

# Response to interim Digital Britain Report

12 March 2009



## Introduction

1. The BSG welcomes the opportunity to comment on the interim Digital Britain report (iDBR). The issues raised in the report have been rising up the policy agenda for some time, however the need to address them has been made more urgent by the financial crisis and wider economic recession. This is not simply because wider economic conditions are making the challenges facing the sector more acute, but because the future prospects for the economy as a whole are to a degree dependent on our ability to successfully resolve these issues and deliver the full promise of Digital Britain. If the UK is to emerge from this recession as an efficient, competitive, low carbon, knowledge economy then it will need both a world-class digital infrastructure and the capability to put that infrastructure to full efficient and productive use. For this reason we believe that Digital Britain must be one of the central pillars of the UK's economic recovery plan.
2. We welcome the interim Digital Britain Report (iDBR) for three reasons: firstly, it provides the clearest statement yet from government about the importance of digital networks and services for the wider economy; secondly, it takes a holistic view of digital Britain, recognising the impacts of digital convergence and pulling together what have, perhaps for too long, been regarded as distinct threads; and thirdly, it recognises the need for action given the challenges facing the sector and the wider economy.
3. The scope of the iDBR is ambitious and the timescales are challenging. It would be unreasonable to expect that all of these issues can be resolved in fine detail by the time of the final report. What is required however, is sufficient clarity on the key issues of policy to ensure that there is certainty about the government's ambition for Digital Britain and agreement on the practical route forward.
4. One issue raised in the introduction to the iDBR but not addressed in detail is the relationship between Digital Britain and climate change. Not only will there be opportunities to reduce the carbon emissions related to the deployment and use of digital services, there will also be opportunities to drive changes in behaviour across the economy related to the way in which these services are used. While this issue is probably too broad and complex to be dealt with in any detail by the DBR it should not be overlooked. Some indication of how the DBR links across to the government's wider Low Carbon Industrial Strategy<sup>1</sup> should therefore be made in the final report.
5. The following comments on the interim report follow the structure of the report itself. We comment on most aspects of the report, although we have not commented on the aspects related to public service broadcasting.

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<sup>1</sup> <http://www.berr.gov.uk/files/file50373.pdf>

## Action 1 Review of prospects for next generation broadband

6. The continued evolution of broadband is clearly of central importance to any vision for Digital Britain. Economic conditions have worsened significantly since the publication of the Caio report making it sensible to take stock once again of the likely prospects for NGA deployment in the UK. However, it should be noted that the evolution towards next generation broadband is still at a very early stage making it difficult to predict with certainty what the likely pace or extent of deployment will be.
7. That said it is clear that the transition to next generation broadband has begun. Although existing broadband infrastructures should be capable of meeting the needs of many residential consumers over the next few years, operators are now taking initial steps towards next generation broadband deployment. Virgin Media's new 50Mbps service should be available to 50 per cent of households by mid 2009 and BT, following the publication of Ofcom's recent statement on its regulatory approach to superfast broadband<sup>2</sup> has re-stated its intention to make its FTTC service available to approximately 40 per cent of households by 2012<sup>3</sup>.
8. A wide range of supply and demand side issues will need to be considered in order to make an assessment of the pace and extent of next generation broadband deployment. These include the costs and capabilities of the various fixed and wireless technologies; likely demand and willingness to pay; the nature and extent of competition; and wider commercial, policy and regulatory factors which might impact upon costs and demand.
9. Analysing the potential costs provides one route to understanding the likely extent of market deployment. According to the BSG's own research<sup>4</sup>, the costs of deploying FTTC per premises connected remain relatively constant up to about the first 58% of UK homes (ranging between £360 to £450 per premise). This suggests that once a commercial business case is proven for FTTC deployment, then that case could be broadly applicable across the first 60 per cent or so of premises.

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<sup>2</sup> [http://www.ofcom.org.uk/consult/condocs/nga\\_future\\_broadband/statement/statement.pdf](http://www.ofcom.org.uk/consult/condocs/nga_future_broadband/statement/statement.pdf)

<sup>3</sup> <http://www.ft.com/cms/s/0/28f7d550-07d2-11de-8a33-0000779fd2ac.html?ftcamp=rss>

<sup>4</sup> <http://www.broadbanduk.org/fibrecosts>

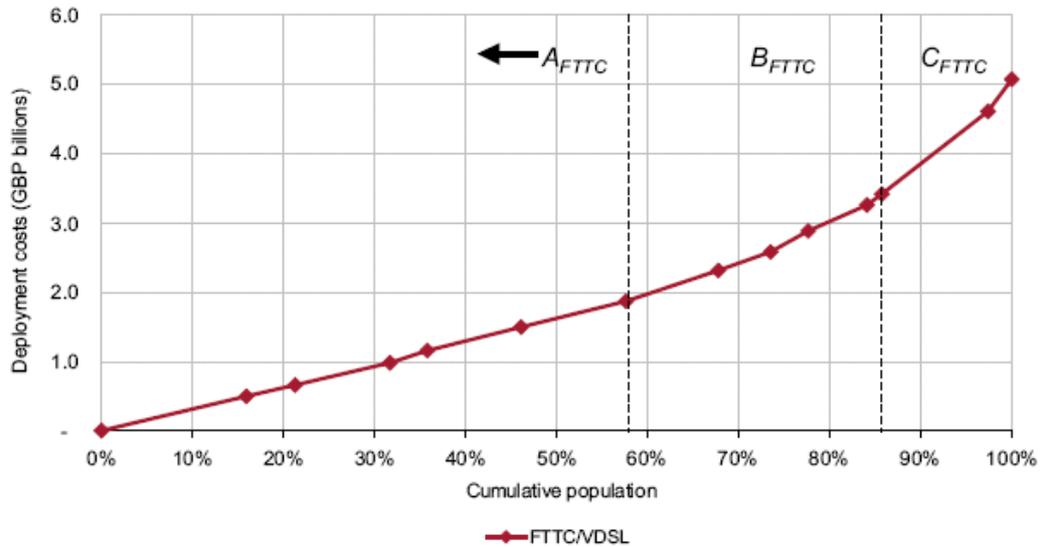
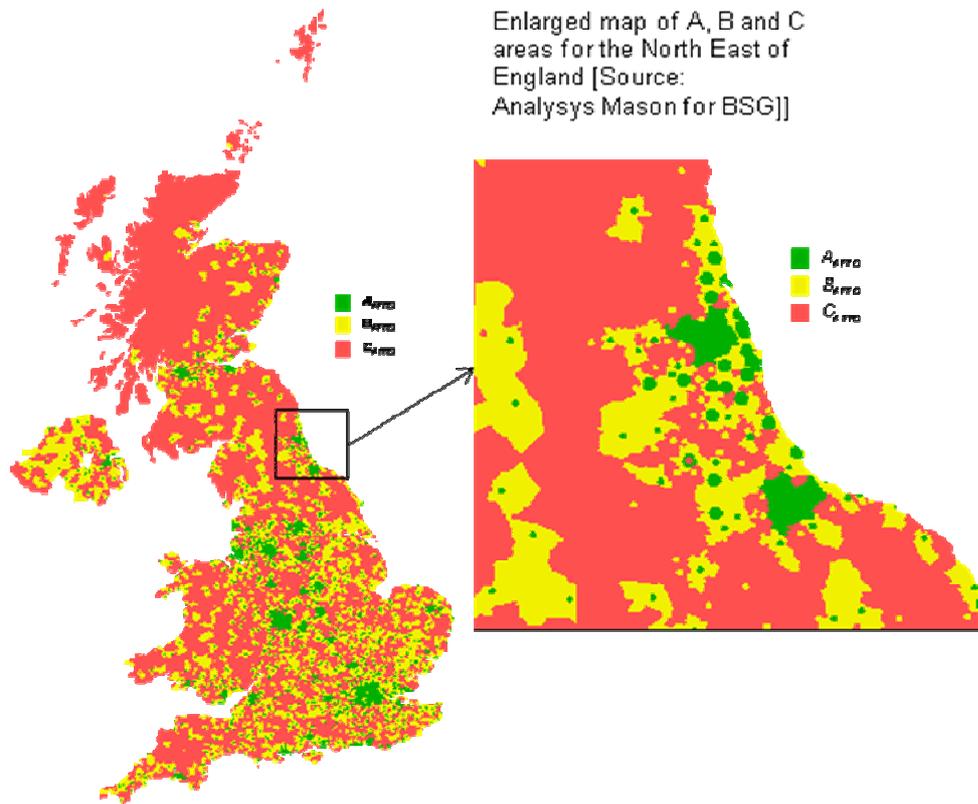


Figure 1.5: Total cost vs. percentage population for FTTC/VDSL [Source: Analysys Mason for BSG]

10. The map below provides an illustration of what FTTC broadband deployment might look like in practice, based upon the BSG’s cost model. Although the A areas cover 58 per cent of the population they cover a significantly lower proportion of the UK land areas. However, it should be noted that many of the A areas are in small pockets. These small pockets are within areas close to the centre of exchange coverage areas, and represent small but densely populated towns and villages that are served by smaller telephone exchanges in areas away from urban centres.



11. While good data now exists on the cost and capability of fibre based networks there is a lack of similar comparable data on the costs and capabilities of wireless and satellite networks. We believe this should be addressed.
12. However, looking at the costs alone does not provide a complete assessment of the likely extent of deployment. It will also be necessary to make some demand side assumptions about willingness to pay; likely levels of take up; competition and implications for market share. In the absence of hard data about the extent of demand in the specific UK market context (taking account of the strong market for digital TV) the best approach to doing this is likely to be through the development of a number of demand side scenarios.
13. A further key question relates to the ability of the sector as a whole to raise the funding necessary to invest in next generation broadband. Understanding the impact of the credit crunch and the wider economic recession on any potential investment plans will be critical in this regard.
14. The increased volatility and uncertainty seen in the capital markets over the last few months will have impacted on the cost of capital for the majority of businesses, Telcos included. This will impact on their ability to invest, and shareholder support for investment. The effect of the credit crunch on the cost of capital was acknowledged in Ofcom's second consultation last December on '[A New Pricing Framework for Openreach](#)'. Again this will need to be factored into the analysis.
15. The impact of the recession on consumer willingness to pay is more difficult to read at this stage. The pace of consumer broadband adoption did slow down in 2008 with 1.5m new broadband customers being added by the end of the year compared 2.3m in 2007. Although this slow down was predicted, with the market moving towards saturation point (where there are few remaining dial-up customers to be upgraded) it was exacerbated by a rapid decline in the number of people moving house.
16. There are few signs however that consumers are starting to forgo their broadband connections. Indeed, anecdotal evidence suggests that broadband is seen as a non-discretionary utility. However, with household budgets under pressure, it is still unclear to what extent consumers will be willing to pay more for higher performance services.
17. A key question in relation to the prospects for next generation broadband relates to the timeliness of investment. In order for investment to be timely from a UK economy perspective, it needs to both keep pace with the growth in demand for bandwidth from both consumers and businesses and keep pace with developments in other national markets.
18. In reviewing developments in other markets, it is important to consider not simply the availability of infrastructure, but also the level of take up and extent of productive use. A good example of such an approach is the connectivity scorecard<sup>5</sup> developed by Professor Len Waverman, (which provides a benchmarked assessment of 'useful connectivity' across 50 countries. We believe this approach could provide a very useful and informative basis for

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<sup>5</sup> <http://www.connectivityscorecard.org/>

assessing the relative strengths and weaknesses of Digital Britain in relation to other countries.

### **Action 2: Remove barriers to wholesale duct access**

19. The BSG's cost model research suggests that civil infrastructure<sup>6</sup> accounts for approximately 41 per cent of the total costs of FTTC deployment. Enabling wholesale duct access may therefore be of benefit in some locations for encouraging competitive provision of broadband access. However, Ofcom's recent study of BT's ducts suggests that although there is space, its availability is likely to be highly variable between any two points in the network and therefore the costs of any particular section difficult to predict. For this reason, wholesale duct access, while valuable in some locations, currently appears unlikely to provide a panacea for enabling large-scale market access and investment.
20. Government should explore options for encouraging and possibly incentivising other owners of civil infrastructure to provide wholesale access for the provision of broadband access.

### **Action 3: VAO ratings guidelines**

21. We welcome publication of the VAO's guidelines on the application of non-domestic rating to fibre. The BSG will host a meeting with the industry and VOA and BERR officials on 20<sup>th</sup> April in order to assist the government's efforts to raise awareness of the rating framework and gain feedback on the guidelines themselves.

### **Action 4: Consider the case for intervention on next generation broadband**

22. In several countries around the world the public sector has played a prominent role in supporting the deployment of next generation broadband. This has been done through a broad range of interventions, many of which have been developed at a regional or municipal level.
23. The case for public intervention on next generation broadband is dependent upon views about the wider economic and social value of next generation broadband to the UK, evidence of value emerging from international markets, and the likely pace and extent of market driven deployment.
24. In 2008 the BSG published a framework for evaluating the value of next generation broadband. Having developed a cost benefit framework and looked at some early indicators of value the report concluded that there is likely to be significant social and economic value from the deployment of next generation services in the UK, and it is likely that this value would significantly exceed the private value available to investors.
25. There may be a need to pay particular attention to the potential value of next generation broadband for the rural economy. Many of the benefits associated

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<sup>6</sup> Not including the cost of the cabinets and the active electronics, Source Analysys Mason for BSG

with next generation broadband may be more significant in rural areas; a lack of availability in rural areas is not simply a matter of equity and fairness, but could also be an issue of regeneration and economic development. However, because of their lower density of housing rural areas may be commercially unattractive to the market; if left unaddressed this could lead to a significant new digital divide.

26. There is a broad range of potential interventions that should be considered, that range in scale and cost from very low to very high. Demand side interventions could prove particularly effective given the high proportion of fixed costs involved in deploying fibre-based networks. However, any intervention would need to be carefully designed to ensure it was efficient and effective, and to ensure it did not prejudice future commercial deployment, particularly where the extent of commercial availability is likely to be variable across a local area e.g. if lack of availability is limited to a few “not spots” in an area, then a blanket intervention for the whole area could prejudice the commercial case for the whole area.
27. Clearly there are risks associated with premature intervention, including potential distortions to competition, undermining the potential for commercial investment and duplicating existing investment. It will therefore be important to ensure that if any intervention is made, it is both efficient and effective.
28. In 2008 the BSG published a report on models for effective and efficient public sector interventions in next generation broadband access networks<sup>7</sup>, which did a number of useful things. Firstly it set out a practical definition of what is meant by efficient and effective. Secondly, it categorised both the drivers for intervention and the different approaches taken across Europe – with a number of common themes emerging. Finally, although no single model of intervention emerged as most appropriate, the report identified six critical success factors, which if met, would help to ensure that interventions are more likely to prove efficient and effective in the long-term. We believe that the conclusions of this report should be re-examined when considering the case for intervention in next generation broadband.

#### **Action 5: Support CBN proposal for INCA/JON group**

29. The BSG’s report on models for public sector interventions also highlighted the need for greater coordination at national level between the various public sector and community organisations considering or undertaking projects and relevant private sector companies. This view was further developed in Francesco Caio’s independent review of next generation broadband in the UK. In that respect we support the proposal by the CBN to establish an umbrella organisation for local and community networks and welcome the government’s active support for this body.
30. Going forward the BSG is working with the CBN and service providers to develop a minimum set of standards necessary to enable commercial operators to offer retail services over local and community networks. This project is likely to look at a broad range of issues including: product design process; product capabilities and the level of ISP control of these; CPE; voice

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<sup>7</sup> <http://www.broadbanduk.org/psi>

provision; pricing structures and levels – commercial terms; provisioning and install arrangements; fault reporting/management, including coordination of engineer visits; contracts, including SLAs, SLGs and quality of service; migration and switching rules, processes and procedures; any other technical, operational and commercial interfaces; customer relationship management and network development over the investment lifecycle.

#### **Action 6: Wireless spectrum modernisation programme (WSMP)**

31. Spectrum based technologies clearly have a key role to play in the vision for digital Britain. The iDBR has identified a set of ambitious goals which, if achieved, could help to unleash the potential of wireless technologies to achieve UBC and NGB. We note that Kip Meek, the BSG's Chairman is playing a key role in leading the negotiations with the industry on the WSMP.

#### **Action 7: Consider including return path capability in DTV Help Scheme**

32. The inclusion of a return path capability within the scope of the DTV help scheme does seem sensible given that the full benefits of digital content and connectivity can only be enjoyed through a combination of digital TV and broadband access. Government will need to find a useful balance between the cost and complexity of set-top boxes and the capability, features and usability of services offered. This proposal also needs to be considered in the context of the ongoing work on project Canvas and other current and future commercial services which combine broadcast and broadband platforms.

#### **Action 8: Consider widening scope of Digital UK marketing**

33. Widening the scope of Digital UK's promotional remit seems sensible. It should be noted that a broadband take-up campaign will involve a different group of stakeholders than are currently represented on Digital UK. Care should be taken to ensure that extending the remit of Digital UK does not distract it from its current core task to support digital switchover.

#### **Action 10: Review case for further support for content**

34. UK originated content is important both as a vehicle for growth of the UK economy and to ensure that a wide range of high quality, home produced programming is available to consumers. However, it will also be an essential component of the next generation broadband value proposition for consumers. As well as reviewing the case for further support for UK content production, the DBR needs to also consider the way in which that content is distributed across the supply chain.
35. We are already seeing rapid growth in consumer demand for video on demand services which has been met by a rise in the number of VOD services and technologies in the market. However, as the recent Competition Commission report on Project Kangaroo concluded wholesale access to UK PSB-originated content will be essential to ensuring competition in these VOD platforms going forward. Given the close links between the market for VOD and demand for next generation broadband, the DBR should play close

attention to ensuring that content is distributed across the supply chain in a way that supports both content creation and the market for next generation broadband.

#### **Action 17: Develop plans for USC for 2012 (scope)**

36. With broadband increasingly being viewed as an essential utility by many households and small businesses there is clearly a growing rationale for extending coverage to the last remaining locations where broadband is either unavailable or of very poor quality. The BSG therefore supports the concept of a Universal Service Commitment. However, delivering on this ambition presents a number of practical challenges and the scope and terms of the commitment need to be carefully calibrated to ensure that the costs are proportionate with the potential benefits.
37. The iDBR suggested that the USC could be defined as being 'up to 2Mbps download' on the basis that this is what is necessary to deliver good quality video. This has provided a useful starting point for discussion, however, the following factors need to be considered when assessing whether or not this is the right definition:
  38. **Rationale/ objective** - The DBR needs to be clear on the underlying rationale of the USC and what it is trying to achieve. The BSG understands that the government's objective is to ensure equity of access to functional broadband services capable of delivering today's generation of video rich services (such as the BBC's iPlayer). The universality of such services combined with increasing levels of take up should then facilitate further innovation of online public service delivery and public service transformation.
  39. **Service definition** - The proposed definition focuses primarily on download speeds, however, there are other service characteristics that are equally important for determining the quality of service experienced by the consumer including jitter, latency, packet loss and DNS resolution. A key question is therefore whether the USC should be defined in terms of the overall quality of service or simply in terms of the download speed. A further issue for service definition is the scope of the universality of the service. In reality, this would likely be influenced by the costs and benefits of extending the commitment to the last few percent of homes.
  40. **Download speeds** themselves can be highly variable depending on a range of factors at different points in the network. The impact of line length is relatively well understood, however, factors beyond the operators control such as in-home wiring or out dated modems can cause serious deterioration in actual service performance. Therefore, if speed is to be part of the service definition these factors will need to be considered.
  41. **Technology** - The USC could be delivered by a range of fixed, wireless and satellite technologies, although the costs and characteristics of each of these services will be different. The USC should be technology neutral as far as possible so that commercial providers are able to use the most effective technology solution for any given location.
  42. **Managing consumer expectations** - Great care needs to be taken in articulating the USC to ensure that consumers have realistic expectations

about what it means for them. If the USC is based on theoretical line speeds the implications of this need to be clearly explained. There will also be some locations where delivering the USC within a reasonable cost will simply not be possible. Government will need to be clear about the limits to universal provision.

43. **Delivery mechanisms** - How any scheme is structured, including how the services will be delivered and by whom, will have implications for other choices that must be made. Design of the delivery mechanism in technology-neutral terms may be difficult to achieve, and this may be part of the iterative process of choosing the most appropriate solution. There may be value in considering the delivery of the USC independently across particular areas of the UK. Different solutions may be more appropriate in different locations due to the particular characteristics of the geography, the extent of demand, and existing network reach.
44. **Wider implications** - Many of the choices set out above have implications for consumers, the market, and the government in terms of achieving the objectives of the USC. In particular, government should consider the possible impact on take-up amongst existing adopters if the full cost of funding the USC was to be passed on to consumers. An adverse impact would work directly against the objective of increasing take-up through the USC. Government should also consider the impact of increased costs on the investment plans of service providers.

#### **Action 18: Develop proposal for funding USC**

45. The obligation of funding the USC should be shared across the public and private sector. The criteria by which it is decided which organisations should contribute, and how they contribute, will need careful consideration, but contributions should be sought widely from across the full range of potential beneficiaries, not just the telecoms sector. This should include appropriate consideration of spectrum costs where these play a role in a possible solution.
46. Careful thought will also be needed about how the USC will operate in practice. Key questions will be how to identify where additional investment is required; how to determine who should be responsible for delivering a solution and how funds are allocated to meet the costs involved.

#### **Action 19: Develop champions for universal take-up**

47. The UK has already reached relatively high levels of broadband adoption with nearly two thirds of households now having a broadband connection. In many markets this is regarded as close to the natural market saturation point. Convincing the last third of non-adopters to take up broadband will be more difficult. Reasons for non-adoption are complex and diverse. In some cases consumers simply won't be aware of the value or relevance of broadband to the way in which they live their lives, in other cases non-adoption will be closely linked to the complexities of social exclusion.

48. Achieving universal take up will be challenging. It will require a coordinated framework of appropriate actions targeted towards and appropriate for clearly defined consumer segments.
49. The Government's Digital Inclusion strategy is already focusing on the most excluded groups in society and the DC10 members provides a good framework for coordination between local authorities on these issues.

**Action 20: Invite BBC to take leading role in driving take-up**

50. The BBC clearly can and should play an important role in driving awareness of the benefits of broadband. However, given the BBC's position in the market careful attention will need to be paid to the market impact of BBC activities and marketing messages. As mentioned above the BBC's activities should be built into a larger framework, with commercial stakeholders having some oversight on BBC activities.

**Action 21: Commit to putting public services online**

51. Over time it should be possible to deliver substantial public value through the transition to online public service delivery. Citizens should benefit by being able to access more efficient and effective public services and government should benefit through efficiency gains achieved through public service transformation.

**Action 22: Establish new media literacy plan**

52. The focus in this section is the right one - encouraging and promoting media literacy is vital in order to drive take-up of broadband and increase engagement with content and services. The development of a National Media Literacy Plan is a good opportunity to bring together the various relevant initiatives underway throughout Government, industry and the third sector.
53. The priorities of the plan should be to identify the groups who are not engaging; identify the reasons for this; and target them with information and support to equip them with the knowledge, confidence and skills they need to navigate the digital world effectively.

**Further work: Public policy principles for online safeguards**

54. This section of the report highlights an important factor in equipping everyone to benefit from Digital Britain – the increased challenge posed because internet content is not capable of being successfully regulated in the same way as traditional, national broadcasting. It identifies issues, which will be of concern for users – either generally or for some users only - such as privacy, harmful or offensive content and access to illegal material. Building the trust and confidence of those users who have so far been hesitant or unsure about engaging with digital services to address these issues, without unduly compromising freedom of expression is undoubtedly complex and does not lend itself to one-size-fits-all outcomes.

55. As such in developing the final proposals in this area, the approach should take into full account the wide array of current good practice and initiatives already underway and focus on knitting them into a coherent landscape, i.e. avoid duplication or assuming that there are significant gaps. Examples of current good practice include the BSG facilitated Good Practice Principles on Audiovisual Content Information, the Good Practice Principles on behavioural advertising developed by the Internet Advertising Bureau, the mechanisms in place for cooperation between industry and the IWF and the commitment of stakeholders to work together to take forward the recommendations of the Byron Review under the auspices of the UK Council for Child Internet Safety.
56. Ensuring that consumers have the trust and confidence to engage fully in digital Britain is in the interests of all players across the value chain. A partnership approach is the right one for tackling these issues, but any principles developed in these areas need to be able to stand the test of time, and underpin the inevitable quick-paced evolution of services in the future.