

KCOM Group PLC

## Digital Communications Infrastructure Strategy

### Submission by KCOM Group PLC

1 October 2014

**Non-Confidential Version**

#### 1.0 Summary

- 1.1 KCOM Group previously provided input to the Department of Culture, Media & Sport (DCMS) on the Terms of Reference for developing a UK Digital Communications Infrastructure Strategy and we welcome the opportunity to comment on this further consultation.
- 1.2 We agree that there is a need to plan ahead to make sure the right infrastructure is in place to meet the UK's objectives and, perhaps more importantly, to meet the needs of users in the UK. In order to do that it is vital that the Government is aware of potential roadblocks and has strategies designed to remove barriers which industry may face. However, we would caution against pre-judging market development and taking specific action in order to try and force its evolution. Rather the Government should focus on ensuring that the right framework exists to incentivise investment and only step in when it is clear that the commercial sector is not going to provide. In particular, while we accept the need for Government funding to be made available to support the deployment of superfast broadband, this must be done on a basis that will ensure the maximum impact from the public monies available and that Government funding is targeted only to those areas where it is needed.
- 1.3 In this response we focus on those sections of the consultation which are of particular concern to our business, Section 4 - Competition and regulation and Section 5 - Facilitating and encouraging investment, and respond to those questions which are most relevant for us. These are the key areas which will have a real impact on our investment decisions moving forward and are areas where the Government has the potential to ensure that the UK provides the right environment to encourage investment and innovation.



## 2.0 Introduction to KCOM Group

- 2.1 KCOM Group delivers communications services to a range of businesses and consumers throughout the UK under a number of different brands, including the KC brand. In Hull and parts of the East Riding of Yorkshire, KC is the main provider of communications services to businesses and consumers. KCOM owns and operates the network in the Hull and East Yorkshire area as one of the two UK incumbent providers, BT being the other. As such we have a key role to play in the deployment and provision of communications infrastructure and services.
- 2.2 Broadband services delivered using ADSL2+ technology and with a minimum speed of at least 2Mbit/s are available to our entire customer base in Hull. In July 2011 KCOM announced plans for an initial deployment of a broadband fibre access network to 15,000 homes over an 18 month period. Our first customers were connected in September 2011 on a trial basis and we formally launched KC Lightstream and KC Lightstream Business services in January 2012 ([www.kc.co.uk/lightstream](http://www.kc.co.uk/lightstream)). In October 2012, KC completed its initial deployment of superfast fibre technology successfully and our next phase of the deployment of fibre currently being undertaken will pass a further 30,000 homes and businesses by March 2015. Currently 3,000 premises have been passed in total with approximately 1,000 connections.
- 2.3 Our technology of choice for the delivery of superfast broadband services is Fibre to the Premises (FTTP) which allows us to deliver guaranteed download speeds of 100Mb/s and 350Mb/s and is capable of delivering speeds of 1Gb/s. FTTP delivers faster download speeds than Fibre to the Cabinet (FTTC), which is BT's technology of choice for the bulk of its deployments. KCOM has opted to deploy FTTP not only because of the faster speeds it can deliver today but also because it will allow us to meet our customers' broadband speed requirements well into the future and it will undoubtedly support any products and services that are developed in the future. It also has the advantage of not being impacted by electrical interference and many other factors that can degrade internet service provided over copper.



### 3.0 KCOM network deployment and customer take-up and use of services

- 3.1 As noted above, currently some ✂ premises have been passed in total. KCOM aims to have passed 45,000 premises with our high-speed fibre deployment by the end of March 2015. We expect to take decisions regarding future investment in the not too distant future.
- 3.2 In deciding to focus on FTTP, we were mindful of the need to ensure that we deployed a longer-term solution that has the capability to meet the future needs of all of our customers. We were also very aware that while FTTC provides an improvement for those customers within 900m of a cabinet, beyond that distance and looking out further than 2020, FTTP provides the only solution to meet predicted future demand. Indeed, our guaranteed speed proposition with FTTP has proved to be a much more compelling one with customers than an “up-to” one with copper or FTTC. Customer demand has exceeded expectations.
- 3.3 The KC network has seen significant growth rates over the last few years:
- Traffic across the network grew by circa 200% between 2007 and 2010, with increases in 2010 and 2011 of 40% per annum. Half of the traffic over our network was bandwidth hungry such as video and file-sharing. The peak core bandwidth has increased from 6Gg in 2011 to 34Gg in 2014.
  - The average peak time usage across the KCOM network in Hull from all users (measured in kbps) increased by 25-30% each year, in 2010 and 2011.
- 3.4 More importantly, our fibre deployment has enabled us to begin assessing what impact the availability of higher speed services has on customer data usage. KCOM provided data as part of a case study included in Ofcom’s 2013 Infrastructure Report<sup>1</sup> which looked at how data use varies by time of day, by heavy and light users and by fibre and ADSL users.

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<sup>1</sup> <http://stakeholders.ofcom.org.uk/market-data-research/other/telecoms-research/broadband-speeds/infrastructure-report-2013/>



KCOM Group PLC

- 3.5 Ofcom's analysis suggested that there is a strong correlation between data use and connection speed even for superfast broadband connections. The data provided by KCOM showed that fibre customers on average use 44% more data than ADSL customers. Average browsing traffic generated by fibre subscribers was 49% higher than for ADSL subscribers, and average video was 35% higher for fibre subscribers. This, together with evidence of previous traffic growth and customer usage is helping shape our understanding of future demand.

#### 4.0 Competition and Regulation

***Q27 How might efficient investment in communications infrastructure be supported, for example by changes in the regulatory framework?***

- 4.1 The economics of NGA are challenging and the regulatory framework will have a fundamental impact on decisions regarding deployment of superfast broadband services and the development of competition in the UK broadband market. Clearly any commercial investor contemplating entering this market will be concerned that their legitimate commercial returns may be eroded by regulatory remedies, particularly with respect to the allowed rate of return on capital employed in the provision of any wholesale services they may be obliged to provide to other service providers.
- 4.2 To deliver NGA, significant new investments will be necessary, at the active electronic system level and in terms of passive fibre and duct infrastructure, as well as at the support systems (OSS/BSS) layer. In order to avoid damaging the prospects for such investment it is important that appropriate economic signals are sent. In regulatory terms, we believe that a flexible approach to the pricing of active wholesale products is vital, allowing a higher cost of capital, which reflects the real risks of speculative investment. We believe the provision of services should always be subject to a reasonable demand test and full cost recovery.
- 4.3 The key regulatory question is this: What would sustainable competition look like with these new network architectures? Whilst accepting the current regulatory encouragement of investment at the deepest level of network competition possible, we believe that there



**KCOM Group PLC**

are different considerations that need to be taken into account when considering competition in this emerging market. The economics are fundamentally different to the deployment of ADSL services with very high incremental investment levels needed per customer served. Ultimately it may be that competition at deeper network levels would be economically inefficient and unsustainable and the regulator must be mindful of this in determining the appropriate regulatory framework.

- 4.5 It is also vital that pricing for existing wholesale copper services is not subjected to downward pressure despite suggestions that reducing copper prices could be used to encourage greater investment in fibre. Indeed, KCOM believes that any moves to decrease these prices would simply result in lower returns for network providers, which in turn reduces the scope for further superfast broadband infrastructure investment. The aim should be to create stable and predictable regulation of both existing and emerging services in order to provide the certainty required to support investment.
- 4.6 We note that KCOM's position as incumbent in the "Hull area" offers both the company itself and policy makers some unique challenges. Whilst we are happy that the services we provide are fit for purpose and offer real value for money, we are not blessed with the scale and in depth resources of the UK's other incumbent, BT. In the regulatory world, the doctrine of "proportionality" has allowed Ofcom to develop and apply regulatory obligations and remedies that recognised these differences and have not generally been unduly burdensome.
- 4.7 However, we believe that a duty to promote efficient investment would provide a valuable additional test in terms of the reasonableness of any regulatory obligations. Indeed an additional duty was proposed as part of the Digital Economy Bill in 2010 but was removed before the Bill was passed. We appreciate that Ofcom already does consider efficient investment in terms of its policy and decision making, as evidenced by the approach which Ofcom has indicated it will take on the pricing of active NGA wholesale products. However we see no harm in including a specific duty to underpin this type of approach.



KCOM Group PLC

***Q29 Is there a role for a revised USO or USC to ensure that minimum consumer demand requirements are met and to reduce the potential for a new digital divide? What might this look like?***

- 4.8 Before determining whether there is a role for a revised USO or USC to ensure that minimum customer demand requirements are met and to reduce the potential for a new digital divide, we believe that there is a need for a much more fundamental review of demand and needs, current and proposed market delivery and existing USO obligations.
- 4.9 The current USO places not insignificant obligations on KCOM and BT in relation to the delivery of voice services and has not been subject to an extensive review for many years. In some respects it is outdated, for example requirements relating to the provision of payphones, and as technology develops we can envisage that the current focus on voice services will become increasingly irrelevant.
- 4.10 Alongside this it is vital that before any additional commitments are placed on CPs it is demonstrated that they are necessary and proportionate. This requires an in-depth understanding of customer demand and needs and how the market is meeting those requirements. Only once this has been determined can any real consideration be given to whether there is a need for any further obligations and if so what who they might apply to and what they might look like.

***Q31 Are there changes to the EU Framework that the UK might seek to encourage more competition in UK markets?***

- 4.11 See our comments above in relation to the USO. The USO derives from the European Framework and as such if fundamental changes were to be made to the USO then that may require revision of the EU Framework. We also note our comments in response to question 23 below.



***Q32 Should Government seek changes to the European Framework which put more reliance on competition law and how might this be done?***

- 4.12 KCOM would welcome proper consideration as to whether more reliance could be placed on competition law as opposed to sector specific regulation.
- 4.13 Because of KCOM's market position in Hull our business is subject to sector specific regulation at both a retail and wholesale level. More recently a number of retail obligations have been removed with Ofcom choosing to rely on competition law to address any issues. The removal of this regulation has in part been driven by a realisation that retail regulation was in fact preventing us offering customers propositions which would have provided significant welfare gains. For example, until 2010 we were prevented by regulation from offering customers bundles of services which are widely recognised as offering better value for money. This was despite any evidence of consumer harm and no formal investigations being launched by Ofcom into KCOM's behaviour either under ex-ante obligations or competition law.
- 4.14 Similarly KCOM has faced no formal investigations with regard to the wholesale markets in which it has been found to have SMP. And while we support the pragmatic approach Ofcom has previously taken to the imposition of remedies in the Hull area, particularly the recognition that the introduction of charge controls would not have the effect of encouraging others to enter the market, ex-ante regulation is not in itself enough to ensure efficient and effective market entry. Any sector specific regulation will always have a cost impact without the guarantee of any material improvement to the competitive landscape.
- 4.15 As we have noted above, the economics of NGA are challenging and any commercial investor contemplating entering this market will be concerned that their legitimate commercial returns may be eroded by regulatory remedies. Greater reliance on competition law would provide businesses such as KCOM with more certainty regarding their obligations without the threat of additional obligations and cost being imposed as a result of the imposition of ex-ante regulation through periodic market reviews.



***Q35 Are there any changes to legislation other than the Communications Act that would incentivise the provision of communications infrastructure?***

4.16 While we do not comment in detail, we note that the Electronic Communications Code presents a number of challenges for CPs wishing to deploy infrastructure and has been the subject of protracted discussions regarding reform. We would urge Government to accelerate its work in this area to remove one significant barrier to the deployment of communications infrastructure.

***Q36 Would there be benefits to investment from a focus on broadband only services? Are there any barriers to the emergence and adoption of broadband only services, whilst still providing necessary access to emergency services?***

4.17 Our key concern here are obligations which might prevent the move to an all-fibre environment rather than talking in terms of benefits to investment from a focus on broadband only services. There is a clear need to ensure that the regulatory regime is adapted as necessary to enable an all-fibre environment. We address this further below.

## **5.0 Facilitating and Encouraging Investment**

***Q37 How might copper access networks evolve over time alongside other access technologies? Is there a role for policymakers in helping manage any transition from copper to other access networks?***

5.1 Plans for and deployment of NGA networks have accelerated considerably and we believe there is likely to be a significant increase in the deployment of FTTP over the coming years. As a result we can envisage a situation where CPs will want to capitalise on the operational efficiencies that an all-fibre network can deliver, with removal of copper assets being a key enabler to achieving those efficiencies. Provision of all-fibre infrastructure will drive enable the delivery of more cost-effective solutions which can only benefit consumers and businesses. A survey of providers in North America found that small and





#### KCOM Group PLC

medium-sized telcos that have upgraded their networks to all-fibre are reporting operational cost savings averaging 20 percent annually.<sup>2</sup>

- 5.2 But to ensure this, it is key that the right regulatory environment exists in order to provide certainty, encourage the necessary investment and enable CPs to migrate their customers at an appropriate time.
- 5.3 Many of the existing regulatory requirements are based on the provision of analogue services over copper and will require significant review should a provider wish to move to an all-fibre network and realise operational efficiencies by removing copper networks. For example, KCOM has a clear obligation to provide retail voice services, payphone and basic internet access under the Universal Service Obligations but this requirement applies to “narrowband” services. Review of the regulatory framework to ensure there are no barriers to all-fibre networks is an essential prerequisite to ensure continued investment by providers.
- 5.4 Part of this review must encompass current requirements to provide battery back-up for all-fibre services. Ofcom’s current guidance, issued in December 2011, requires that a battery back-up should always be provided to support publicly available telephone services (PATS) provided over FTTP and the minimum duration of the back-up facility should be 1 hour.
- 5.5 This requirement imposes considerable additional costs on providers wishing to deploy all-fibre solutions and will act as a significant barrier to realising the efficiencies that a move to an all-fibre network will bring. KCOM acknowledges the importance of customers having the ability to access emergency services but would argue that given the low level of risk previously identified by Ofcom and the widespread use of mobiles, placing an obligation on all-fibre providers is an unnecessary and costly measure which has the potential to have a serious impact on the provision of these services.

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<sup>2</sup> <http://www.ftthcouncil.org/p/bl/et/blogaid=182&source=1>

