

Press release: Forging a full fibre broadband and 5G future for all

Mandatory full fibre broadband for all new build homes and a new priority to connect hard-to-reach rural areas are key measures proposed in a national, long-term strategy for UK telecommunications.

The new approach is aimed at driving large-scale commercial investment in the fixed and wireless networks that are vital for the UK to remain globally competitive in a digital world.

[The Future Telecoms Infrastructure Review](#) (FTIR), announced as part of the government's modern Industrial Strategy, proposes the changes that are needed to give the majority of the population access to 5G, connect 15 million premises to full fibre broadband by 2025, and provide full fibre broadband coverage across all of the UK by 2033. Full fibre infrastructure is vital to underpin 5G coverage.

At its heart is an emphasis on greater consumer choice and initiatives to promote quicker rollout and an eventual full switch over from copper to fibre.

DCMS Secretary of State, Jeremy Wright said:

We want everyone in the UK to benefit from world-class connectivity no matter where they live, work or travel. This radical new blueprint for the future of telecommunications in this country will increase competition and investment in full fibre broadband, create more commercial opportunities and make it easier and cheaper to roll out infrastructure for 5G.

The FTIR's analysis indicates that, without change, full fibre broadband networks will at best only ever reach three quarters of the country, and it would take more than twenty years to do so. It also indicates that 5G offers the potential for an expansion of the telecoms market, with opportunities for existing players and new entrants.

Key recommendations from the FTIR include:

- New legislation that will guarantee full fibre connections to new build developments;
- Providing Operators with a 'right to entry' to flats, business parks, office blocks and other tenanted properties to allow those who rent to receive fast, reliable connectivity, from the right supplier at the best price;
- Reforms to the regulatory environment for full fibre broadband that will drive investment and competition and is tailored to different local market conditions;

- Public investment in full fibre for rural areas to begin simultaneously with commercial investment in urban locations;
- An industry led switchover (from copper to full fibre) coordinated with Ofcom;
- A new nationwide framework which will reduce the costs, time and disruption caused by street-works by standardising the approach across the country;
- Increased access to spectrum for innovative 5G services
- Infrastructure (including pipes and sewers) owned by other utilities such as power, gas and water, should be easy to access, and available for both fixed and mobile use;
- Ofcom to reform regulation, allowing unrestricted access to Openreach ducts and poles for both residential and business use, including essential mobile infrastructure;
- Alongside the FTIR, Government has also published a Digital Infrastructure Toolkit which will allow mobile networks to make far greater use of Government buildings to boost coverage across the UK.

The FTIR will drive competition and commercial investment in full fibre networks across as much of the UK as possible. However there will be some parts of the country where it will be unlikely that the market will be able to deliver alone.

Nationwide availability of full fibre is likely to require additional funding of around £3 billion to £5 billion to support commercial investment in the final c.10% of areas. These, often rural areas, must not be forced to wait until the rest of the country has connectivity before they can access gigabit-capable networks.

The Government will therefore pursue an “outside-in” strategy, meaning that while network competition serves the commercially viable areas, the Government will support investment in the most difficult to reach areas at the same time. We have already identified around £200 million within the existing Superfast broadband programme that can further the delivery of full fibre networks immediately.

Sharon White, Ofcom Chief Executive, said:

We welcome the Government’s review, and share its ambition for full-fibre and 5G networks to be rolled out right across the UK. The Government and Ofcom are working together, and with industry, to help ensure people and businesses get the broadband and mobile they need for the 21st century.

Next steps

We will shortly publish consultations on legislative changes to streamline wayleaves and mandate fibre connections in new builds. The conclusions of the Review will also form the basis of the government’s Statement of Strategic Priorities (SSP) to Ofcom, setting out the strategic objectives and outcomes

that the regulator must have regard to in the exercise of its regulatory functions.

Notes to Editors

1. The UK has only 4% full fibre connections and lags behind many of our key competitors Spain (71%), Portugal (89%) France (c.28% and increasing quickly).
2. Full fibre networks are faster, more reliable, and more affordable to operate than than copper-based networks. 5G will deliver faster and better mobile broadband, and enable new applications in industry sectors like manufacturing, health and transport.
3. The strategy seeks to recognise differences across rural and urban areas, and develops solutions that are tailored to both. The Review concludes that the best approach is to promote competition and commercial investment wherever possible, and to intervene only where necessary.
4. Market competition should deliver full fibre networks across the majority of the UK if we get the conditions right (c.80%). c.20% of the country is likely to require bespoke solutions to ensure rollout of networks. 5G is not just about faster mobile data connections, it could also deliver a wide range of new opportunities across industry sectors such as manufacturing, energy, transport and healthcare. The Government wants to encourage these new commercial opportunities through policy reforms, including making sure spectrum is accessible to all and used efficiently.
5. Running copper and fibre networks in parallel is both costly and inefficient, and a 'fibre switchover' strategy will be necessary to stimulate demand for fibre, to enable new networks to achieve scale quicker, and to ensure a smooth transition process for customers. The switchover process will be industry-led and timing will be dependent on the pace of rollout of fibre networks, and on the take-up of those networks. It is realistic to assume that switchover could happen in the majority of the country by 2030, but the timing will ultimately be dependent on the pace of fibre roll out and on the subsequent take-up of fibre products.
6. The EU's new directive for electronic communications – the European Electronic Communications Code (EECC) – is currently under negotiation. It is likely to be adopted by the EU shortly. If adopted, we are minded to implement, where appropriate, the substantive provisions in UK law, on the basis that it would support UK's domestic policy objectives. This will enable the extension of market review periods to five years and provide mechanisms to aid fibre network rollout in certain areas.