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Delivering gigabit- capable broadband

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Summary

Good internet connectivity is critical to everyday life and economic growth—even more so because of the changes in work and education that have been driven by the COVID-19 pandemic. This makes the rapid roll out of Project Gigabit vital. In 2020, the Department for Digital, Culture, Media and Sport accepted that its original plan for delivering nationwide gigabit broadband across the country by 2025 was unachievable and revised its target. Yet, despite revising this to 85% coverage by 2025, we are still not convinced that the Department will deliver on time. For some time now this Committee has pressed the Department on answering precise questions on the timetables and milestones to achieve this target. Central to this is knowing exactly when new gigabit infrastructure contracts will be signed and how they will be rolled out. Without such a timetable and clear answers to these questions, we cannot fully understand how they will meet the 2025 target.

Proof of this can be found in the fact the Department has made little tangible progress in delivering internet connectivity beyond that achieved by the private sector. It reports that the proportion of premises in the United Kingdom with access to gigabit broadband leapt from 40% to 57% between May and October 2021. However, while recognising that this is largely due to Virgin Media O2 upgrading its cable network, the Department is unable to fully explain why this has occurred.

We warned earlier this year that failures with the rollout of superfast broadband across the UK risked exacerbating digital and economic inequality. Although the Department now states that it plans to reach nationwide coverage for gigabit-capable broadband by 2030, it has no detailed plan in place for reaching communities where it is not commercially viable to do so. Moreover, its goal of full coverage by 2030 does not cover the very hardest to reach areas, which include around 134,000 premises. The announcements of commercial investment plans by existing and new providers are welcome and reduce the potential need for taxpayer funded rollout. However, we are concerned that the Department's focus on accelerating coverage through rollout by commercial operators rather than by prioritising those areas it knows are hardest to reach risks some of the areas that need improved connectivity most being once again left behind.

Introduction

The Department for Digital, Culture, Media & Sport (the Department) is responsible for delivering the government's policies on increasing economic growth and productivity through improved digital connectivity. Central to this is its target of rolling out gigabit-capable infrastructure capable of download speeds of at least 1000 megabits per second (Mbps) to at least 85% of UK premises by 2025. Although superfast broadband (download speed of at least 30 Mbps) is fast enough for most household use today, global internet traffic is growing by around 40% each year. Gigabit-capable broadband, such as full fibre, can provide speeds of over 1,000Mbps, fast enough to download a High-Definition (HD) film in seconds.

In 2019, the Department revised its target of achieving nationwide full-fibre coverage by 2033 to achieving nationwide gigabit-capable coverage by 2025. In 2020 it revised this again, to at least 85% of UK premises having access to gigabit-broadband by 2025. Despite having revised its target, the Department also plans to accelerate rollout to get as close to 100% nationwide coverage as is possible in that time. The Department expects that commercial operators will supply broadband infrastructure where profitable, and that this will provide up to 80% of the UK's coverage. These providers include large firms like Openreach and Virgin Media O2, and smaller providers, known as alternative networks or "alt-nets". The Department is working with these operators to provide subsidies to build gigabit infrastructure in less commercially viable areas. In addition, it is providing funding through the gigabit voucher scheme as immediate help for people experiencing slow broadband speeds in rural areas. The government has allocated £1.2 billion to rolling out gigabit by 2025, with a further £3.8 billion reserved for future years.

Conclusions and recommendations

1. **The Department's reporting still lacks the consistency and detail needed to enable Parliament and the public to tell what progress it is making in rolling out gigabit-capable broadband across the UK.** The Department's target was initially for nationwide full-fibre network coverage by 2033. In 2019, it revised this to nationwide gigabit-capable broadband by 2025. This was then revised again in November 2020, following our last evidence session, to a minimum of 85% gigabit capable coverage by 2025, with the Department also seeking to get as close to 100% as possible within this timeframe. We previously recommended that the Department needed to clearly set out its key milestones for delivering its target and publish yearly updates on its progress. The Department is unable to fully explain the breakdown of the progress it is reporting in achieving its targets. In October 2021, for example, it reported that there was 57% coverage national gigabit coverage. This represented a rapid increase on the figure of 40% coverage in May 2021 reported by Ofcom. The Department told us this was largely as a result of Virgin Media O2's upgrade of its cable network but it was unable to inform us of exactly how much of this increase was due to that upgrade.

Recommendation: *Given the critical nature of this issue and our concern about the Department's grip on it, we recommend that the Department should:*

- *work with the National Audit Office to determine the most appropriate metrics and frequency for reporting progress with the scheme; and*
 - *by the end of March 2022, write to us with the results of this work and outline how and when it will provide us with regular and transparent updates on the programme.*
2. **The Department has so far been overly reliant on the contributions of commercial suppliers in improving gigabit coverage.** The Department is reliant on suppliers to deliver gigabit coverage to 80% of UK premises without subsidy. Between May and October 2021, national gigabit coverage increased from 40% to 57%. The Department acknowledges that Virgin Media O2's upgrade of its cable network contributed significantly to the increase in gigabit availability during this period, although it is unable to provide a figure for this. The Virgin Media O2 upgrade provides gigabit availability, but this is not achieved through full fibre technology, which is more future proof but requires new infrastructure. While companies such as Virgin Media O2 have set out their intention to further future proof their networks over time, once the current upgrade of existing cables has been completed there will remain a gap in coverage if the Department does not put in place further contracts to build the gigabit infrastructure. The Department told us it has extended some of the contracts it had in place for the delivery of superfast broadband to now enable gigabit-capable connections. In some areas it is also supplying gigabit vouchers to communities to pay for gigabit-capable connections in areas where it is not commercially viable to do so. However, it has not yet signed any new gigabit infrastructure contracts of its own.

Recommendation: *In line with its Treasury Minute response, the Department should set out what progress it has made towards its coverage target of 85% by 2025. This should be broken down by how much coverage is being achieved by:*

- *individual commercial suppliers, such as Openreach, Virgin Media O2 and smaller suppliers known as alternative networks or “alt-nets” etc., and the extent to which it is through full fibre technology; and*
- *the gigabit voucher scheme.*

3. **We are not convinced by the Department’s assertion that it will meet its target delivery of a minimum of 85% by 2025 despite having signed no new infrastructure subsidy contracts for Project Gigabit.** The Department’s previous target proved to be unachievable. Despite revising the overall target, the Department’s target dates for signing contracts with gigabit suppliers to begin laying gigabit infrastructure have continually slipped. At our last evidence session, in November 2020, we called for the Department to provide a broad timetable or indicative dates for the essential steps towards achieving its targets, which the Department repeatedly declined owing to it awaiting Ministerial approvals. The Department is still unable to provide detailed information about how long it expects the contracting process to take. The Department previously informed us that contracts would be operating by the fourth quarter of 2021. It has since moved this to May 2022 in the Project Gigabit Summer update. This changed again to June to August 2022 in the Autumn update. The Department contends that the delay is positive, as it is the result of unprecedented levels of interest and activity from commercial providers. As a result, it is re-planning which areas it will need to deliver gigabit coverage through infrastructure subsidy contracts but stated in evidence that that it did not expect in future to have to replan to the degree that we have in the past 12 months.¹

Recommendation: *In line with its Treasury Minute response, the Department should write to us setting out in detail how it will deliver 85% coverage by 2025, including:*

- *the baselines it is using, and overall progress against these; and*
- *what new infrastructure contracts it has signed and how many more contracts it requires to be in place and by when in order to meet its overall target.*

The Department should also adopt a flexible procurement approach which allows it to respond to market developments without endlessly delaying the signing of contracts for commercially unviable areas.

4. **We are disappointed that the Department has still not taken significant action to remove barriers to rolling out Project Gigabit.** Despite our recommendation earlier this year, the Department has yet to secure the legislative and policy changes that industry deems necessary to address major barriers to delivering gigabit infrastructure at pace. The Department has initiated the Telecommunications Infrastructure Act, designed to ensure that the UK has sufficiently robust electronic communications networks to deliver the coverage and connectivity consumers

and businesses need. However, it has not yet followed this up with the necessary secondary legislation. We are concerned that without addressing legislative barriers the Department will be unable to meet its target for roll-out. The Department has also run consultations on removing barriers to gigabit rollout but has yet to publish the findings of these. In one case, this is eight months after the consultation closed. While stakeholders welcome these interventions, they call for the Department to take more decisive action, particularly regarding wayleaves (land access agreements). Furthermore, the removal of high-risk vendors' equipment from the network is estimated to cause a delay in the full fibre roll-out of up to a year, and for 5G by two to three years. Despite its apparent lack of significant progress in tackling barriers, the Department asserts that it is confident that the pace of rollout means that it is still on track to hit its targets.

Recommendation: *In line with its Treasury Minute response, the Department should write to us setting out what progress it has made:*

- *to remove barriers to deployment, including details of the findings from its consultations and its response in the four priority areas of:*
 - a) *access to land*
 - b) *street works*
 - c) *new build connectivity; and*
 - d) *supporting mobile deployment.*
 - *to remove equipment from high-risk vendors from the relevant networks.*
5. **The Department's approach to rolling out gigabit risks perpetuating digital inequality across the UK.** The Department contends that it is taking an "Outside-In" approach to gigabit infrastructure procurement. As part of this approach, the Department identifies areas which it does not expect it to be viable for commercial providers to operate in. It then commissions internet infrastructure connecting these areas in parallel with work being undertaken by commercial providers. This is designed to ensure that no areas are systematically left behind. However, the Department is unable to demonstrate that it is still following its "Outside-In" approach. In addition, the Department's one-size-fits-all approach to what it considers urban areas, especially in London and the West Midlands, does not take into account the very different needs within those areas. Those areas that currently have sub-superfast broadband speeds are more likely to be in the 20% of premises that the Department thinks will be unviable for commercial providers. Rural areas, such as the Cotswolds in England, and areas of economic deprivation that were previously provided with government support to deliver superfast broadband, such as Blaenau Gwent in Wales, have some of the lowest levels of gigabit coverage. If the 2025 target is going to be met it is essential that rural and remote areas, especially those who currently lack superfast broadband, receive significantly increased investment on the basis that the commercial sector will unlikely be able fill the gap.

Recommendation: *The Department should, from the start of April 2022, publish statistics every 3 months showing its regional and national breakdown of progress against its gigabit coverage target.*

6. **The Department does not have a detailed plan to ensure that those in the very hardest to reach areas are not being left behind.** The Department's commitment to delivering 85% coverage by 2025 and full coverage by 2030 does not include those premises it has identified as the very hardest to reach. It estimates that fibre-based approaches are unlikely to work for around 134,000 or 0.3% of premises. In these hardest to reach areas, the potentially prohibitively high cost of rolling out full fibre broadband means that the Department is likely to need to use other technologies, such as satellite. At our last evidence session, in November 2020, the Department told us that it was assessing the value for money of alternative technologies for delivering the fastest speeds possible to hard-to-reach premises. However, a year later it is unable to offer any details or update on what new technologies are under consideration.

Recommendation: *In line with its Treasury Minute response, the Department should write to us setting out how it will reach the remaining 15% left out of the 2025 target, as well as the very hardest to reach 0.3%. This should include what progress it has made in developing and procuring new technologies.*

1 Achieving the target of 85% gigabit coverage by 2025

1. We took evidence from the Department for Digital, Culture, Media and Sport (the Department) on its progress to date in achieving its target of reaching a minimum of 85% nationwide coverage of gigabit-capable broadband by 2025.

2. The Department is responsible for delivering the government’s policies on increasing economic growth and productivity through improved digital connectivity. Central to this is its target of rolling out gigabit-capable infrastructure capable of download speeds of at least 1000 megabits per second (Mbps) to at least 85% of United Kingdom premises by 2025. The Department also has an additional aim of reaching as close to 100% of premises as possible within the same timeframe.² Building Digital UK (BDUK) is the part of the Department responsible for implementing government’s broadband policies.³

3. The download speeds available to premises depend on the type of technology used to deliver their broadband connections. Superfast broadband in the UK is mainly delivered through ‘fibre to the cabinet’ (FTTC) technology, which is where fibre-optic cables run to a street cabinet and existing copper wires connect the cabinet to individual premises. This provides download speeds of up to 80 Mbps. In contrast, full-fibre technology, also called ‘fibre to the premises’ (FTTP), can deliver download speeds of 1,000 Mbps (or 1 gigabit per second), which is fast enough to download a High-Definition (HD) film in seconds. Full-fibre runs entirely over fibre-optic cables which run directly to premises. Gigabit speeds can also be delivered using the latest enhancement to the cable network, which was developed originally for transmitting cable television.⁴

Project Gigabit

4. As of November, 2021, 97% of premises in the UK have access to superfast broadband, which has a download speed of at least 30 Mbps.⁵ This speed is adequate for most household use, but global internet traffic is growing by around 40% each year.⁶ To ensure the UK has access to the broadband speeds necessary to match future demand, the Department announced its Future Programme on 23rd July 2018 as part of the Future Telecoms Infrastructure Review.⁷ In March 2021, it renamed this “Project Gigabit”.⁸

5. The Department has allocated £1.2 billion to Project Gigabit, to be spent by 2025.⁹ The purpose of this funding is to provide coverage to the 5% of premises within its 85% target that the Department regards as commercially unviable for the private sector to provide with gigabit infrastructure.¹⁰ The Department told us that it is able to access a further £3.8 billion by 2025 if needed to enable it to go beyond 85% coverage.¹¹ The

2 Department for Digital, Culture, Media & Sport, [Outcome Delivery Plan: 2021 to 2022](#), July 2021

3 C&AG’s Report, Improving Broadband, HC 863, Session 2019–21, 16 October 2020, para 1.5

4 [Connected Nations Update: Summer 2021](#), p.3

5 Q 29, Think Broadband, UK Superfast and Fibre Coverage, <https://labs.thinkbroadband.com/local/>

6 C&AG’s Report, para 4

7 Q 17, C&AG’s Report, para 5, DCMS, [Future Telecoms Infrastructure Review, July 2018](#), p. 3

8 [Government launches new £5bn ‘Project Gigabit’ – GOV.UK \(www.gov.uk\)](#)

9 Qq 20–26

10 [Autumn Budget and Spending Review 2021](#), para 4.77

11 Qq 20, 23–26

Department aims to use its Project Gigabit funding to encourage commercial investment and stimulate suppliers to go further into harder to reach areas, by using public subsidies to stretch commercial activity.¹²

6. The Department has changed its target for achieving nationwide gigabit-capable broadband three times in the last four years. Its original target in 2018 was to provide infrastructure capable of faster gigabit speeds to 50% of premises by 2025, and to achieve nationwide coverage by 2033. In 2019, it revised this to accelerate achieving nationwide full fibre and gigabit-capable coverage by 2025. When we previously took oral evidence from the Department on its performance on 9th November 2020, we felt it was clear that the Government's target was unachievable. The Government subsequently accepted this and on 25 November it published a revised target to achieve at least 85% of UK premises having gigabit-capable broadband by 2025 and that it would seek to accelerate rollout to get to as close to 100% as possible.¹³ The Department acknowledged that its previous target was extremely challenging in the timescale available.¹⁴ In its letter to us ahead of our evidence session, the Department accepted that the target remained challenging, but that it had a high degree of confidence that it would be reached.¹⁵

7. In our report of 8 January 2021, we recommended that the Department should clearly set out what activities it intended to complete and by when to achieve its revised targets. As part of this, we recommended that it set out the final dates by which key milestones must be reached in order to meet those targets and publish yearly updates on progress thereafter.¹⁶ In response, the Department told us that the overall programme delivery profile will be incorporated into the Programme Business Case which was due to be submitted for approval in Summer 2021 and that it would publish its progress against the programme's milestones regularly.¹⁷ More recently, in its letter to us ahead of our evidence session, it told us that the full programme business case was now undergoing Treasury approvals and once the business case has been approved, it will provide further detail on its overall delivery projections for the programme.¹⁸

8. In changing its target, it has also made changes to the type of technology it plans to use to achieve gigabit broadband rollout.¹⁹ In 2019, the Department revised its target from full fibre to "gigabit-capable" broadband. Some stakeholders considered this to be a watering down of the target because they view fibre as a superior technology.²⁰ This is because the telecoms industry generally regards full fibre as the best available technology as it is able to provide consistent gigabit speeds and is largely unaffected by rain and flooding. The industry also regards full fibre as using less energy than other forms of connectivity, costing less to maintain, and with no long-term foreseeable capacity constraints.²¹ Virgin

12 [Project Gigabit Phase One Delivery Plan \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)

13 [National Infrastructure Strategy – Fairer, faster, greener – November 2020](#), page 31

14 Committee of Public Accounts Committee, *Improving Broadband*, Thirty-fifth Report of Session 2019–21, HC 688, 8 January 2021

15 Letter from Sarah Healey to PAC Chair Dame Meg Hillier R: Broadband Report, 22 October 2021

16 Committee of Public Accounts Committee, *Improving Broadband*, Thirty-fifth Report of Session 2019–21, HC 688, 8 January 2021

17 Government response on the Thirty-Fifth report from the Committee of Public Accounts, *Improving Broadband*, Session 2019–21 CP 409, March 2021, para 1.4

18 [Correspondence](#) from Sarah Healey, Permanent Secretary, Department for Digital, Culture, Media and Sport, re broadband report, dated 22 October 2021

19 Q 28

20 C&AG's Report, para 3.16

21 [National Infrastructure Assessment Report](#), July 2018, page 21

Media O2, which is currently upgrading its cable network to gigabit-capable connections, has announced plans to futureproof this by replacing its entire network with full fibre by 2028.²²

Gigabit coverage in the UK – Progress to date

9. In its letter to us ahead of our evidence session, the Department told us that there had been a rapid increase in nationwide gigabit coverage to 57% coverage in October 2021, up from 34% in November 2020.²³ However, the most recent publicly available data from Ofcom put nationwide coverage at 40% in May 2021, up from 27% in September 2020. We asked what the cause of the rapid rises in coverage had been. The Department told us that gigabit-capable devices were being provided to customers either through existing fibre networks or through Virgin Media O2 upgrading its cable network to gigabit-capable speeds. It explained that “a lot of the very quick early rises” were largely due to the Virgin Media O2’s cable network upgrades which do not require a lot of new infrastructure and is more of a software upgrade. However, it was unable to tell us how much of this increase was the result of Virgin Media O2’s upgrade.²⁴ The Department subsequently wrote to confirm that as of 31st October 2021, total gigabit coverage in the UK was 58%, of which full fibre coverage was 28%. It also told us that 30% of UK premises only have a gigabit capable connection through Virgin Media O2, and that total coverage from Virgin Media O2 extends to 40% of UK premises. However, it did not answer the specific point of how much of the 17-percentage point increase seen in recent months was due to Virgin Media O2’s upgrades.²⁵ We also heard from Gigaclear who wrote to us confirming that nationwide gigabit coverage is expected to hit 60% by the end of 2021. It also told us Virgin Media O2 is expected to complete its upgrade early in 2022. Gigaclear said this is likely to contribute to a further rapid rise in gigabit coverage which is then expected to diminish once the upgrade has been completed.²⁶

10. The Department expects commercial operators will supply broadband infrastructure where profitable, and that this will provide up to 80% of the UK’s coverage.²⁷ To achieve the additional coverage needed to meet its 85% target, the Department plans to provide subsidies in the form of a gigabit voucher scheme²⁸ and the public sector hub programme²⁹ as well as the extension of existing superfast broadband contracts to provide gigabit connections.³⁰

11. The Department has yet to sign the gigabit infrastructure contracts with commercial suppliers under which it would provide public subsidy for them to build in areas that would otherwise not get coverage as they are less commercially viable.³¹ The dates by

22 Q 17, [Virgin Media O2 bolsters future network with fibre upgrade plan - Virgin Media O2](#)

23 [Correspondence](#) from Sarah Healey, Permanent Secretary, Department for Digital, Culture, Media and Sport, re broadband report, dated 22 October 2021

24 Qq 16, 28; [Connected Nations Update: Summer 2021](#), 9 September 2021 page 3

25 Letter from Sarah Healey to PAC Chair Dame Meg Hillier Re: Improving Broadband, 23 November 2021

26 DRB0014 DCMS recall (Broadband), Gigaclear, November 4, p.1

27 [Project Gigabit: Phase One Delivery Plan – GOV.UK \(www.gov.uk\)](#)

28 Q 6–7

29 Q 31, known as GigaHubs; provide up to £110m infrastructure funding to public buildings in the ‘hardest to reach’ to improve services and incentivise broadband companies to build off these networks.

30 Q 6, 30, 60, 71, [Correspondence](#) from Sarah Healey, Permanent Secretary, Department for Digital, Culture, Media and Sport, re broadband report, dated 22 October 2021

31 DCMS, [Project Gigabit Phase One Delivery Plan, March 2021, p. 6](#) and DCMS, Project Gigabit Delivery Plan Autumn Update, October 2021, p. 12

which the Department reports that it expects to sign gigabit infrastructure contracts have changed on several occasions. At our last evidence session in November 2020, the Department told us that it expected contracts to be operating in the last quarter of 2021.³² In the Department's summer update on progress, this was changed to May 2022.³³ In its Autumn update, this was changed again to between June and August 2022.³⁴ We asked the Department if it was able to give us a guarantee about when new contracts would be signed for the hardest to reach areas. It was unable to give us any guarantees but told us it had published its latest "projections" in its Autumn update.³⁵ We received written evidence from stakeholders within the sector, including Talk Talk and Gigaclear. They told us that they were concerned about the apparent slow pace of progress in signing contracts and want to see a clear timeframe from BDUK in order to understand likely deployment over the next five-year period.³⁶

12. The Department told us that the reason it had yet to sign any new gigabit infrastructure contracts was largely that commercial operators had accelerated their plans for expanding gigabit coverage very rapidly. It explained that this has meant that it needed to re-plan on the basis that the private sector has picked up more than was originally expected. The Department informed us that it wanted to ensure that taxpayer money was not wasted, and that public funding was used only when absolutely needed.³⁷ The Department told us that the level of change in commercial operators and the market in the last year had been unprecedented and that it did not expect in future to have to re-plan to the degree that it has in the past 12 months.³⁸

13. We asked the Department about concerns among some of our constituents who are feeling increasingly left behind as a result of private sector roll-out to the more commercially viable parts of constituencies. We asked it why its planning was slipping even further despite the procurement process having been made easier for it by commercial operators accelerating their build plans very rapidly and Government's level of ambition with regard to gigabit promoting market activity. The Department told us that people in areas where commercial operators are not going to build would not necessarily be left behind and that they would be eligible to look to use broadband vouchers.³⁹ The voucher scheme is available for homes and businesses which the Department defines as uncommercial, and is designed to allow pockets of community coverage to be provided by commercial operators at pace for people experiencing slow broadband speeds.⁴⁰ Promotion and administration of the Gigabit Broadband Voucher Scheme is led by commercial operators.⁴¹ These commercial operators include large firms like BT Openreach and Virgin Media O2, and smaller providers, known as alternative networks or "alt-nets," including County Broadband and CityFibre.⁴²

32 Committee of Public Accounts Oral evidence: Improving Broadband, HC 688, 9 November 2020, Q 121

33 DCMS, Project Gigabit Delivery Plan Summer Update, August 2021, p. 10

34 DCMS, Project Gigabit Delivery Plan Autumn Update, October 2021, p. 12

35 Q15–16

36 DRB0013 DCMS recall (Broadband), Talk Talk, November 4, p.3 and DRB00014 – DCMS recall (Broadband), Gigaclear, 9 November, p. 2

37 Q 6, 12

38 Q 10

39 Q 6–7

40 Qq 27, 59, 60

41 [For Suppliers – Gigabit Vouchers \(culture.gov.uk\)](https://culture.gov.uk)

42 Q 12, 16 and 17

2 Addressing the barriers to roll-out

Delivering legislative change

14. In our January 2021 report we concluded that the Department had failed to make meaningful progress in tackling barriers faced by operators in maximising gigabit connectivity. We noted that it had yet to secure the legislative and policy changes that industry deemed necessary for removing major barriers at pace and received no assurance that they were being addressed urgently.⁴³ The Department responded by outlining the progress it had made through its “Barrier Busting Taskforce” including introducing the Telecommunications Infrastructure (Leasehold Property) Bill and consulting on whether the Electronic Communications Code required further reforms.⁴⁴

15. The Department’s answers during our more recent evidence session suggested that it is still not making progress at pace in tackling barriers to gigabit roll out. For example, the Telecommunications Infrastructure (Leasehold Property) Act 2021 (TILPA) received Royal Assent on 15 March 2021. This legislation was designed to amend the Electronic Communications Code, providing a process that telecommunications operators could use to gain access rights to multi-dwelling premises for a defined period. However, the substance of the Act will only come into force through secondary legislation. The Department initially expected this to occur in Autumn 2021.⁴⁵ In our session, however, the Department told us that it was “hoping to do [this] soon” and that it was looking to lay the regulations needed by Spring 2022.⁴⁶ The Department subsequently wrote to us saying that it would expect to implement regulations for the Telecommunications Infrastructure (Leasehold Property) Act by the second quarter of 2022.⁴⁷

16. The Department also held a technical consultation on the regulations needed to implement the Telecommunications Infrastructure (Leasehold Property) Act from June to August 2021. However, it has not yet published either the findings of the consultation or its response to these.⁴⁸ Similarly, the Department is still analysing feedback on the consultation it ran from January to March 2021⁴⁹ on whether the Electronic Communications Code can help to ensure that the UK has sufficiently robust electronic communications networks to deliver the coverage and connectivity consumers and businesses need.⁵⁰ We received written evidence from stakeholders, including commercial suppliers, who suggested that delays to reforms will make delivering the 2025 target more challenging. For instance, Openreach told us that that it can upgrade existing copper infrastructure, but that this would require primary legislation, which was not yet in place.⁵¹ Similarly, the Internet Service Providers’ Association and the Internet Networks Cooperative Association told us that barriers are diverting key funding away from the rollout and impacting the

43 Committee of Public Accounts Committee, *Improving Broadband*, Thirty-fifth Report of Session 2019–21, HC 688, 8 January 2021, para 2

44 Government response on the Thirty-Fifth report from the Committee of Public Accounts, *Improving Broadband*, Session 2019–21 CP 409, March 2021, para 2.2 and 2.3

45 [Telecommunications Infrastructure \(Leasehold Property\) Act 2021 - House of Commons Library \(parliament.uk\)](https://www.parliament.uk/library/record/index?chamber=commons&document=2021-03-15-tilpa)

46 Q 50

47 Letter from Sarah Healey to PAC Chair Dame Meg Hillier Re: Improving Broadband, 23 November 2021

48 Q 53–56

49 Q 54

50 [Closed consultation overview: Consultation on changes to the Electronic Communications Code – GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/closed-consultation-overview-consultation-on-changes-to-the-electronic-communications-code)

51 DRB0007 DCMS recall (Broadband), Openreach, November 4, para 24

commercial viability of the build in certain areas; with operators spending substantial sums negotiating and obtaining wayleaves and often facing long delays that hold back deployment of new networks.⁵²

17. Stakeholders also suggested that there were areas where the Department's approach to removing barriers to rolling out gigabit-capable infrastructure could be strengthened further.⁵³ This was particularly the case regarding "wayleaves," which are contractual agreements between landowners and telecommunications providers about the right to access property in order to install and maintain electronic communications apparatus.⁵⁴ We received written evidence from The Independent Networks Co-operative Association, which told us that issues with wayleaves topped the list of challenges cited by independent operators working to deliver the UK's overall policy objectives. Negotiations over wayleaves can sometimes takes over two years.⁵⁵ Openreach also told us that issues related to wayleaves are a particular concern for blocks of flats with multiple occupants, which Openreach estimated may affect up to 1.5 million households.⁵⁶

18. We asked the Department when we will see progress on the ground with regards to wayleaves. It told us that although the Electronics Communications Code, which is where the wayleaves issue is addressed, was reformed in 2017, it can go further in ensuring that negotiations between operators and site providers are smoother than they currently are. It explained that as part of bringing forward the Product Security and Telecommunications Infrastructure Bill in the current Parliamentary Session, it would propose further reforms to the Code.⁵⁷ We asked the Department what this would mean in practice, and it told us it was looking at the obligations that companies have when they are engaging with site providers and how to make sure companies have met their obligations. It told us it was also looking at ways to upgrade historical rights and renew rights that have expired.⁵⁸ The Department was unable, however, to provide any specific timescales for when this legislation will be in place, stating that it would bring forward the Bill as soon as parliamentary time allowed.⁵⁹ Following our evidence session, the Department wrote to us to confirm that while it was unable to provide a firm set of dates, it expected the legislation needed to address the barrier we identified to proceed in the next few months. It also told us that amendments to Building Regulations mandating connectivity for all new build developments and the implementation of regulations for the Telecommunications Infrastructure (Leasehold Property) Act are due by the second quarter of 2022. It committed to continuing to work with Department for Transport colleagues on reforms to the street works regime and keep the Committee updated.⁶⁰

19. The government's decision in July 2020 to reduce its dependency on technology originating from certain high-risk vendors could introduce delays and additional expense to nationwide roll-out.⁶¹ The Department estimated that the removal of high-risk vendors'

52 DRB0004 DCMS recall (Broadband), Internet Service Providers' Association, 4 November, p. 2 and DRB0009 DCMS recall (Broadband), The Independent Networks Co-operative Association, 4 November, p. 4

53 DRB0005 DCMS recall (Broadband), Hertfordshire County Council, 4 November, p, 1,3 and DRB0011 DCMS recall (Broadband), Octopus Group, 4 November, para 4.6

54 [Guidance on access agreements – GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/access-agreements)

55 DRB0009 DCMS recall (Broadband), The Independent Networks Co-operative Association, 4 November, p. 4

56 Q 51, DRB0007 DCMS recall (Broadband), Openreach, November 4, para 23

57 Q 42

58 Qq 43–45

59 Qq 46–49

60 Letter from Sarah Healey to PAC Chair Dame Meg Hillier Re: Improving Broadband, 23 November 2021

61 C&AG's Report, para 15

equipment from the network will have caused a delay in the full fibre roll-out of up to a year, and for 5G by two to three years.⁶² The Department told us that EE and BT have announced they are going to get 5G coverage to 90% of the population by 2028. However, the Department told us that it remained confident it will achieve its target of 85% gigabit-capable coverage by 2025, because of the pace at which commercial suppliers were working.⁶³

62 Q63

63 Q64, 65–66

3 Addressing digital inequality

Connecting rural areas – the ‘Outside-In approach’

20. In our report in January 2021, we found that the Department was still developing its £5 billion programme to subsidise roll-out to the hardest to reach 20% of the UK’s 31 million premises and could not tell us when it intends to deliver major milestones, such as the letting of contracts. We were increasingly concerned that those in rural areas may have to pay more and may reach gigabit broadband speeds late.⁶⁴ At our evidence session, the Department confirmed that it does not intend to leave behind hard-to-reach areas, as rollout of Project Gigabit is based on the “Outside-In” procurement approach.⁶⁵ This approach identifies non-commercial areas and builds to these premises in parallel with commercial building, ensuring that no areas are systematically left behind.⁶⁶

21. We asked the Department why it had not just pressed ahead with the areas that it already knows are commercially unviable in the long term. It pointed us to Cumbria which had recently “been procured” and said that Cambridgeshire was also in the same batch. However, these are a small proportion of the UK and we asked what it was doing about the rest of the population. The Department told us that it was “absolutely not complacent”, and it was trying to ensure that it had a range of interventions in the programme so that it was clear with the market about where it is going to subsidise.⁶⁷

22. Those areas that currently have sub-superfast broadband speeds (30 Mbps or below) are more likely to be in the 20% of premises that the Department thinks will be unviable for commercial providers. Only 21% of premises in rural ‘county areas’ currently have access to gigabit-capable connections.⁶⁸ We heard that some rural areas or areas of economic deprivation, such as Blaenau Gwent in Wales, were previously supported by the Welsh Government with the previous Superfast broadband roll out. In contrast, we noted that roll-out of gigabit connectivity had been much slower and that at just 3% the area had one of the lowest levels of coverage.⁶⁹ We therefore asked the Department what it was doing to ensure that these areas and other rural areas, such as the Cotswolds, were not being left behind. The Department told us about a number of activities it was undertaking including: the roll out of superfast broadband to those unable to receive 30 Mbps (about 40,000 premises expected within the next year); the voucher scheme, which is told us was active and very popular in Wales; and the public sector hubs programme which had reached some 600 public buildings in Wales. However, it also told us it only recently completed the initial data-gathering stages for new procurements and therefore no new Gigabit infrastructure contracts have been signed.⁷⁰

23. In our January 2021 report, we found that the most difficult to reach areas were not neatly grouped together, and the Department was not yet clear how it would prioritise its interventions to ensure that they are served. As the Department expects that areas

64 Committee of Public Accounts Committee, *Improving Broadband*, Thirty-fifth Report of Session 2019–21, HC 688, 8 January 2021, para 1

65 Q 13, 15, 16, 19

66 [Delivering a gigabit-capable UK: Gigabit Infrastructure Subsidy](#), June 2021, para 3.3

67 Qq 11–3

68 County All-Party Parliamentary Group, [Levelling Up Digital Connectivity in Counties](#), October 2021, p. 5

69 Qq 31–32

70 Q 31

it classifies as “urban” will largely be covered by commercial building, its procurement prioritises rural areas with the greatest proportions of premises that are unable to receive superfast broadband speeds (30 Mbps).⁷¹ This means that it does not intend to sign contracts for areas including Birmingham and the Black Country, Merseyside and Greater Manchester, Greater London and Newcastle and North Tyneside until the later stages of the procurement process.⁷² Nevertheless, predominantly urban settings can have some rural areas within them. We queried whether this approach took account of the fact that neighbouring areas within the same region may have very different needs.⁷³ For example, we observed that despite being within the same region Birmingham and the Black Country are likely to have different connectivity requirements.⁷⁴ This is also the case for Edmonton in Greater London, where there are pockets of very poor service in a largely urban area.⁷⁵

24. The Department asserted that where there are variations found within urban areas, those pockets which are currently unviable are expected to be covered by commercial operators over the course of the next few years. However, should that not be the case, the Department told us that it will have to consider the best way of providing gigabit connections to those areas. The Department stated that potential solutions include the use of Gigabit vouchers, and it will continue to monitor eligibility for these to “mop up” these sorts of cases. The Department also stated that the roll out of 5G will benefit some of those urban areas because it is less specifically premises-based and gives good speeds.⁷⁶

Delivering coverage in the hardest to reach areas

25. The Department regards 0.3% of premises in the UK as being “very hard to reach,” and acknowledged that these do not feature within its target of achieving full national coverage by 2030.⁷⁷ These are typically the most rural and remote premises within the hardest to reach areas of the country, where the costs of delivering broadband are exponentially higher than in other areas and where traditional fibre-based approaches are unlikely to work.⁷⁸ The Department estimated that this equates to about 134,000 premises.⁷⁹

26. At our last evidence session in November 2020, the Department told us that it was assessing the value for money of alternative technologies for delivering the fastest speeds possible to hard-to-reach premises.⁸⁰ The Department told us that it was looking at what options were available to ensure connectivity in these areas. We heard that it had launched a consultation to identify what kinds of approaches could be used. The Department’s call for evidence focussed on delivering improved broadband to very hard to reach premises closed in June 2021.⁸¹

71 Q 37–38

72 DCMS, Project Gigabit Delivery Plan Autumn Update, October 2021, p. 16

73 Q 20, 40

74 Q 40

75 Q 59

76 Q 59

77 Q 19

78 Qq 14, 34, DCMS [Call for Evidence: Improving connectivity for Very Hard to Reach premises, p. 2, 19 March 2021](#)

79 Q 13

80 Committee of Public Accounts Committee, *Improving Broadband*, Thirty-fifth Report of Session 2019–21, HC 688, 8 January 2021

81 Q 13–14, [Improving broadband for Very Hard to Reach premises; 19 March 2021](#)

27. We asked why the Department had not made more progress in identifying what would be needed to connect the hardest to reach areas and how it would ensure that people in these aren't were pushed to the back to the queue.⁸² The Department told us that "nothing is ruled out". It explained that in these areas, potential means of providing gigabit-capable coverage included wireless options, as well as the use of satellites such as those in the OneWeb and SpaceX Starlink programmes.⁸³ The Department told us that the Government had spent \$500 million on OneWeb and that the technology was "moving very fast" while improving year-on-year but were nonetheless expensive. It explained that OneWeb had entered into a deal with some of the operators in the UK, and that it was working with OneWeb to see whether it could bring down the costs and whether it might be a viable option for some of the hardest to reach areas. The Department asserted that it "might be a more creative and faster solution than some other options available" for the more remote areas and agreed to provide us with more detail on the programme.⁸⁴

82 Qq 13, 20

83 Qq 13, 34–35

84 Qq 34–35, [UK government to acquire cutting-edge satellite network – GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/uk-government-to-acquire-cutting-edge-satellite-network)

Formal minutes

Wednesday 12 January 2022

Members present:

Dame Meg Hillier, in the Chair

Dan Carden

Sir Geoffrey Clifton-Brown

Mr Mark Francois

Peter Grant

Mr Richard Holden

Delivering gigabit-capable broadband

Draft Report (*Delivering gigabit-capable broadband*), proposed by the Chair, brought up and read.

Ordered, That the draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 27 read and agreed to.

Summary agreed to.

Introduction agreed to.

Conclusions and recommendations agreed to.

Resolved, That the Report be the Thirty-second of the Committee to the House.

Ordered, That the Chair make the Report to the House.

Ordered, That embargoed copies of the Report be made available, in accordance with the provisions of Standing Order No. 134.

Adjournment

Adjourned till Monday 17 January at 3:30pm

Witnesses

The following witnesses gave evidence. Transcripts can be viewed on the [inquiry publications page](#) of the Committee's website.

Thursday 04 November 2021

Sarah Healey, Permanent Secretary, Department for Digital, Culture, Media and Sport; **Susannah Storey**, Director General for Digital and Media, Department for Digital, Culture, Media and Sport; **Imran Shafi**, Director for Digital Infrastructure, Department for Digital, Culture, Media and Sport; **Paul Norris**, CEO Building Digital UK, Department for Digital, Culture, Media and Sport

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Published written evidence

The following written evidence was received and can be viewed on the [inquiry publications page](#) of the Committee's website.

DRB numbers are generated by the evidence processing system and so may not be complete.

- 1 Blackdown Hills Parish Network (BHPN) in Devon & Somerse. ([DRB0002](#))
- 2 CityFibre ([DRB0010](#))
- 3 Gigaclear ([DRB0014](#))
- 4 Hertfordshire County Council ([DRB0005](#))
- 5 Horner, Stephen ([DRB0003](#))
- 6 INCA ([DRB0009](#))
- 7 Internet Service Providers' Association ([DRB0004](#))
- 8 Kiely, Mr Mike (Founder, The Bit Commons) ([DRB0001](#))
- 9 Octopus Group ([DRB0011](#))
- 10 Openreach ([DRB0007](#))
- 11 Protect and Connect ([DRB0012](#))
- 12 Sutherland, Ewan ([DRB0006](#))
- 13 TalkTalk ([DRB0013](#))
- 14 The Local Government Association ([DRB0008](#))

List of Reports from the Committee during the current Parliament

All publications from the Committee are available on the [publications page](#) of the Committee's website.

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2nd	BBC strategic financial management	HC 187
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4th	COVID-19: Local government finance	HC 239
5th	COVID-19: Government Support for Charities	HC 250
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8th	COVID 19: Culture Recovery Fund	HC 340
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25th	The Department for Work and Pensions' Accounts 2020–21 – Fraud and error in the benefits system	HC 633
26th	Lessons from Greensill Capital: accreditation to business support schemes	HC 169
27th	Green Homes Grant Voucher Scheme	HC 635

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29th	The National Law Enforcement Data Programme	HC 638
30th	Challenges in implementing digital change	HC 637
31st	Environmental Land Management Scheme	HC 639
1st Special Report	Fifth Annual Report of the Chair of the Committee of Public Accounts	HC 222

Session 2019–21

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2nd	Defence Nuclear Infrastructure	HC 86
3rd	High Speed 2: Spring 2020 Update	HC 84
4th	EU Exit: Get ready for Brexit Campaign	HC 131
5th	University technical colleges	HC 87
6th	Excess votes 2018–19	HC 243
7th	Gambling regulation: problem gambling and protecting vulnerable people	HC 134
8th	NHS capital expenditure and financial management	HC 344
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17th	Immigration enforcement	HC 407
18th	NHS nursing workforce	HC 408
19th	Restoration and renewal of the Palace of Westminster	HC 549
20th	Tackling the tax gap	HC 650
21st	Government support for UK exporters	HC 679
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23rd	Delivering carrier strike	HC 684
24th	Selecting towns for the Towns Fund	HC 651
25th	Asylum accommodation and support transformation programme	HC 683

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26th	Department of Work and Pensions Accounts 2019–20	HC 681
27th	Covid-19: Supply of ventilators	HC 685
28th	The Nuclear Decommissioning Authority's management of the Magnox contract	HC 653
29th	Whitehall preparations for EU Exit	HC 682
30th	The production and distribution of cash	HC 654
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32nd	Specialist Skills in the civil service	HC 686
33rd	Covid-19: Bounce Back Loan Scheme	HC 687
34th	Covid-19: Support for jobs	HC 920
35th	Improving Broadband	HC 688
36th	HMRC performance 2019–20	HC 690
37th	Whole of Government Accounts 2018–19	HC 655
38th	Managing colleges' financial sustainability	HC 692
39th	Lessons from major projects and programmes	HC 694
40th	Achieving government's long-term environmental goals	HC 927
41st	COVID 19: the free school meals voucher scheme	HC 689
42nd	COVID-19: Government procurement and supply of Personal Protective Equipment	HC 928
43rd	COVID-19: Planning for a vaccine Part 1	HC 930
44th	Excess Votes 2019–20	HC 1205
45th	Managing flood risk	HC 931
46th	Achieving Net Zero	HC 935
47th	COVID-19: Test, track and trace (part 1)	HC 932
48th	Digital Services at the Border	HC 936
49th	COVID-19: housing people sleeping rough	HC 934
50th	Defence Equipment Plan 2020–2030	HC 693
51st	Managing the expiry of PFI contracts	HC 1114
52nd	Key challenges facing the Ministry of Justice	HC 1190
53rd	Covid 19: supporting the vulnerable during lockdown	HC 938
54th	Improving single living accommodation for service personnel	HC 940
55th	Environmental tax measures	HC 937
56th	Industrial Strategy Challenge Fund	HC 941