

Question 1: Do the nine challenges identified by the Commission cover the most pressing issues that economic infrastructure will face over the next 30 years? If not, what other challenges should the Commission consider?

1. Openreach welcomes the opportunity to respond to this call for evidence. The last National Infrastructure Assessment (NIA) called for a step change in the deployment of full fibre broadband, and Openreach has been at the forefront of delivering this.
2. At a conference in 2021, the CEO of the National Infrastructure Commission referred to the UK as “being one of the hottest digital infrastructure markets in Europe today – if not the world”, characterised by “incumbent operators building like fury” along with rising numbers of alternative network providers securing funding - creating competition and delivering rapid network expansion. We agree with this assessment, and believe the existing regulatory and policy framework set out by Ofcom and DCMS has helped to underpin this.
3. While there is more to be done on reducing the barriers to deployment, and further steps the Government could take to further incentivise investment, it is clear the overarching framework in which the sector operates is delivering good outcomes for the UK.
4. As such, we agree that digital infrastructure does not need to be a core focus for the Commission, and that the upcoming NIA does not need to undertake significant further work in this area.

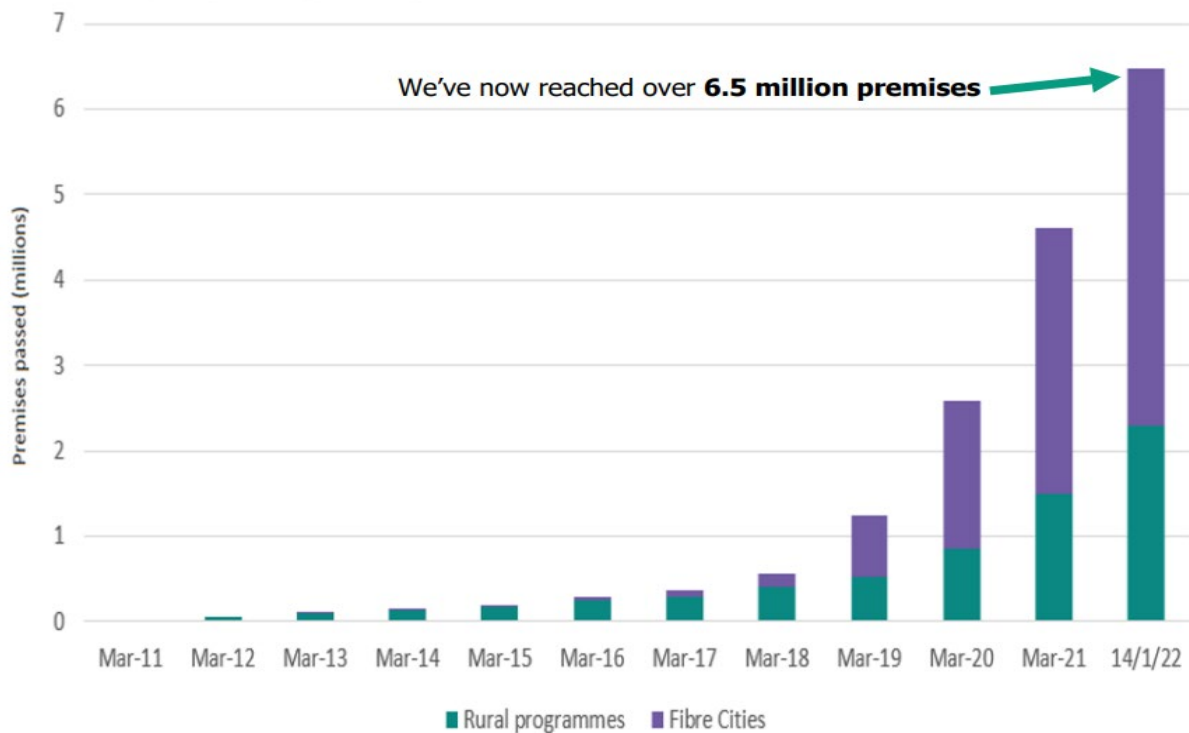
Openreach’s investment

5. Openreach is continuing to accelerate the pace and scale of our nationwide full fibre deployment. We have set out plans – as part of a £15 billion commercial investment – to deliver full fibre to 25 million homes and businesses by December 2026. Depending on our ability to attract further funding, we want to continue our deployment beyond this point – bringing the benefits of full fibre to even greater numbers of consumers. Delivering this transformative investment will go a significant way to meeting the Government’s objective of reaching 85% of the country with gigabit capable networks by 2025.
6. We have now passed over 6.5 million homes and businesses, and are currently building at a weekly run rate of over 50,000 premises. We are continuing to accelerate the pace of our deployment to meet our longer term objectives of passing 4 million premises a year with full fibre. This would be one of the fastest commercial deployments in the world.
7. In May 2021 we announced that we would increase our commercial deployment in harder to reach areas by 3 million premises (the vast majority of which are in what Ofcom classifies as Area 3), building on our previous industry-leading commitment, made in June 2020, to build to 3.2 million premises in harder to reach communities. This means we have publicly committed to building full fibre to at least 6.2 million premises in harder to reach areas as part of our commercial delivery. This balanced build approach means we are not just building full fibre in urban areas, but are helping to level up the UK by delivering full fibre to communities across the country.
8. Our commitment to deliver full fibre to at least 6.2 million premises in harder to reach areas as part of our commercial investment is clearly a positive intervention for rural communities across the UK.

Ofcom calculates there are c.9.5 million in Area 3 which means our commercial build will cover a significant percentage of the hardest to reach premises. This is relevant to the wider public interest, as our commercial investment reduces the number of areas where there is likely to be a market failure and consequently areas which may require public subsidy as part of the Project Gigabit programme. Therefore, our commercial investment will deliver better value for the taxpayer by ensure public funds are targeted towards the areas of most need.

- This financial year, 30% of our build has been in Area 3, with over 2 million Area 3 premises now having access to full fibre. No other operator is building, or currently plans to build, full fibre at anything like the scale that we have set out under our commercial plans - or has the same track record of delivering in challenging rural locations as we do.

Chart One: Scale of Openreach build across our rural and urban deployment programmes



- In this financial year alone, we have passed over 200,000 premises with full fibre which were previously superfast not-spot areas. Our innovative Community Fibre Partnership programme (which utilises DCMS gigabit vouchers) has also helped deliver FTTP to over 180,000 homes in some of the most isolated communities in the country. We also work with the designated Universal Service Provider (BT Group) to provide fixed line connections to some USO-eligible premises and are delivering the R100 contracts across Scotland. Our FTTP plans build on our successful partnership with DCMS and BDUK to deliver the previous superfast upgrade, which bought superfast connectivity to over 97% of the country.

- Our commercial deployment is therefore helping to meet the Government’s targets, deliver for urban and rural communities across the UK, and support better value for the taxpayer.

Wider market context

12. Ofcom's regulatory approach has sought to promote competition and investment in gigabit-capable networks as a means of bringing faster, better broadband to people across the UK and in support of the Government's objectives - and the evidence to date shows this approach is clearly working. Ofcom's approach aligns with the goals set out in the 2018 Future Telecoms Infrastructure Review, and the 2019 Statement of Strategic Priorities.
13. In recent years the market has been characterised by growing numbers of alternative network providers (altnets) emerging. These altnets have secured significant amounts of private funding to support their deployment. Many of these altnets are also making use of our passive infrastructure (e.g. our underground ducts and overhead poles) to drive down the costs of their deployment. Some altnets are building primarily in urban areas (such as CityFibre and Hyperoptic) where there may already be gigabit capable networks present or being planned, whereas others are focussing efforts in more rural areas.
14. The level and intensity of competition has clearly strengthened in recent years. There are now 99 alternative network providers in the UK, up 28 from last year. We estimate that altnets secured over £4 billion in funding in 2021 alone. Their network coverage has doubled to 5.9 million premises, and the largest six alt nets have now set ambitions to reach 25 million homes by the mid 2020s. They have already connected near 1 million end customers to their networks as well.
15. There are now 143 operators registered to use PIA – enabling them to build networks across the country. We're providing a good quality of service, and have seen order volumes continue to grow, despite the challenges posed by lockdown. We have received over 56,000 kilometres of noticed duct and 440,000 of noticed poles with 4,900 kilometres of duct and 29,000 poles built over last 15 months.
16. This network-based competition is good for consumers – offering a wider choice of network providers and retail options. It is also helping accelerate the deployment of full fibre and to bring the benefits of full fibre to a wider range of communities than would have otherwise been possible, and has kept broadband costs to the end users amongst the lowest in Europe.
17. Network based competition does necessarily mean that there will be overlap between competing networks. There are roughly 32 million premises in the UK. Considering that our current plans are to pass 25 million homes by December 2026 and we typically achieve 75-80% coverage in any given area, this means that we anticipate having a full fibre presence in almost every community in the UK meaning that overlap between competing networks is inevitable. Depending on securing further funding, it is possible that we would go further than our planned 25 million footprint in future, meaning the benefits of competition could be extended even further. Commercial deployment at this scale is necessary if the Government's full fibre targets are to be met.
18. In agreement with DCMS, we publish a list of exchanges we intend to build in, which we have updated regularly since 2019. This information can be found [here](#). We publish details of each exchange we plan to build in as part of our major build programmes – which captures the significant majority of all our commercial deployment. We do not publish details about some smaller programmes where it is not logistically feasible for us to do so. For example, these smaller programmes include our delivery of

FTTP to new housing developments, in-fill for some newer housing developments (known as retro new sites) and deployments to meet our universal service obligations (USO).

19. Publication of this information – and our wider footprint selection – follows a robust and audited process to ensure that we maximise commercial opportunities while also being fully compliant with competition law and all our other legal obligations. We assess a number of different factors to decide where full fibre deployment offers the best chance of a commercial return, including for example anticipated costs of build and projected take-up of services. We do not target overbuild of competitor networks – indeed where there is limited competitor overlap we may anticipate higher take-up of our services.¹ Equally, where we anticipate lower costs to build, even if there is competitor overlap we may still consider we have good prospects of a commercial return. As above, this aligns with Ofcom and DCMS’s overarching strategy to promote competition and investment in gigabit capable networks to deliver better outcomes for UK consumers and businesses.
20. We are therefore confident that we compete fairly, while also delivering full fibre to a growing number of communities across the country. This is a dynamic market with rapid volumes of new premises and build locations being announced by us and our competitors, so we’re also continuing to support BDUK through engagement with Open Market Reviews to help them identify where commercial build is unlikely to take place.

Supporting consumers

21. Alongside our accelerating deployment of full fibre, we have been seeking to drive further take-up of full fibre services. One way in which we can do this is through supporting our customers (e.g. retail providers like Sky, TalkTalk, Zen and BT) to encourage more consumers to take up full fibre. We have aimed to do this through a new pricing offer – referred to as ‘Equinox’. This proposal means that where a retail provider chooses to buy broadband and voice from Openreach, it agrees that a minimum proportion of those orders will be for full fibre - where that’s available - then we’ll offer a connection and rental discount against our standard prices. They remain free to place as much or as little business with other providers as they see fit, and this won’t impact the discount they get from us.
22. Equinox also offers uniform rental pricing across all areas of the UK, meaning that customers in rural areas pay the same wholesale rental price as those in urban areas (note retail pricing is a decision for Openreach’s customers). This is consistent with the Government’s levelling up agenda and ensures that consumers and businesses across the UK can benefit from competitively priced gigabit services.
23. Equinox offers provides great value broadband to our very broad and diverse range of retail providers, and as a result access to the best products for end-customers. Ofcom reviewed this process, and has concluded that our Equinox Offer doesn’t present competition concerns and will deliver better consumer outcomes.²
24. In concluding their review of Equinox, Ofcom found that:

¹ Our knowledge about competitor network presence is based on publicly available information.

² Ofcom, Statement: Openreach proposed FTTP offer starting 1 October 2021, September 2021. Available [here](#)

- a. **Citizens and consumers:** *Our conclusion is that the Equinox Offer is consistent with promoting investment in gigabit-capable networks by Openreach and other operators and promoting network-based competition, ultimately delivering better consumer outcomes.*
- b. **Altnets:** *As a result of the Equinox Offer, altnets are likely to face stronger competition from Openreach. However, we conclude that the Order Mix Targets and forecasting requirements do not create a potential barrier to using altnets and that the New-to-network Discounts do not raise concerns in terms of targeting or their impact on altnet build. As a result, our conclusion is that the Equinox Offer is consistent with network-based competition.*
- c. **ISPs:** *We consider that ISPs are likely to benefit from network-based competition. As explained above, we conclude that ISPs will continue to be free to use altnets where they wish to do so.*
- d. **Openreach:** *We consider that not preventing Openreach from introducing the Equinox Offer allows it to engage in network-based competition, without compromising our objective of promoting investment in gigabit-capable networks.*

25. We agree with this assessment.

26. We're seeing strong demand for full fibre services, partially driven by our commercial efforts, but also as a result of increased consumer appetite for better broadband. We now have over 1.5 million consumers using full fibre, with higher take up forecast as we continue our network expansion. Strong take up is clearly vital to support the case for ongoing investment.

Supporting the deployment

27. There are a number of areas where we continue to engage with DCMS and other Departments. Addressing different deployment barriers remains critical to support the sector to deliver at both pace and scale.

28. The NIC was right to highlight the importance of access to multi-dwelling units (MDUs) in previous reports last year. We estimate that up to 1.5 million flats may not be accessible owing to challenges operators face in securing wayleaves. The success of our rural deployment – and Project Gigabit – will both also depend on how easily we and other network builders can negotiate wayleaves with landowners.

29. DCMS have proposed some reforms to the Electronic Communications Code, and we're continuing to engage with the Department to demonstrate that further amendments could be made to accelerate deployment and avoid these risks. Stronger reforms would benefit operators in both urban and rural areas. In particular, where we have copper infrastructure in place, we believe we can upgrade this with minimal visual impact or burden on the landowner and that reforms should be delivered to enable us to do so.

30. In July 2019, DCMS confirmed their intent to ensure that all new build properties were delivered with gigabit capable infrastructure. While our commercial efforts have ensured that the significant majority of new builds are now contracted with full fibre, there are too many new builds which remain on copper based networks. Amendments to building regulations are expected later this year.

31. DfT are also considering measures to reduce bureaucracy around streetworks. One measure being considered is to introduce a new flexi-permit which would cover a number of minor and standard works in a limited area for a limited period of time. This would reduce the volume of permits which operators would need to apply for, and enable a more efficient build through reducing the amount of time we have to stop work while waiting for streetwork permits to be granted. It is positive to see DfT consider this measure, and we hope it is introduced as quickly as possible so as to allow operators to benefit from this change.
32. Business rates remain a significant concern for operators – and upcoming revaluations add significant uncertainty and unpredictability into our future rates liability. In order to maintain investment, it is important that HMT take forward measures to reduce this uncertainty. One approach would be for Government to drive greater predictability and affordability, protecting fibre investment, by modifying the 'Plant & Machinery' regulations to treat fibre for telecoms network operators as "tools of the trade" so fibre becomes a tenant asset and fibre infrastructure providers are not penalised for fibre investments.
33. We continue to engage constructively with BDUK on the framework for Project Gigabit, and look forward to seeing the final framework for delivery. We believe that a framework which incentivises scale build in the intervention area would offer value for money while rapidly improving build levels. In the meantime, we're continuing to deliver full fibre across the country – bringing the benefits of world class connectivity to communities in both urban and rural areas.
34. We're also aiming to transition to being a green fleet by 2030. We have the second largest commercial fleet in the UK, so this represents a significant challenge and opportunity for the UK. Recent changes to the Government's grant programmes have added additional cost to the transition and appear to run counter to the overarching drive towards net zero.