

Ofcom Consultation

Wholesale Local Access Market Review: Consultation on possible approaches to fibre modelling

This paper captures Scottish Futures Trust's (SFT's) response to the recent Wholesale Local Access ('WLA') Market Review: Consultation on possible approaches to fibre modelling issued by Ofcom. We understand the modelling process has been instigated to develop an understanding of the wholesale costs of providing fibre access and will be used to inform the Ofcom WLA Review to be undertaken later this year. The outcomes of this review will inform the basis of regulation. They should also inform the current Ofcom considerations as regards the independence and operations of Openreach.

More detail as regards SFT's digital role is captured in Annex 1.

In terms of the modelling consultation and its background and basis, we have the following comments.

- The Consultation identifies that the modelling will be based upon the current dominant NGA technology, FTTC using VDSL2. Whilst we understand the basis of this modelling decision at present, Ofcom should also endeavour to consider other technology approaches (e.g. FTTP) through the modelling and the cost / income basis of a number of different providers (utilising these different technologies), to benchmark any NGA FTTC modelling. Ultimately, the aim of the modelling should not be just to model the NGA network (based upon an FTTC approach) but benchmark this as well against alternative and evolutionary approaches and allow the model itself to develop overtime. Such benchmarks will highlight differences in investment approaches and the basis of any return on capital requirements (e.g. timing, investment parameters, associated risk, etc). Ofcom may have different options open to it about how it sources such information. It may be that this can be sourced directly from providers and the outcome presented as a range or averages in the WLA market review consultation documentation for comparison.
- The current consultation highlights that public funding (e.g. the BDUK funded programme) will be excluded from the modelling. Whilst we appreciate that this issue will be considered as part of the main WLA consultation, we are of the view that such infrastructure needs to be included within the analysis. We agree it would not change the basis of the modelling, however, it will change the basis as to how costs are funded, any underlying cost of capital and the ultimate return which can be made through performance. It is therefore imperative that such public funding be built into the analysis. To understand the impact, Ofcom may wish to produce two models: with and without public funding. The other reason that the programmes such as the BDUK superfast roll-out should be included is that the modelling should capture how efficiencies have been realised overtime through such factors as procurement and evolution of equipment, standard services and the like. These efficiencies need to be modelled as part of the process capturing time based assumptions and effects. These could be captured as an efficiency factor or as actual figures in the modelling.
- The consultation highlights that the modelling should be based upon building upon an existing network. Again, we would agree with such an approach, however, any costings and / or assumptions should be based upon elements of the existing network being in usable

condition. The modelling should not provide allowances for the rectification of poor condition infrastructure.

- Common Costs: As highlighted in the consultation, Ofcom will consider the basis of common costs in the main WLA. This will be a key aspect in determining the outputs of the modelling and thought needs to be given as to how these will be allocated.
- In terms of the modelling, Ofcom should include sensitivity and wider scenario modelling within the main WLA documentation for assumptions that may subject to flex, or which are not definitive. It should then seek to consult on the basis of these elements and their reasonableness. Likewise, Ofcom should highlight modelling areas where further input is requested – indeed it may wish to do this ahead of the main WLA as the modelling develops, such that a more developed picture can be included within the WLA main review.
- From a user point of view, the provision of the WLA modelling should be accompanied by a bespoke data book and a user guide. The data book should capture the modelling approaches and assumptions, including referencing their origin. The user guide should capture how the model works and how any user can run / use the model. Whilst this would be at their own risk, it will allow potential respondents to test, use and highlight results from additional modelling.

Annex 1: SFT's Digital Role

In terms of telecoms infrastructure, SFT is working with Scottish Government ('SG') to develop an implementation strategy to deliver Scotland's world class digital vision as described in SG's Scotland's Digital Future - Infrastructure Action Plan¹. For this vision to be delivered, it is imperative that both consumers and enterprises in Scotland have access to digital services and mobile connectivity to enable connection and content. This requires both infrastructure and devices to achieve:

- Seamless delivery across fixed and wireless platforms;
- A quality of service and experience commensurate with other leading and modern digital economies; and
- Investment into Scotland's digital infrastructure that will guarantee the country's future competitiveness, as well as its ability to provide enhanced public services and opportunity to its citizens.

A key aspect of this work is to assess the wide range of potential interventions that could be considered to enhance the opportunity for investment in digital infrastructure across Scotland. This includes UK and Scottish Government policy and regulation, as well as establishing the drivers that will stimulate efficient and effective private and public sector investment.

In Scotland the demand for data has increased significantly in recent years and with it the demand for seamless broadband and mobile connectivity. Anecdotal evidence, together with Ofcom and other studies, indicates however that the customer quality of experience is a mixed one. For many (regardless of geography), it is one of unreliable, slow broadband and mobile connectivity services. This experience is replicated in both the consumer and business connectivity markets. There is therefore a strong case to ascertain whether adequate investment and innovation has been delivered into those, primarily regional markets. For some, there has been significant improvement in terms of superfast broadband and 4G coverage, alongside growth in the number and types of connected devices. This has largely been in urban and economic centres. Convergence has also changed how people access services, and indeed OTT content has grown exponentially over the last few years again for some. It is this experience that we want to see replicated across the country.

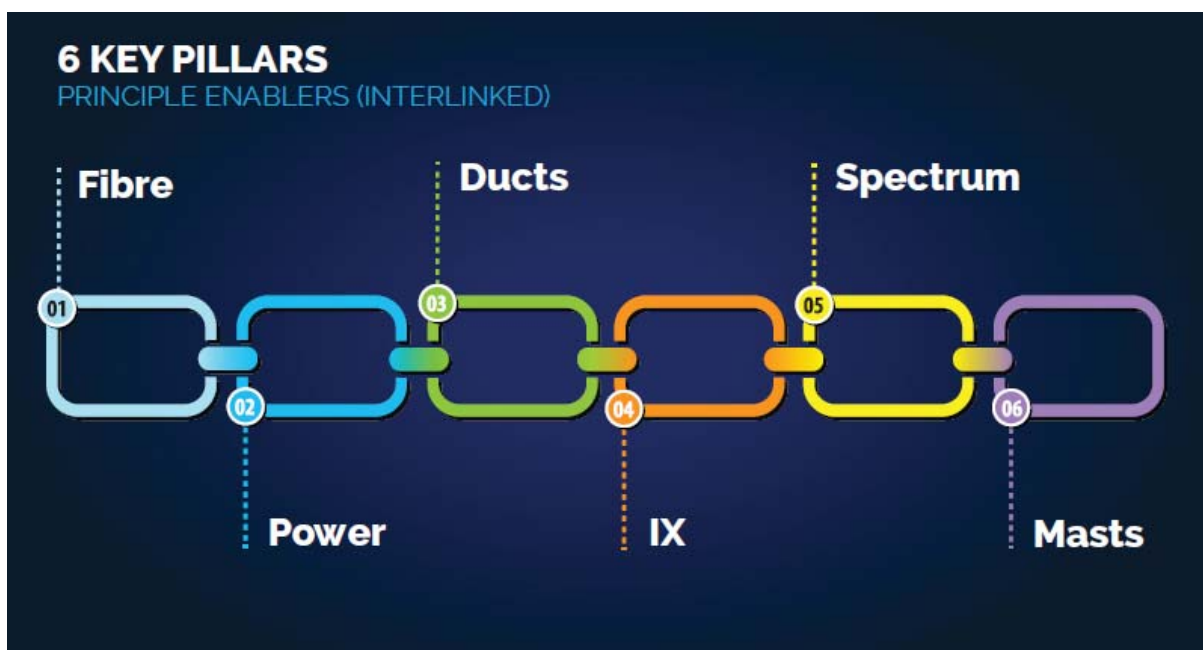
As we highlighted in our recent response to Ofcom's Strategic Review of Digital Communications, it is recognised that Ofcom has applied certain remedies, but based upon consumer outcomes we suggest that there is significant scope for both Ofcom and the wider public sector to be increasingly proactive as regards driving market change and performance. We believe such approaches should be part of an overarching UK Regime, but should also address the needs and requirements of regional businesses and consumers. Ultimately, the ability to deliver an efficient, competitive telecommunications market for all will deliver significant benefit. To assess these potential benefits, SFT commissioned Deloitte² to consider the impact of Scotland achieving its world class digital vision. The findings of the report captured the potential of such a vision in fiscal, economic and social terms. The report found that the potential benefits arising from achieving such a vision were significant in

¹ <http://www.gov.scot/Resource/0038/00386525.pdf>

² http://www.scottishfuturestrust.org.uk/files/publications/Impact_of_digitalisation_in_Scotland.pdf

economic, fiscal and inclusion terms. Achieving a world class digital vision also improves a number of social dimensions: access to public services, greater social cohesion and inclusion and a reduced cost of living, amongst others. This includes looking at the potential benefits of increased digitalisation on services such as healthcare and education provision and services. As highlighted, the 'prize' of enhanced digital communications offers significant benefit, and indeed has the potential to significantly improve competitiveness, productivity and innovation.

From a digital communications infrastructure point of view, SFT and SG have identified six key pillars that are key to Scotland's digital environment being ready for a new generation of connectivity, 5G. The ITU has already defined that a 5G ready network will have to provide data speeds of up to 20Gbps. If Scotland is to be prepared for this, it is imperative that it has the underlying infrastructure in place. Spectrum is one of those key pillars, and therefore its management and availability will be key to achieving this future vision.



A proliferation of fibre connectivity will be critical. Copper infrastructure will not sustain a future ultra-high speed, resilient network and the transit of information. The installation of this fibre will require working with different industries and local authorities to ensure adequate infrastructure is thought about when planning new developments or new buildings. Likewise, it is envisaged that there will be a higher concentration of small cell technology in the urban environment to deliver the headline speeds. This will need the co-operation of Government and local authorities to ensure an appropriate planning and policy framework. It is also essential that this is all supported by sufficient power, from the urban to rural areas. Spectrum will have a key role to play, however, this is not just about availability. Additional obligations that may come with new spectrum auctions should allow for ubiquitous 5G coverage from the urban to rural areas and drive the right products to use services in an affordable and accessible way. Ultimately, new advances in technology will require near instant information resource (latency of <1 ms) and will require that information be closer to the user. Scotland to achieve this world cannot rely on information being stored in internet exchanges in London or Manchester: it needs to be in Scotland. For Scotland, the six pillars provides a base upon which to consider the future world and ensures that it will be 5G ready when industry comes to its deployment.