IP Migration – Cost Elements

The structure and costs associated with TDM were clearly understood and often as a result of Ofcom direction however more recently we have seen additional costs¹ which are severely impacting the business and could result in the [X] service being pulled from the market, with serious consequences to [X] who typically serve the more vulnerable in society [X].

[X].

[X]. One of BT's arguments in this regard is that the increased charges were needed to offset the higher running costs of their legacy equipment; [X].

This ppc which was also implemented by one of our TCPs, raised the cost of each transaction routed by them by 440%.

This additional charge was not implemented across all CPs [X]. Shrouded by the mask of virtue of grappling with this problem, BT has been allowed to make legitimate services, [X] which are relied upon by [X] and the vulnerable in society, to be acceptable collateral damage.

This commercial viability as we go further towards IP and the various unregulated elements compounds the uncertainty [X].

[X] urgently needs assurance that Ofcom will safeguard the associated cost elements for 080 traffic, or even review the costs of 0800 calls² to ensure UK businesses are not compromised by arbitrary price rises. At a time when the UK economy needs every help it can get to overcome the impact of COVID-19, it is even more important than ever that BT's unfettered one-sided bargaining power is not allowed to cause detrimental effects on those that need [X] support.

Unchecked, these cost increases will be pushed downstream [X] and in the long run to the consumer.

We note that the WVMR consultation does not consider monitoring or guidance for current cost elements of AERO, Transit, APCC or non-geographic traffic – all of which are material traffic streams which will be affected by BT's network upgrade.

Conveyance

One of the traffic streams which Ofcom does not raise in the Consultation is how, in an all-IP world, the logic and conclusions of the 2015 Non-Geographic Call Services (“**NGCS**”) Review (the “**NGCS**

¹ [X].

² Dispute between BT and each of Vodafone, Telefónica and Three relating to forward looking call origination charges for 080 numbers August 2014.

Review")³ apply.

[X], it is our understanding that costs charged by BT for conveying an NGCS call from the point of origin to the point of egress to the TCP's network are unique to BT's commercial model.

These are significant charges. They are far more than the various components of the past NTS Retail Formula, which afforded BT the Fully Allocated Cost of retailing these calls. Indeed, at 15.19 pence per minute, they are many orders of magnitude higher. To our knowledge, BT is the only CP that "double dips" and does not absorb the conveyance cost from the Access Charge.

When these charges are compounded to the additional charges mentioned previously, this equates to a significant impact to our cost base and a significant cost that will ultimately find its way to the consumer.

It is important to note that this principle of AERO is applied by BT to 080 and 03 numbers, as well as the ranges on which Ofcom recently consulted⁴ and are a material component of the cost base of new entrants and established networks alike.

So far, BT is only proposed to be obligated to treat all traffic terminating at a POC from April 2025 at the FTR, regardless of their plans, and to have a transparent migration timetable to migrate switches to POCs.

Logic would suggest that if a POC is the place in the product market for call termination, then, in the opposite direction, it is the closest place to *collect* a call. In other words, if it is equivalent to a DLE for call termination, it cannot be anything other than equivalent to a DLE for call origination in the round. The consequence is that AERO disappears as BT closes its switches.

However, in the absence of any change in BT's policy or an intervention by the regulator with respect to NGCS, BT can obfuscate, increase its charges, spray this traffic all over the network to enrich itself with EBC⁵ or media conversion charges, leaving the bill with the terminating network, who may not be able to physically interconnect elsewhere to avoid it and will receive no help from the OCP which has no commercial incentive to do anything else either. In other words, the value chain for NGCS, of which [X] is a part, will end up carrying this cost and ultimately passing it on downstream.

At the very least, BT's prior justifications for its [X] AERO charges related to the cost of TDM

³ Simplifying non-geographic numbers - Final statement on the unbundled tariff and making the 080 and 116 ranges free-to-caller, December 2013.

⁴ First consultation: "Future of telephone numbers" published by Ofcom on 11th April 2019

⁵ BTs Element Based Charging

equipment, be that the switch processing is in the call set-up, or the cost of its trunk networks, are, in an all-IP world, a very different cost base, and BT's logic becomes non-existent.

To that end, we consider that Ofcom must issue an updated policy position to reflect how the NGCS Review's conclusion of "terminator pays" must be construed considering BT's core network change.

Otherwise we fear we will have precisely the detrimental uncertainty and risks we discussed (and as highlighted by Ofcom in the Consultation⁶).

Transit

BT's position of dominance arises from several key historical aspects and notably this significantly distorts the market for transit.

While there is a degree of competition in transit for routes to major operators, such as Vodafone and O2, BT has an entrenched position when it comes to smaller operators.

This is in no small part because of their former position as the state monopoly and the holder of 100% of telephone numbers until 1987; any new entrant that wants to entice customers to switch will first and foremost want to establish porting (and hence an interconnect) with BT, thus handing BT by virtue of its former monopoly status, the entire suite of interconnects.

These smaller operators are unlikely to want the overhead of managing multiple complex interconnection relationships and may well be content with just that situation, especially if they can leverage BT's existing porting relationships to gain access to other operators customers on a managed service basis (such as BT IPEX Type A platform).

There is also a considerable bias towards being able to advertise "interconnected with BT" amongst the smaller operators; whilst there is no technical reason why this should be the case, the cache of it is given significant weight.

This all conspires to hand to BT a significantly advantageous position which it is accused, even today, of abusing. Which brings us to a key point; Ofcom's view of the transit market is over-simplistic. Just because there is a competitive market for some major routes, does not make the entire market competitive. Indeed, with BT's eye-watering transit pricing, it only takes a small amount of traffic to consume transit in the blend for a material increase in the cost base.

In conclusion – there are multiple factors: impact from COVID, no control over the [X] access provider or technology and price increases from BT on any of the elements highlighted could spell

⁶ For example at §7.39 of the Consultation

the end of the service [X].

Communications

As we have mentioned above, the time it took to migrate our services illustrates our strong belief that the retail layer will need time to digest the changes being proposed, the impact and necessary actions to ensure at the time of migration to IP all their services will be maintained without interruption. Especially when you consider [X] migration took considerable planning, resource and had multiple fall-back positions.

End-users have a whole new world of technology to understand and implement and today they are not aware that this change is happening, let alone the preparations required and costs involved.

Given this example of how long these services require to smoothly migrate, that the availability of broadband services will not be ubiquitous across the UK for many years and to allow time for any further [X], we believe there must be a national advertising campaign, beginning now, which will enable [X] End-Users to begin to digest the impacts of this major technology update. It is our strong opinion that there will not be enough time left for them to plan and fully implement the changes if not.

[X] We are aware, as a result of the various network and equipment changes we have seen to date, that many [X] services will be impacted and unable to function with the new configurations and routing paths which cause latency to be created when moving to fibre/IP.

Additional factors of the new set-up for the [X] which will impact the ability for the service to work include:

- the power socket being situated too far away from the new router.
- the realisation the ATA only has one port, the End-User being unable to purchase a new phone AND a new terminal given the current financial climate.
- [X].

[X], as a stakeholder, has asked Openreach, the OTA and Ofcom for exchange footprint information to enable the [X] to engage in localised information campaigns to begin the education process, with no success. Even then, we understand that the PECS in contract with the end user affected is responsible for the communications, further reinforcing the position that TCPs are beholden to the whims of the OCPs.

As a stakeholder, on behalf of the [X], we believe that to leave the announcement of the implication

of the migration to broadband suppliers will not allow enough time for change and that the message to [X] maybe diluted as this is not the CPs core sales incentive. This will also allow misinformation and confusion to arise and may even slow the migration process down for this market sector.

Openreach recently mentioned that migrations are beginning to pick-up in Salisbury. Is there perhaps a link between migration activity and that Openreach did a leaflet drop in this area?

As discussed, [X] IP migration at a wholesale level took 3 years once the decision was made to move. As we have frequently mentioned to Ofcom, DCMS, Openreach and the OTA, if businesses are not aware of the need to change, time to change will be squeezed, and the smaller businesses and inevitably the consumer will be the ones whose migration experience will be disrupted.

We are aware of discussions around the cost of a communications campaign. For [X], and indeed, we would say for the average layperson, there are only two ways that this can be approached.

Firstly, it should be paid for by central government – the situation is similar to the change over to digital-TV, where Government provided the funding.

Alternatively, BT should pay for the campaign. BT are upgrading their network; BT will get the primary benefit from the upgrade of the network. Any flow of that cost into the charge controls for BT's regulated products merely compounds the very same moral hazard of the industry underwriting BT plc's corporate strategy – that cannot be correct. In any event, if the situations were reversed, we are certain that BT wouldn't countenance funding any of its suppliers' communications requirements.

At the very least, there needs to be a consistent, white-labelled, message in the marketplace. Anything else is too readily dismissed by the reader as an attempt by the OCP to 'upsell'. There are thousands of independent PECS in the UK; the risk of inconsistent messaging, including exploitation of the uncertainty and doubt that will arise, is a very real risk. The only way that this can be avoided is to have one authoritative set of communications and who better to do that than the entity actually upgrading its network?

Technical standards

The pace of migration to IP is now increasing significantly and more CPs are looking to understand its impacts and engage with BT Wholesale (“**BTW**”) regarding their IPX offering. Openreach is engaging with industry to ensure the withdrawal of WLR is managed as smoothly as possible. However, the lack of visibility of BTW's medium to long term plans is of great concern with respect to our ability to engage with the [X] and manage how they will deal with this momentous change i.e. further

technical impacts then the migration at the access layer has created to date. Problems so far have included:

- [redacted].
- A DMA⁷ rollback due to a change in network capabilities since the implementation of our migration plan. We found that ISDN calls were failing despite previous investigations, undertakings and planning into network standards and protocols. It transpired that protocols had been changed and CPs had not communicated that the network functionality and technical specifications had changed. We strongly stress to Ofcom that network standardisation and notifications are a key consideration to how the migration progresses.

All of these issues could be further compounded by the lack of mandated standards. Due to the various factors and unpredictability of the migration through the various networks and interconnects, we are unable to predict when, where or what the next technical challenge may be.

We welcome Ofcom's proposal for BT to consult on their plans for migration and would encourage Ofcom to direct BTW to be forthcoming with technical details⁸ of their plans, sooner rather than later, as the migration could cause at least as much disruption as we have seen to date, if not more.

It is critical that Ofcom understands that network standardisation and notifications are a key consideration to how the migration progresses. As highlighted above, we had to undertake a DMA 'rollback' due to standard and technical changes in a network during our planning period, which we were not notified about, despite our best efforts to cover all these angles.

We strongly recommend Ofcom to provide guidance regarding which standards should be used when in order to remove the impacts we have seen on services to date. We respectfully remind Ofcom that the issues [redacted].

Summary

[redacted] has a socially important use of 080 freephone numbers, which are relied upon by [redacted] and the more vulnerable. The subsequent impacts and uncertainty of the move to IP [redacted] are making the service both difficult to maintain or commercially feasible.

⁷ DMA – The BT Data Management Amendment process which manages the implementation of routing plans between BT and networks.

⁸ Timelines for IP interconnect migrations and resultant TDM switch removals. Doesn't have to be switch specific but at least a % of total interconnects, TDM switches and CP's affected to give an idea of how slow/quick these migrations will be over the next 5 years

We ask Ofcom to consider a broader review of IP interconnect costs to reduce the doubt and uncertainty with respect costs across the board and timescales for the overall transition which will also help CPs and SPs make crucial decisions with respect to both migration and product life.

We cannot stress enough the inevitable outcome of the consistent accumulation of impacts both technical and financial [X] but also the unavoidable knock-on impact to consumers in terms of both service availability and the overall cost of the service to the end-users.