

Superfast Broadband and the Digital Divide

Purpose

For discussion and direction.

Summary

This paper:

- provides a brief national policy update;
- outlines the emerging results of the member-commissioned survey of councils that are part of the Superfast Broadband Programme and Mobile Infrastructure Project;
- summarises the latest broadband and mobile connectivity coverage data; and
- discusses possible Board activity in response to these findings.

Chris Townsend, Chief Executive, and Andrew Field, Head of Operations at Broadband Delivery UK, will be presenting to the Board on the Superfast Broadband Programme and discussing the Government's plans for reaching the 'final five per cent' referred to as Phase 3.

Recommendations

That the People and Places Board:

1. to note the emerging results of the survey and the latest coverage data;
2. steer officers on the suitability of the next steps in response to the survey findings, suggested in **paragraphs 29 to 34**
3. discuss the current Superfast Broadband Programme and efforts to extend superfast broadband provision, with the two guest speakers.

Action

Officers to take forward as directed by members.

Contact officer: Daniel Shamplin-Hall
Position: Adviser
Phone no: 020 7664 3314
Email: daniel.shamplin-hall@local.gov.uk

Superfast Broadband and the Digital Divide

Background

1. At the last Board, members highlighted the lack of digital connectivity faced by many of their residents and local businesses. They fed back to officers their experiences of the two major publicly funded programmes charged with improving connectivity: the Superfast Broadband Programme and the Mobile Infrastructure Project, and highlighted cases where both programmes had been ineffective at extending mobile and/or superfast broadband coverage.
2. In order to more widely assess each programme's performance to date, reflect back to Government any lessons learnt from the sector, and shape Board activity in this area going forward, the Board commissioned officers to undertake a nationwide survey of councils involved in both programmes and provide a summary of published superfast broadband and mobile coverage data.

National Policy Update

3. When considering the emerging results of the survey, members will want to bear in mind the Government's announcement in November that it intends to establish a Universal Service Obligation (USO) to provide residents with the legal right to request a broadband connection with speeds of 10Mbit/s by 2020. At present it is unclear who will be obligated to deliver the USO, how it will be delivered or who will fund what is going to be an expensive programme. More details are expected to be announced when the Government consults on the proposal in early 2016. Officers will consult with members and respond to the consultation when it is launched.
4. The Government is also currently negotiating a new EU State Aid exemption with the European Commission after the original exemption expired in June 2015. Negotiations are taking longer than expected and, until they are completed, any new procurement councils want to undertake which was not signed off before the last exemption expired cannot currently receive public subsidy. This means that any projects looking to use new public funds to extend provision to those residents without superfast connectivity, cannot commence.
5. The Mobile Infrastructure Project is set to complete in March 2016. Government officials have made clear to LGA officers there are no plans for a second phase of the project. At present, Government policy is focussed instead on extending mobile connectivity via a new legally binding agreement it secured with mobile operators to invest £5 billion to improve mobile infrastructure by 2017; and to guarantee voice and text coverage from each operator across 90% of the UK geographic area by 2017. On top of this, the Mobile Network Operator (MNO) O2 also has a legal coverage obligation to roll out 4G to cover at least 98% of the UK population by 2017, which other MNOs have indicated they will match.
6. The Government also plan to give increased permitted development rights for MNOs to erect masts without the need of planning permission. MNOs already enjoy some permitted development rights, but these expanded rights would enable them to install even taller phone masts without the need for planning permission. LGA analysis has shown that the planning system is not a barrier to developments. In fact, councils continue to approve

almost nine in every 10 planning applications. Planning controls are key to giving residents the power over developments that impact on their quality of life and the planning system encourages developers including MNOs to more effectively engage local communities.

7. Government is also consulting on its new 5-year Digital Strategy for the UK, which it will set out early next year. The Strategy will focus on: 'Unlocking digital growth' through the completion of the EU Digital Single Market; 'Transforming Government' by digitalising Government services further; 'Transforming day to day life' by encouraging innovation in the education and health sectors; and 'Building the foundations' by meeting the targets for the rollout of superfast broadband, implementing a USO, and ensuring that digital skills are at the heart of the educational system. LGA officers will take a steer from the Chairs of both the People and Places Board and the Improvement and Innovation Board to draft the LGA's response.

Emerging survey results

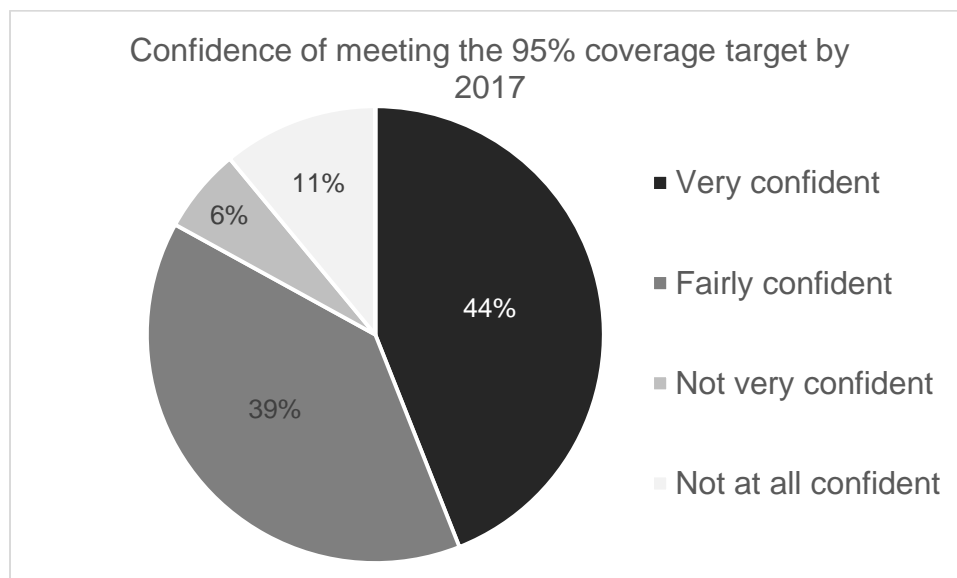
8. At the beginning of December, the LGA's Research Team conducted an online survey of all councils involved in the publicly funded Superfast Broadband Programme and Mobile Infrastructure project. The survey was sent to senior broadband programme officers and was disseminated via the Association of Directors of Environment and Transport. At the time of writing, almost 60 per cent of those areas that took part in the Mobile Infrastructure Project and 40 per cent of those that took part in the Superfast Broadband programme had responded. In order to provide as complete an account as possible, the survey was extended for a further two weeks leading up to the Board. Officers will update members if the emerging findings change significantly.
9. A summary of key findings is as follows:
 - 9.1. **The Superfast Broadband Programme is on target to achieve its objectives. However, take up of superfast broadband where it is available is still low in many areas.**
 - 9.2. **Councils are broadly satisfied with delivery partner performance, but some have shared concerns about the use of public funding to build in commercially viable areas.**
 - 9.3. **The majority of councils are considering new procurement approaches and different suppliers in efforts to extend provision to the final five percent, as part of the Phase 3 roll out.**
 - 9.4. **The Mobile Infrastructure Project has failed in many areas and councils are instead looking to build their own relationship with mobile network operators to tackle the lack of mobile connectivity.**

Superfast Broadband

Superfast Broadband Programme Objectives

10. Amongst those councils surveyed so far, the Superfast Broadband Programme is set to hit its targets of achieving superfast broadband coverage across an average of 90 per cent of households by 2016 with respondents already achieving an average coverage of 91 per cent under Phase 1. Over 80 per cent of respondents were also 'Fairly Confident or 'Very Confident' of the programme reaching 95 per cent of households by 2017,' as shown in Figure 1.

Figure 1



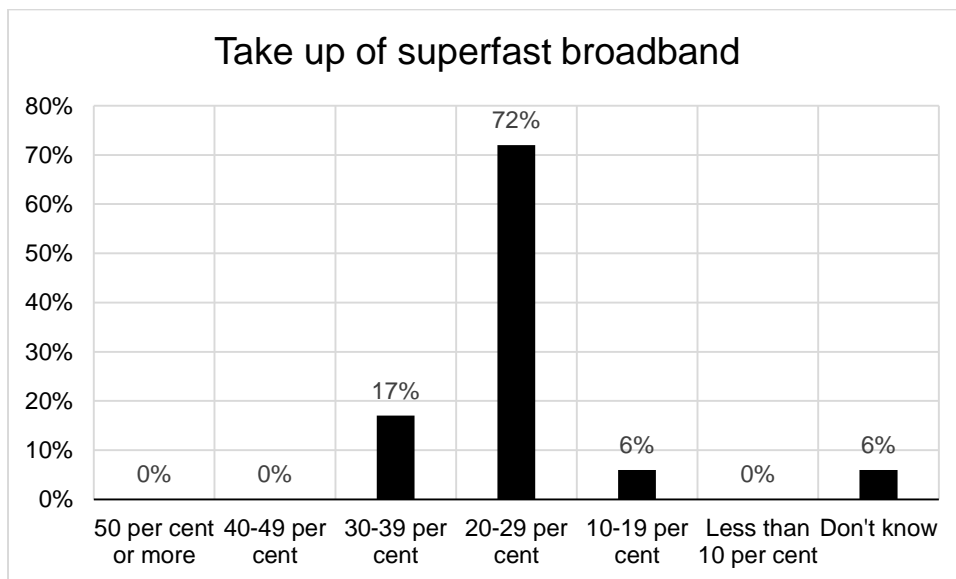
Delivery partners' performance

11. Areas were mainly satisfied with the conduct of their delivery partners with 67 per cent regarding them as 'Very Transparent' or 'Fairly Transparent' when sharing data and 66 per cent and either 'Tending to Agree' or 'Strongly Agreeing' that they had a strong and influential say where public funding secured by the clawback mechanism could be re-deployed. Of potential concern however is that 44 per cent of respondents stated that there had been occurrences in their area of the "delivery partner using public subsidy to fund infrastructure (in whole or in part) to serve premises that could already access superfast broadband from other commercial providers." Whilst there are inevitable complications and mistakes made on the ground, including changing or inaccurately mapped commercial roll out plans, this reveals delivery partners appearing to use public money to compete with the commercial market.

Take-up of superfast broadband

12. Whilst it is widely accepted that take-up of superfast broadband so far has been significantly faster than forecast by BT in the phase 1 contracts,¹ in relative terms, take up in those premises with availability still remains low. Although 91 per cent of council respondents had passed the 20 per cent take up mark in their areas, triggering the clawback mechanism in their Phase One contracts, very few have a take up higher than 30 per cent, as shown in Figure 2. 50 per cent of respondents believe low take up is due to residents perceiving no need for faster speeds whilst 39 per cent of respondents believe a lack of awareness of availability amongst residents is a major cause. This shows that there is wider need for a programme of demand stimulation. The public sector has much to benefit from marked increases in take up. For every 10 per cent increase in take up nationally, delivery partners are obligated to repay £129 million of the original public investment. Whilst take up levels should continue to rise over time, there is a time limit to the clawback function which can only be triggered within the duration of the seven year contract.

Figure 2



Reaching the final five per cent and market competitiveness

13. Of those councils looking to extend superfast broadband provision to parts of their areas not covered by the current schemes, 44 per cent reported they plan to use alternative solutions through new procurements outside their original delivery partners. Councils may be looking for other providers to provide bespoke local solutions at better value for money. Owing to the smaller scale of such providers, this will require councils to procure in smaller pockets across their areas - a marked difference from the area-wide National Procurement Framework process. The competitive nature of the infrastructure market however is still of concern to councils with 83 per cent of respondents either 'Tending to Agree' or 'Strongly Agreeing' that "Government and Ofcom intervention is required in the digital infrastructure market to ensure competitiveness

¹ The National Audit Office - The Superfast (Rural) Broadband Programme: update, January 2015

Universal Service Obligation

14. Overall, councils responded positively to the Government's announcement of a Universal Service Obligation. Many however shared initial concerns that a fixed USO speed of 10Mbit/s will quickly become outdated with the increasing requirements of technology and the needs of businesses and households, especially in light of the European Commission's target of above 30Mbps coverage across the entire EU by 2020.

14.1. *"This is certainly a positive step, but is some way from being implemented legally. The marketplace has to demonstrate that it can absorb the costs associated with a legal requirement...Equally, speeds are rapidly becoming obsolete and 10Mbit/s might not be sufficient for basic services in the not-too-distant- future.*

Survey Respondent

Mobile Infrastructure Project

Delivery partner's performance

15. The survey of those councils that took part in the Mobile Infrastructure Project has found that councils were dissatisfied with the programme. This is not surprising as Government officials recently confirmed less than 3 per cent of the 600 planned masts have been built so far, with only another 60 potential sites currently being progressed. Indeed, at the end of November 2015, spend on the Mobile Infrastructure Project was £9.1 million from the £150 million set aside over three years. LGA officers pressed Government to reinvest any underspend in future mobile connectivity projects, but were informed all funding will be returned to central Government. LGA Officers will continue to push Government to reallocate any underspend to new projects related to tackling poor mobile connectivity.
16. The failure of two key components of the programme, along with unrealistic timescales appear to have been the root of the cause. Delivery partners' engagement with local planning bodies was poor, with 70 per cent of council respondents believing that their relationship with delivery partners was either 'Not Very Effective' or 'Not at all Effective.'
17. Failure of the delivery partners to properly engage with local residents on the placement of masts was also a key failure with 60 per cent of council respondents believing efforts were either 'Not Very Effective' or 'Not at all Effective.'
18. There will clearly be some key learning points for the industry arising from the MIP, especially in terms of improving engagement with planning authorities and local communities. It will be imperative that this is collated and disseminated by Government for use in future roll out programmes. LGA officers will press civil servants to share any lessons once the project formally completes in March 2016.

Councils' engagement with mobile network operators

19. In the absence the Mobile Infrastructure Project delivering on local plans, councils have made efforts to develop and maintain their own relationships with commercial suppliers. Many are doing so to try to gain an understanding of when and where commercial suppliers will roll out faster mobile connectivity to help them more effectively plan which areas will be most in need of fixed broadband infrastructure. 50 per cent of those surveyed have relationships with mobile network operators locally. Of the 40 per cent that did not, 75 per cent were keen to develop them locally.

19.1. “Were local authorities provided with the data and contacts with the MNOs we could attempt to keep the [Mobile Infrastructure Project] scheme running or at least design future broadband interventions with the provision of backhaul to suitable mast sites in mind.”

Survey Respondent

Superfast Broadband and mobile connectivity coverage data

Broadband

20. The most comprehensive analysis of superfast broadband and mobile coverage is carried out by Ofcom each year in its ‘Connected Nations Report.’ This brings together data from all the major suppliers of superfast broadband and mobile services. The data is collected in July, so is only a snapshot of coverage six months previously.
21. In total it reports 84 per cent of premises across England are now able to receive superfast broadband, which it defines as 30Mbit/s or over.² ThinkBroadband³, an independent broadband analyst which estimates coverage via thousands of speed test conducted on its website currently estimates the 24Mbit/s superfast coverage figure across England as 89.6 per cent. This backs up with Broadband UK officials reports that the Superfast Broadband Programme will reach the 90 per cent coverage across the country by May 2016.
22. Unsurprisingly, coverage in rural areas still lags behind the national average. In rural England, only 36 per cent of premises have access to superfast broadband, although this has risen from 23 per cent in 2014.

| | 2014 | 2015 | Diff |
|----------------|-------------|-------------|--------------|
| Across England | 77 per cent | 84 per cent | +7 per cent |
| Rural Areas | 23 per cent | 36 per cent | +13 per cent |

Source: Ofcom Connected Nations Report

23. For some residents in rural areas, despite having their local infrastructure upgraded to superfast speeds, for technical reasons (mainly their distance from the exchange) their lines cannot receive superfast speeds. Around 2 million (or 7 per cent of) UK premises are connected to upgraded networks but cannot currently receive download speeds of 30Mbit/s; on average, their download speeds are around 18Mbit/s.
24. In light of the Government’s new Universal Service Obligation, 47 per cent of rural premises in England are unable to receive the Government’s target of a minimum 10Mbit/s speeds, with the figure rising in some local authority areas to 53 per cent. Ofcom has provided a detailed breakdown of the percentage of below 10Mbit/s premises in English local authorities (Annex A), although the list is not comprehensive. It is worth noting that, as the Superfast Broadband Programme has not yet completed, some of the premises that make up these numbers may well be covered by the end of 2017. However, the figures still highlight the challenge faced by many areas.

² The National Procurement Framework with which the majority of councils procured their suppliers defines superfast broadband as 24Mbit/s, so coverage at this level will be slightly higher.

³ <https://labs.thinkbroadband.com/local/>

Mobile Connectivity

25. Rural mobile connectivity continues to lag behind urban coverage with indoor coverage in rural areas is particularly poor. For example, 72 per cent of rural premises in the UK have voice call coverage from all networks outdoors; but only 31 per cent of rural premises have the same level of coverage indoors. Complete and partial ‘not spots’ are also more prevalent in rural areas which reflects their relative population densities.

| | | Indoor Voice (2G + 3G) | Outdoor Voice (2G + 3G) |
|-----------------------------------|-------|---------------------------|----------------------------|
| Partial Not-Spots | Urban | 8% | 1% |
| | Rural | 56% | 22% |
| Complete Not-Spots | Urban | Less than 1% | Less than 1% |
| | Rural | 11% | 2% |
| Premises covered by all operators | Urban | 92% | 99% |
| | Rural | 33% | 76% |

Source: Ofcom analysis of operator data

Source: Ofcom Connect Nations Report

Mapping the data

26. In order to support councils and consumers to better understand mobile coverage in their areas, Ofcom has released a [Mobile Coverage Checker map](#) with its own predicted coverage for mobile voice and data for each of the UK mobile network operators. They have tested actual coverage in various locations around the UK, and used the results to set the thresholds for voice calls used on the map. They will continue to conduct testing, work with the mobile operators and analyse consumer feedback with a view to improving the accuracy of the map.

27. The LGA has also successfully lobbied Ofcom to release data at a more useful local authority level. As part of a partnership with the digital skills charity Go On UK, officers have conducted an analysis of the digitally inclusive nature of local areas, at local authority level. By compiling a range of different metrics, their mapping tool is able to rate out of 5 the likelihood of part of the population of an area being digitally excluded. The map will be updated with the latest broadband and mobile coverage data from this latest Ofcom release this month.

Broadband Campaign

28. At the last Board, members also commissioned a member-facing campaign to encourage councillors to submit internet speed results from the areas they represent. Using the data from these results it was proposed that the LGA would create a tool to build a “councillors’ map of broadband speeds” across England. The campaign, which has been refined further from the survey’s emerging findings, will also look to focus on increasing members’ understanding of the alternative network suppliers to help them make informed judgements on potential alternatives to current delivery partners. Officers will work with Lead Members to shape the campaign strategy ahead of a fuller update at the next Board.

Next steps

Members are asked to consider the suitability of the following actions as a response to the emerging findings:

29. In response to the recent delays to the Government-EU State Aid negotiations: **LGA officers will draft a formal letter from the Chair of the Board to BDUK expressing the sector's concerns at the delays holding up potential new procurement processes.**
30. In response to the identified Mobile Infrastructure Project underspend: **LGA officers will also use the formal letter to Government to push for the reallocation of any underspend on the MIP to new projects related to tackling poor mobile connectivity.**
31. In response to council's plans to use smaller procurement methods and engage alternative suppliers as part of Phase 3 plans: **LGA officers propose to host a joint roundtable in the spring between council procurement officers and BDUK to discuss how new smaller procurement processes might work, hear from alternative network providers and community-funded operations on their proposed solutions, and share best practice amongst councils.**
32. In response to the low take-up rates reported by survey respondents: **LGA officers will work in partnership with the LGA Improvement and Innovation Board to lobby BDUK and the Government's Digital Economy Unit, charged with improving digital skills and inclusion, to explore efforts to stimulate demand in areas.**
33. In response to councils' efforts to develop local relationships with Mobile Network Operators: **LGA officers will engage the Mobile Network Operators' Association to understand the mobile market and wider commercial development and explore ways both sectors could work together.**
34. **Officers will also seek to engage Ofcom in this regard and assess whether their new mobile coverage map could be a useful tool for councils or if it could be improved in any way.**