

Dig Once Strategy

Background

Digital connectivity – or ‘smart infrastructure’ or ‘digital infrastructure’ – is the utility of the twenty-first century. It underpins every aspect of the modern economy and all aspects of smart cities. This includes cellular wireless – 2G, 3G, 4G, and 5G – and Wi-Fi, wired (including full-fibre) technologies, Internet of Things (IoT), and emerging non-terrestrial networks such as low-earth orbit satellites.

This importance is only going to grow, and therefore demands a strategic approach to rolling-out digital connectivity. As technology plays an increasing role in all aspects of our lives, economies, and societies, reliable and extensive connectivity is essential. Similarly, as innovation is accelerated by new and improved technologies – including 5G, and IoT – the demands on connectivity will increase.

Despite its importance, the rollout of connectivity in the urban – and rural – environment can be complex. The process features an extensive range of stakeholders, including cities and local authorities, landowners, private-sector connectivity providers, other utility and service providers, and residents. The interests of all of these stakeholders may not always align. Connectivity rollouts also require engaging with planning and housing legislation and telecommunications regulation. This is often the domain of national government, and can present challenges to local implementation and delivery.

Recognising this importance, and these challenges, the Digital Infrastructure Group is shaping a strategy to enable the benefits of connectivity. These efforts will go some way to preventing anyone from being excluded from the life-changing and life-improving potential that connectivity can enable. Digital infrastructure, in particular, is a key enabler for many (if not all) of the Sustainable Development Goals – and especially relevant to the associated priority of ‘leaving no one behind’.

As a first step, any new developments and major construction projects must have suitable connectivity to facilitate these initiatives from move-in date. Existing buildings must also be connected-up. In addition, all construction must engage with the needs and realities of network rollouts – including wireless and wired connectivity.

Recognising that connectivity is a fundamental foundation of the digital – and broader – economy, a ‘Dig Once’ strategy can ensure that this connectivity (both wired and wireless) is delivered in a strategic way.

Our ‘Dig Once’ strategy:

One of the most efficient and effective ways to stimulate and incentivise fibre infrastructure implementation and bring costs down to extend digital coverage across the region, is through a ‘Dig Once’ approach. This means making the most of a road or path being dug up for one purpose and facilitating it to do other things at the same time (i.e. install digital infrastructure), minimising time, cost and disruption.

Our Dig Once Strategy achieves this by encouraging increased levels of collaboration and cooperation between Local Authorities and Utilities companies through authority streetworks co-ordination and by providing information so highways and planning officers can hold better informed discussions with telecoms suppliers, developers and investors. This approach is supported by the actions of the Digital Adoption Strategy, particularly through improved governance and the role of the Mini-DIG working groups and digital champions.

The DIG Once Strategy provides guidance and information on:

- ways of working that could be adopted by the partner authorities, in-particular Highways and Streetworks teams, such as promoting joint trench option (installing additional ducting, or simply sharing road space within established traffic management);
- how existing and new assets (primarily ducting) can be best used to directly support the introduction of digital infrastructure;
- ways of working to make use of the extensive re-use of existing assets, whether owned by local authorities (Highways), utilities (Pipes and Sewers) or Openreach (Physical Infrastructure Access (PIA)), with new excavation as a last resort.