

Business Broadband – Call for Evidence

A submission from the Federation of Communication Services.

The Federation of Communication Services represents companies who provide professional communications solutions to professional users. Our members deliver telecommunications services via mobile and fixed line telephony networks, broadband, satellite, wi-fi and business radio. Our members' customers range from SMEs, home-workers and micro-businesses up to the very largest national and international private enterprises and public sector users. FCS is the largest trade organisation in the professional communications arena, representing the interests of nearly 400 businesses with a combined annual turnover in excess of £45 billion.

In the context of this consultation, it should be noted FCS members are themselves almost exclusively SME businesses. They therefore provide an unique sounding-board against which to test the consultation's initial conclusions. FCS stands ready to facilitate those interactions in whatever way makes most sense.

FCS has long been concerned to ensure the nation enjoys ubiquitous and cost-effective access to business-grade broadband connectivity. Without high quality, affordable and ubiquitous connectivity – preferably available from a choice of more than one supplier -- it is impossible to deliver the hosted databases, value-added call-handling and recording functionality and cloud-based software solutions which empower business growth and efficiency in the present age.

FCS is therefore pleased to see the specific needs of the business community for Digital Communications is receiving the focus from government that it has so long deserved. Business users have been treated largely as bystanders in the broadband roll-out policies of successive governments. These policies have aimed at improving the ability of telecoms operators to sell bundled services to consumers, rather than ensuring the cost-effective provision of vital connectivity to the companies which employ them.

For too long, vital overarching policy guidance has been missing from this sector. Whole areas of the country have been left at the whim of a single incumbent network provider, and it has been impossible for businesses to plan and invest with confidence in their digital future. Digital Communications in this context should be defined to include both 'active' infrastructure (fibre backhaul and the copper network) and 'passive' infrastructure (radio and telephone mast sites, ducts and poles).

It has long been FCS's view that the regulation of the UK markets for broadband and for both fixed and mobile telephony passive infrastructure need to be scrutinised from first-principles, both by the Regulator and by Parliament. In this regard, we welcome the inclusion of Digital Infrastructure within the remit of the National Infrastructure Commission as a vital development of the necessary resource to facilitate this process.

Main concerns:

1. Setting even a five-year strategic window is a herculean task. Especially in an industry like telecommunications, where the technologies which our infrastructure delivers are developing at such a fast pace. See, for example, the strategic ‘what-if’ scenarios in DCMS’s 2014 UK Digital Communications Infrastructure Strategy consultation. In the light of recent industry developments (for example, the growth of voice-over-wi-fi mobile calling or the acquisition of Everything Everywhere by British Telecom, or of Airwave by Motorola), some of these scenarios already appear irrelevant or out of date.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/346054/DCIS_consultation_final.pdf
2. The policies of successive governments towards the digital communications sector have concentrated on what we might call the art of the possible. Inducements and commitments have been entered into with the incumbent provider which have worked to successfully deliver short-term political objectives. In the process, existing legacy technologies have not been replaced, and new entrants have been restricted from entering the market place. What is missing is the clear long-term objective, against which inward investors and incumbent industry participants can plan a strategic future path.
3. The power and flexibility of modern business telecoms and IT solutions are still comparatively recent developments in the career lifetimes of many UK business people. Many of today’s business leaders started their working lives in the days of central switchboard operators and fax machines. So there is often no innate common understanding of what is possible.
4. This low level of understanding is compounded by the fact that IT and comms upgrades are an infrequent purchase, and are often approached in silos. Many businesses employ IT managers who learned their craft maintaining and supporting hard-wired computer hardware, rather than deploying Apps. In any event, ad-hoc deployment of task-specific Apps can create systemic compatibility problems. And faults created by coding or programming glitches within the Applications inevitably fall back upon the in-house IT professionals to fix, rather than upstream suppliers (for fuller discussion of these issues, we would refer you to the IT Service Managers Forum – www.itsmf.co.uk)
5. Because IT and comms have become so vital, so quickly, neither business users nor government have been able to keep pace. Witness the development of Cyber Essentials, for example, in response to a specific concern that sub-contractors’ systems could provide a means to compromise sensitive public data. Cyber Essentials contains no provision to secure a company’s telephone system. Not because this is not best practice or because it’s not desirable, but simply because the solution was developed as a response to what was seen as a specific IT problem. Attempts to develop best-in-class legislative approaches to cyber crime are hampered in practice by the silo’d responsibilities of BIS, DCMS, Home Office, Treasury and Cabinet Office.

6. Nobody is going to sell you a product they can't deliver. Lack of high-quality, affordable business-grade connectivity means Comms Providers have no incentive to even enter into conversations with some business people about the transformational impacts of modern communications solutions. Business owners may well wish to move from in-house servers to cloud-based solutions; to avail themselves of pay-as-you-go access to the latest software or to move from a cap-ex to an op-ex approach to IT. But none of this is even imaginable without reliable high-speed connectivity.

Current and future business needs

- 1.1 At the risk of stating the obvious: if we had asked businesses 10 years ago – or even five years ago – what their current and expected broadband needs would be, it is unlikely we would have foreseen today's demands. Demand is driven by two factors: what is actually needed to enable and sustain business processes (including interactions with customers and peripatetic employees) and what is brought to the market by third parties to enhance and improve those processes.
- 1.2 Most of the growth in demand over the last few years has been a function of technology enabling new ways of doing things, rather than technology satisfying a clearly articulated demand from business. By its nature, therefore, it is unlikely most business users will be in a position to 'know what they don't know'.
- 1.3 Technology companies who make their livings bringing new business solutions to market have no clear incentive to deliver bandwidth-efficient solutions.
- 1.4 Businesses are starting to learn that 'speed' is a very blunt proxy for 'availability'. BT FTTC broadband may offer headline 80MBps download, 20MBps upload speeds. But it typically contended 1:20 or even 1:50. Hence a 10MBps leased-line in which 100% availability is guaranteed to the single lessee may well deliver a more consistent experience.
- 1.5 These arguments can be observed especially in discussions between landlords and tenants. They are a major factor for any business which is looking to relocate or expand. There is strong evidence that unavailability of business-grade connectivity is a major inhibiting factor for owners of rural estates wishing to diversify by converting farm buildings into offices.
- 1.6 In this context, therefore, the current proposals for a Universal Service Obligation are missing one vital word – 'Uncontended'. If you tell businesses they have a right to ask for 10MBps, they will expect to get 10MBps. Not have to share a 10MBps line with 20 other people. Without a service level guarantee, the promise is entirely meaningless. Worse, it is likely to be a recipe for disappointment and frustration – especially if businesses who have asked for the USO make investment decisions in anticipation of the imminent delivery of a 10MBps service.

- 1.7 It should be noted these concerns arise purely because UK government policy continues to promote (and subsidise) the build-out of connectivity solutions which rely upon the legacy copper network. This approach has delivered short-term improvements, but at the expense of long-term future-proofing. We are reaching the upper limits of what is technically possible via copper. This is particularly noticeable in locations which are geographically remote from the nearest fibre-enabled cabinet, because signal decays with distance over copper. So the UK has business consumers who technically have ‘next generation access’, but still struggle in practice to obtain download speeds in excess of 1Mbps. <http://www.ispreview.co.uk/index.php/2014/03/gigaclear-bring-10gbps-fibre-optic-broadband-oxfordshire-business-park.html>
- 1.8 Fibre To The Premises solutions essentially give each individual user a personal leased line with access at pretty much any speed the user is willing to pay for. There is no need to factor in transmission losses over copper wires; the cost and quality of service delivered is simply a matter of configuring appropriate hardware.
- 1.9 FCS believes the [EEF’s submission](#) to this Call For Evidence represents an excellent reflection of the state of the manufacturing market. But it should be remembered manufacturers are, by nature, clearly focused on business systems and constantly benchmarking themselves against their peers, both in the UK and internationally. Compared with many other business sectors, therefore, manufacturing’s degree of awareness of its current and present needs is ‘best in class’. Many SMEs in the service sectors lack the degree of sophistication, resource or strategic foresight which typify the disciplines of manufacturing.
- 1.10 If you are used to poor-quality connectivity, and there is no compelling reason to relocate or spend a lot of money upgrading, you simply build your business expectations around putting up with poor-quality connectivity. A useful proxy might be to think in terms of using the kind of mobile phone handset with which many of today’s businesspeople cut their teeth: you could make calls, send SMS messages and play ‘snake’. Whether or not that’s all you needed to do, or all you wanted to do, the fact remained that that’s all you could do. The only reason anybody’s going to offer you an i-phone is because there is no barrier at network level to prevent you swapping out the SIM and enjoying a richer level of functionality.
- 1.11 Which leads to the final point: connectivity is connectivity. Customers do not care whether they consume that connectivity via buried cables, point-to-point microwave links, wi-fi repeaters, satellite signals or (as in the Republic of Ireland) wires nailed to pylons and telegraph poles. We talk about the core network because it is robust, ubiquitous and familiar. But strategy for future-proofing the UK’s infrastructure need not and should not inadvertently favour one delivery platform over another.

How could government help?

- 2.1 Experience from the BDUK Connection Voucher Scheme points to a general lack of understanding

among business people of the transformational power of high-quality business connectivity. BDUK's response was to create a series of case studies, to encourage business people to consider what a difference a 'step change' in connectivity might make to their own businesses. But see Main Concern comment 6 above: it made sense to do this only because the Connection Voucher Scheme was putting into the hands of business the capability to make this transition. FCS recommends some resources be allocated to examining the feedback from the Connection Voucher Scheme (and the new, business-specific extension currently underway under the auspices of the Welsh Government), and comparing them to responses from the inter-departmental [Cyber Streetwise](#) initiative, which attempted to tackle a similar level of business ignorance on the subject of cyber security.

- 2.2 Government approaches to business connectivity need to be consistent and strategic. The decision to include digital infrastructure within the purview of the National Infrastructure Commission is an important step in this direction. And the joint working between BIS and DCMS in this present project is great cause for encouragement. NIS = Treasury. Cyber Streetwise = Home Office, BIS and Cabinet Office. These segmented, departmentalised workstreams too easily become proprietorial and detached from best-practice experience which may exist elsewhere within government. FCS recommends the creation of a new Commons Select Committee on the Digital Economy to create an appropriate and accountable Parliamentary vehicle through which best practice might be shared and encouraged.
- 2.3 Business customers rely greatly upon the expertise of third party comms providers and IT support companies to inform their choices. Cost of entry to both of these professions is low, and there is no pre-qualification or accreditation procedure to prevent anyone setting up as a practitioner. FCS believes industry self-regulation and professional ethics are a surer guide to the long-term vitality of the sector than government regulation. But government support, encouragement and endorsement of industry best-practice schemes sends a useful signal to industry and encourages consumers to ask more informed questions. (Witness, for example, Crown Commercial Service and the Home Office ESMCP programme's insistence on the FCS1362 Code Of Practice for installing radio-frequency equipment into road vehicles).
- 2.4 Government could encourage the use of some high-level 'bandwidth hunger' indicator by software providers. Something along the lines of the traffic lights in food packaging. Just a means to give customers an indication of how much bandwidth such and such an application could be expected to require if run on, say, a tablet device as a mobile app, or in a remote desktop environment or accessed on-demand from a remote server.
- 2.4 In the same vein, modest amounts of government seed-corn funding would be sufficient to encourage industry to create '10 Questions to Ask Your Internet Provider' – style reference guides for business customers. A suite of such documents could be hosted on various industry associations' web-sites and used by their own members, creating a huge multiplier effect at exactly the right point – the point of the business consumer making a purchasing decision.

SUBMISSION ENDS