

# Broadband & the Road to 5G

## INCA Response to the Parliamentary Culture Media & Sport Committee Inquiry

### 1. Introduction

- 1.1. The Independent Networks Co-operative Association Ltd (INCA) is the trade association for the independent digital infrastructure operators building new full fibre and wireless broadband networks (the altnets), suppliers, local authorities, plus consultants and professional service firms. INCA was founded in 2009 and runs conferences and seminars, engages with policy makers and regulators, and develops collaborative projects.
- 1.2. INCA welcomes the opportunity to respond to this inquiry looks forward to working with the Committee further on this key issue.
- 1.3. The key points made in our submissions are:
  - The 2025 target is challenging, and the industry needs coordinated support from Government and the regulator in order to achieve this.
  - Network competition is key to delivering nationwide gigabit capable connections and should be encouraged through aligned policy and regulatory environments.
  - Government must take action on a number of specific barriers to rollout including facilitating wayleaves and coordinating streetworks.
  - Consideration of the impact that new immigration systems will have on the supply of telecoms and engineering skills is a pressing necessity.
  - Continued oversight is needed of the Outside-In programme to ensure it is competitive and open to a wide range of players.

### 2. What is the impact of COVID-19 on the roll-out of full-fibre and 5G infrastructure in both the short and medium-to-long term, including any differences in different parts of the UK

- 2.1. The Covid-19 pandemic has caused significant disruption to the telecoms industry along with the rest of the economy. However, communications networks have proved resilient.<sup>1</sup> The industry has worked hard with DCMS to ensure it can continue to operate during this intensely difficult time. Designated as key workers, telecoms staff have been able to maintain and manage networks, fix faults, and roll-out fibre whilst respecting social distancing rules.
- 2.2. However, the interpretation of lockdown restrictions has varied across regions and local authorities despite guidance from central Government that network build could

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<sup>1</sup> <https://www.ofcom.org.uk/about-ofcom/latest/media/media-releases/2020/broadband-networks-during-pandemic>

continue.<sup>2</sup> There are numerous areas where rollout plans have been delayed or put on hold due the inconsistent application of the guidelines but the long-term effect of this period on rollout therefore still remains unclear.

- 2.3. The central importance of our digital connectivity has never been more obvious. Over the last three months, the UK has seen its economy, education system, healthcare provision and social life shift entirely online. This has only been possible due to widespread and high-quality connections, and the experience only underlines the importance of future-proofed and nationwide gigabit networks.
  - 2.4. Proliferation of anti-5G conspiracy theories have also had an impact on engineers of both fixed and mobile networks working during the lockdown, with instances of abuse increasing dramatically for some operators. The vandalism and increased threat are expected to make it harder to build out 5G networks, which will require more sites. This could slow down deployment of 5G and has been a clear impact of the pandemic and ongoing issues around misinformation.
- 3. How realistic is the Government's ambition of nationwide gigabit-capable broadband by 2025, and what measures (regulatory, financial, technical, other) will be needed to achieve it?**
- 3.1. Regardless of the impact Covid-19 restrictions, the telecoms industry regards the 2025 target as challenging.
  - 3.2. The whole industry has been rolling out networks at pace, with research by Point Topic, commissioned by INCA<sup>3</sup> showing that the independent operators (non-incumbent), now pass 1.2m premises with full fibre, an increase of 50% during the past year. These operators currently have plans to reach 15.7m premises by the end of 2025 but operators would be able to go further if Government accelerated the reductions of barriers to rollout.
  - 3.3. These estimates will not reach the 2025 target, and the plans outlined in the Point Topic Report will only be achieved if Government is more robust in its efforts to overcome barriers to deployment. These include: obtaining wayleaves, enabling effective streetworks, continuing the moratorium on fibre business rates, and helping the industry overcome labour and skills shortages as the immigration regime changes.
  - 3.4. Moreover, and this is a crucial point for the altnet sector, the UK will only achieve its rollout targets if the regulatory regime actively encourages effective competition and if there is clear alignment between Government ambitions, Government policy and the regulatory approach adopted by Ofcom.
  - 3.5. One considerable concern is around overbuild, particularly by incumbent operators in largely rural areas. One potential option to mitigate against this threat would be to

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<sup>2</sup> <https://www.gov.uk/guidance/covid-19-guidance-for-telecommunications-infrastructure-deployment-in-england>

<sup>3</sup> <https://www.inca.coop/news/altnet-full-fibre-growth-April-2020>

grant five-year exclusive licenses to areas where there is no existing FTTP operator present. This would help to unlock considerable investment.

3.6. ***Therefore, without considerable support from Government, and appropriate regulation from Ofcom, the 2025 targets remain highly ambitious.***

#### **4. What are the challenges to the roll-out of 5G and gigabit-capable networks? To what extent do existing legislative, regulatory and spending plans address them?**

##### **The Regulatory environment**

- 4.1. Over the last five years a substantial shift in policy direction through the 2016 Digital Communications Review, the 2017 Future Telecoms Infrastructure Review and the updated rollout targets in 2019 have significantly boosted new investment in the sector. The independent sector has been both a key driver and beneficiary of this, and the market environment now looks significantly different to a few years back when the UK embarked on the challenge of rolling out superfast networks. There still remain some areas which require state intervention to make them commercially viable but overall there is higher degree of competition with multiple alternative operators operating in urban and rural areas and offering a key alternative to established players such as Openreach.
- 4.2. While not perfect, Government policy has started to recognise the new market environment, but we have strong concerns that Ofcom’s regulatory approach does not reflect this. Ofcom’s recent consultation ‘Promoting investment and competition in fibre networks – Wholesale Fixed Telecoms Market Review 2021-26’<sup>4</sup> envisages geographic regulation of BT in three areas. Area 1 – fully competitive – does not currently exist. Area 2 – partially competitive covers some areas of the country and is likely to expand in cities and large towns. Area 3 – non-competitive is expected by Ofcom to include around 30% of the population, mainly in small towns and rural areas.
- 4.3. Ofcom’s view, despite the recent investment commitments from alternative networks, is that there will be no serious competition to BT/Openreach in this final Area (3), and that an independent network would not be capable of achieving ubiquitously rollout in these areas. INCA’s members strongly challenge this view given the £6.6bn cumulative investment committed to the independent sector for the period to 2025<sup>5</sup>. Furthermore, altnets have largely specialised in serving specific rural communities where the commercial case is not strong enough for BT/Openreach to cover, so they would be well placed to deploy quickly and comprehensively. Indeed, several of our members covered rural areas way ahead of BT, demonstrating that they not only capable of doing so but also that they are willing address the financial and engineering challenges of bringing connectivity to these areas.

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<sup>4</sup> [https://www.ofcom.org.uk/data/assets/pdf\\_file/0037/188956/wftmr-volume-1-overview.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0037/188956/wftmr-volume-1-overview.pdf)

<sup>5</sup> <https://www.inca.coop/news/altnet-full-fibre-growth> April 2020

- 4.4. As a consequence of this assumption, Ofcom have proposed to incentivise BT/Openreach to invest in fibre in Area 3 by allowing them to recover costs in these areas. This makes any rollout from small independent operators almost entirely unviable in Area 3, undermining the Government's commitment to encouraging competitive investment between incumbents and new entrants and creates three main challenges to reaching the 2025 target.
- Firstly DCMS/BDUK has announced that they intend the 'Outside-In' programme to be competitive. Ofcom has recently responded by saying they do not anticipate areas designated as Outside-In will be included in Area 3. However, the Outside-In areas have yet to be defined, leaving a high degree of uncertainty for those planning new networks.
  - Secondly, Ofcom's approach takes into account committed investment, but not planned investment by independent operators. However, the regulatory uncertainty could hold back that planned investment and that could undermine the viability of the 2025 timetable.
  - Thirdly, BT has made clear statements that it does not anticipate covering the whole country and has called on Government to ensure that competition rules do not prevent a degree of co-operation between different industry players in deployment.
- 4.5. ***To achieve the Government's target, the regulatory regime must therefore support competitive investment in a meaningful way, and this requires Ofcom to reassess its anti-competitive position put forward in the Wholesale Fixed Telecoms Market Review and to engage with the altnet sector extensively and comprehensively on these issues.***

#### **Barriers to broadband rollout**

- 4.6. There are a number of knotty barriers to deployment which fundamentally slow down the rollout of broadband in the UK. For the Government's 2025 ambition to be met, they must intervene to support the Industry on the following issues as a matter of urgency.
- 4.7. **Obtaining wayleaves to cross land** – Whilst access to tenanted properties is partially addressed in the current Telecoms Infrastructure (Leasehold Property) Bill, this is almost exclusively applicable to multi-dwelling units, and as a result mainly urban scenarios. Obtaining wayleaves is a significant burden and cost for operators across the board, and this support should therefore be expanded to encompass a much wider range of situations, premises and locations. Crucially this would help with addressing rollout barriers in many rural constituencies.
- 4.8. **Street-works and planning rules** – Inconsistencies across regions and local authorities often delay and add cost to projects. Overcoming this issue requires an inter-departmental approach in UK government, devolved administrations and locally. While there are pockets of good collaboration between the different parties

involved there are is still a significant degree of inconsistency in how streetwork rules are applied across local authorities and there is huge potential in sharing and mainstreaming best practice in this area – Government and local authorities have a role to play in this.

- 4.9. **Access to existing passive infrastructure** (duct and pole access) – When rolling out networks, providers can either start from scratch or they can utilise existing infrastructure, e.g. ducts and poles or masts to reduce digging, thus reducing costs and disruption. Given its dominant structure, Openreach has an obligation to make available access to its physical infrastructure (PIA). However, the Openreach offering is cumbersome and difficult to access and Ofcom has so far resisted calls to review the obligations and ensure that alternative networks are provided with competitive access to Openreach ducts, masts and poles. Given that a working system around infrastructure access is a key cornerstone of both Ofcom and Government’s policy approach, we urge the Committee to investigate this further.
- 4.10. **Labour and skills** – Putting in place a new nationwide full fibre and wireless digital infrastructure is a big civil engineering project. While the sector as a whole has made significant investment in training and education, a large part of the current workforce is from the EU with a significant contingent working on a contract basis. The Government has stated that the sector will not receive any special treatment under the proposed new immigration rules taking effect in 2021 which would result in a sudden contraction in the skills supply just as the industry is seeking to hugely accelerate their infrastructure deployment.
- 4.11. **Taxation and business rates** – Business rates on telecoms infrastructure present a considerable barrier to investment and therefore network rollout. The existing moratorium on business rates instituted in the Telecoms Infrastructure (Relief from Non-Domestic Rates) Act continues to give 100% rates relief on all newly built fibre until 2022. The Government should act swiftly to extend this relief to ensure their taxation system appropriately aligns with their policy ambitions and avoid significant tax increase for the sector that falls just in time with a period where providers are expected to significantly speed up their rollout plans.

## 5. **What needs to happen to ensure the Government’s ‘outside in’ approach successfully addresses the digital divide while also delivering value for money?**

- 5.1. £5bn of public funding has been allocated to the ‘Outside In’ programme to help tackle some of the most challenging areas for commercial deployment. To succeed this programme should allocate funding that balances the capability of small providers operating on a regional or more local basis, with large, national scale operators.
- 5.2. The context of the previous BDUK scheme in 2011/12 is important when considering the Outside-in programme. The BDUK Superfast Broadband procurement framework resulted in just one supplier, BT, leading to concerns about lack of competition and value for money. This was highlighted by subsequent reports by the National Audit

Office<sup>6</sup> and Public Accounts Committee in 2014, leading to significant changes.<sup>7</sup> The design of the programme, and designation of BT as sole supplier, led to a focus on delivering superfast broadband to the easiest areas first with harder to reach areas being left behind.

- 5.3. The Outside-In programme starts from a different basis – connecting the hardest to reach areas at the same time as commercial deployment. It is also anticipated that this will be based on a competitive market of providers with procurement through a ‘Dynamic Purchasing System’ rather than a fixed framework to help ensure value for money. The crucial challenge in designing the programme is the geography and size of lots that attract subsidy. In general, large providers like Openreach prefer a small number of larger procurements. Smaller, more regional operators prefer lot sizes that best meet their local footprint and will prefer to bid on a number of smaller lots. Identifying the areas and getting the balance right between lot sizes and the overall number of procurements is an early challenge to get right. Failing to identify the appropriate lot sizes would risk repeating the mistakes that were made with the BDUK superfast programme and would seriously undermine competition in the market.
- 5.4. DCMS/BDUK will spend this year planning and developing the initiative. Consequently, procurements will not actually be launched until 2021. That leaves at most four years to cover the most difficult areas to meet the 2025 timeline and it is therefore imperative that this work continues at pace.
- 5.5. Other Government stimulus programmes, particularly the Rural Gigabit Broadband Voucher Scheme, have been slow to award funds, with our members reporting a year long wait on applications and raising concerns around appropriate resourcing. With the 2025 timeline quickly accelerating, unlocking these funds as quickly as possible is of key importance.
- 5.6. **We urge the Committee to monitor the development of the Outside In and other programmes and ensure that their implementation proceeds on a genuinely competitive basis, and continue to progress along the expected timelines.**

## **6. What does take-up of broadband and mobile services indicate about consumer and business attitudes to digital connectivity? What needs to be learnt from this for the roll-out of, and switchover to, gigabit-capable networks?**

- 6.1. Investment in new digital infrastructure runs ahead of demand, in part because services that fully exploit new capacity can only succeed when that capacity is available. A good current example is the use of online services for people working from home. Although the current fixed line broadband networks are expected to cope with an increase in daytime usage, service reliability will become an

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<sup>6</sup> <https://www.nao.org.uk/wp-content/uploads/2015/01/The-Superfast-Rural-Broadband-Programme-update.pdf>

<sup>7</sup> <https://www.parliament.uk/business/committees/committees-a-z/commons-select/public-accounts-committee/news/rural-broadband-report-publication/>

increasingly important issue. Full fibre networks in particular are inherently more reliable than hybrid fibre/copper networks. Of course, the benefits of more capable and reliable networks are only realised once they have been built.

- 6.2. 5G is a different issue, since it offers benefits of both enhanced speed and low latency, along with different approaches to managing networks and bandwidth. These attributes hold out the promise of a new generation of wireless services for consumer markets, industry verticals and connectivity.
- 6.3. The key lesson is that we need to have reliable high-speed networks available throughout the country to future-proof against the exponentially increasing data usage in everyday life across the UK.

## **7. What will be the impact on individuals and communities whose broadband and mobile connectivity fails to keep pace with the rest of the country over the next 10 years? What is the link with other DCMS policy concerns, such as changing patterns in the consumption of digital media?**

- 7.1. In general, the networks have stood up well to the changing pattern of use but the Coronavirus lockdown has demonstrated the need for high quality broadband services in all areas of the country.
- 7.2. We don't yet know the long-term impact of Coronavirus on work patterns, but millions of people have discovered that many office-based jobs can be undertaken from home, meetings held, services managed successfully – with the right connectivity. However, those with access to high capacity networks, are at a distinct advantage in terms of quality of services like video conferencing and access to educational resources.
- 7.3. Areas that do not keep pace with the growth of new gigabit-capable networks risk becoming economically and socially less attractive. Communities in rural areas that have been connected to full fibre have experienced noticeable economic and social benefits and are often served by independent networks – e.g. experience from the Broadband for the Rural North project<sup>8</sup>.

## **8. How effectively do the different stakeholders (UK and devolved governments, local authorities, Ofcom, industry) work together in both the mobile and broadband sectors? How might these relationships be improved to support gigabit-capable roll-out?**

- 8.1. In general, there are good working relationships between industry players (both traditional and challengers), government (UK, devolved admins and local) and Ofcom. However not all policy levers are currently well-aligned and, as explained previously, Ofcom has so far failed to share the Government's ambitions of enabling and relying on competition in hard to reach areas.

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<sup>8</sup> <https://b4rn.org.uk/>

- 8.2. Government policy has gone through a significant and sudden change – ambitions accelerated from 50% full fibre, to 100% gigabit capable networks by 2025. Whilst DCMS is in general supportive of the industry, tackling some of the barriers to deployment require inter-departmental collaboration and effective relationships with devolved administrations and local authorities. **This requires more assertive leadership from DCMS to ensure enabling connectivity is at the forefront of policymaking in other departments and local authorities.**
- 8.3. Regarding relationships in specific situations, the role of local authorities in the new Outside-In funding programme is very unclear. Local authorities were funding partners in the original BDUK programme, but they also brought local knowledge and the ability to tackle local deployment challenges. Proper engagement will be extremely valuable in the future Outside-In programme.

## 9. Conclusion

- 9.1. The independent sector has the will, capability and investment in place to meet the challenging timetable. To achieve this, the industry requires a supportive regulatory environment and a concerted and active effort from Government to reduce barriers.
- 9.2. In summary, for the 2025 ambition to be met INCA recommends
- Alignment between Government and Ofcom on how a competitive market can work to successfully deliver investment and network build.
  - Wider understanding and acceptance of the role, capacity and viability of the independent sector, reflected in policy and regulatory decisions.
  - Widen the scope of legislative measures to enable greater application of wayleaves access to rural scenarios.
  - Encourage greater coherence and reduce administrative burdens around planning and streetworks.
  - Continued work between industry, Ofcom and Openreach to improve access to their PIA product.
  - Consider the impact of new immigration rules on a sector reliant on specialised technical and engineering skills often recruited from within the EEA.
  - Extend the current 100% business rates relief on new fibre beyond 2022.
  - Continued oversight of the BDUK Outside In programme to ensure it is transparent and competitive for a wide range of operators.
  - Proper engagement with local authorities, taking account of their local expertise when designing the BDUK programme.
  - Coordinated and concerted leadership from DCMS across Government departments and local authorities.