#### Foreword from Minister for the Cabinet Office Francis Maude and Minister for Culture and the Digital Economy Ed Vaizey





We are in the midst of a digital revolution that is radically transforming our lives at home, in the workplace and on the move. In a world that is becoming digital-by-default and mobile-first, citizens are increasingly reliant on access to high speed networks to communicate, work and access essential public services wherever they are.

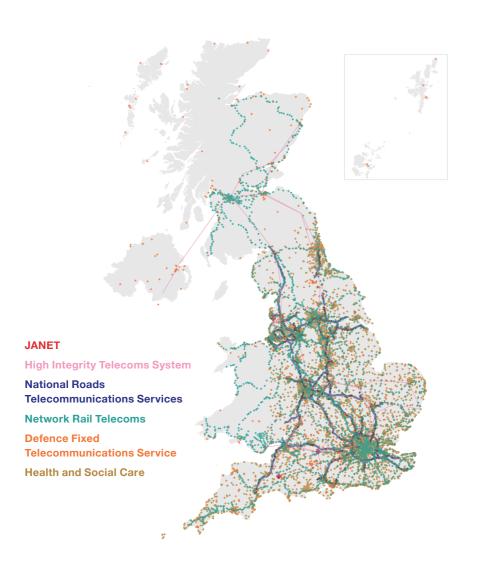
The importance of telecommunications and digital infrastructure is hard to overstate. It is not as visible but at least as vital as our work to improve the road network, or develop high speed rail. The digital networks we are building today directly underpin our growing digital economy and are enablers of future growth and prosperity - all part of our long-term economic plan for the country.

Last summer we launched a review into the digital and telecommunications infrastructure owned or leased by the public sector to help us take full advantage of existing capacity.

Today we are publishing the initial results of this landscape review. These maps and data are a first step into increasing transparency and setting out how we will use our publicly-owned networks more effectively. In the past hundreds of millions of pounds of taxpayers' money was spent building these networks - this Government believes they should be put to full use for all the public.

This is a great opportunity. We want to take full advantage of this existing capacity, avoiding wasteful duplication when buying additional resource. Government should be transparent and joined-up. This review is another step in that direction.

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We have commissioned a review of the public sector Telecommunications & Digital Infrastructure. This will cover fixed and mobile telecommunications infrastructure and bundled infrastructure services, and includes networks which are directly owned, operated or leased, as well as the provision of infrastructure services.

The first stage of this review has identified a set of maps and data - which we are publishing in interim form today to increase transparency and aid collaboration to get better connectivity for the public.

We found that Government owns, operates, or has long-term leases on some major fixed networks, examples of which include:

- fibre that runs alongside our railways and which forms one
  of the UK's largest backhaul networks with significant spare
  capacity;
- fibre that runs alongside England's motorway network enabling the rollout of the SMART motorways programme; and
- the long term lease on the UK Education & Research Network (Janet), a UK-wide fixed fibre facility delivering data-intensive and leading-edge services to universities and colleges.

Major networks are also sourced as a service from the private sector, including:

- the Public Services Network, which provides connectivity to the majority of public sector organisations in Great Britain and Northern Ireland:
- the Defence Fixed Telecommunications network which provides secure voice, data, and video services to Defence users in the UK and abroad;
- the Airwave Emergency Services Network providing resilient communication services to public safety organisations;
   and
- the N3 network connecting Health and Social Care sites.

The provision of network services is changing and there are currently proposals for new services to replace old in health, defence, and emergency services.

The initial stage of the review has uncovered an untapped resource: capacity in the existing publicly owned networking across the country.

In some cases we may not need to build further infrastructure, or we may find we are able to use spare capacity to supplement and enhance existing provision and connectivity.

We're going to collaborate to get this done. The review has focused on central government, but there will be other networks that the government owns out there and we would like to use this opportunity to invite other public sector bodies to identify their infrastructure and contribute to extending coverage.

Since last summer, the owners and operators of the major publicly funded networks have been working together to identify opportunities to collaborate. Over 20 proposals are being investigated. Some are already in train, and will, for example:

- make government buildings available as locations for siting aerial telecommunications masts, overcoming barriers to extending connectivity both in urban and rural areas, and generating additional public revenue;
- exploit the investment in the Emergency Services Communications Programme (ESMCP) to provide connectivity to emergency phones, saving the Highways Agency costly upgrade work; and
- change the use of the Ministry of Defence Grapevine 2 procurement to open it to other Government and public sector bodies, sharing capacity and reducing procurement and operating costs.

Over the next few months we aim to build momentum and embed a collaborative culture. Examples of further opportunities being investigated include:

- Jisc, the parent organisation for the Education & Research Network (JANET) is bidding to join the Public Services Network. This would open up JANET capabilities and technologies across the public sector and avoid duplicating investment and commercial provider charges;
- the Home Office are exploring the possibility of minimising the number of connections into Ports and Airports; and
- exploiting network cabling supporting wind farms to provide improved rural connectivity. Infrastructure UK will explore the possibility of using this infrastructure to provide services such as broadband for remote communities, and mobile backhaul, working with DECC and DCMS.

We are publishing this information to increase the transparency of the UK's telecommunications and digital infrastructure, there is further work to be done and we will publish more detailed information soon. To ensure the UK's infrastructure is used effectively, we would encourage other owners to do the same.

In publishing this data we are setting out the size of the opportunity ahead: an underused digital infrastructure that can be harnessed far more effectively to connect the nation. We look forward to working with government departments and other public sector bodies to deepen our understanding of this area, and to ensure these publicly owned assets are used as effectively as possible for the public.

#### **JANET**

The UK Education and Research Network, commonly known as Janet (the Joint Academic Network) supports universities and colleges with a high bandwidth and scalable UK-wide network open to the Internet. Points of presence (PoP) denoted on the map.



#### **High Integrity Telecoms System**

Provides a high integrity system to carry information services between central government and local areas involved in a response to an emergency, utilising satellite technology. Core sites denoted on the map.



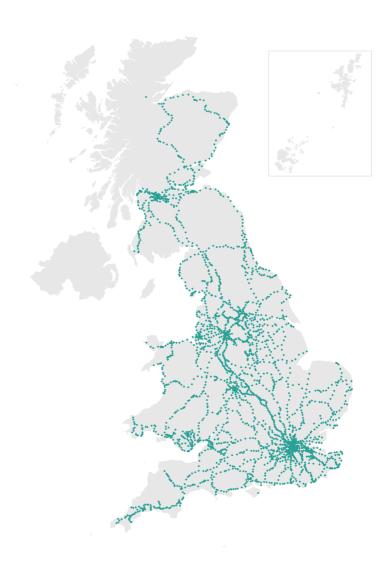
### National Roads Telecommunications Service

The network is formed by fibre and copper cables, in the verge of motorways and interconnects roadside devices such as CCTVs, speed cameras and signals. The network connects emergency telephones and other roadside devices to a number of regional control centres. Points on the map denote access to fibre optic and copper cables.



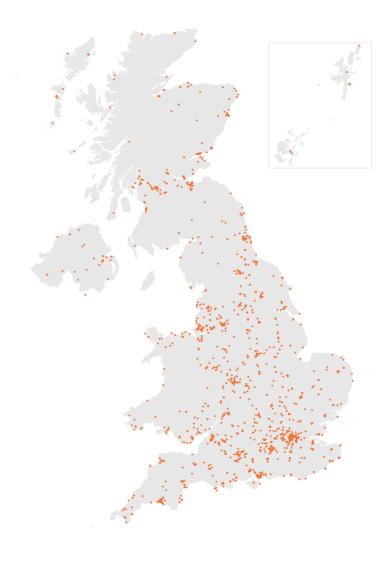
#### **Network Rail Telecoms**

Fibre in the ground supports safety-critical and consumer communications along railways, signalling and power control systems as well as network rail corporate voice and data traffic. Points on the map denote mast sites.



## **Defence Fixed Telecommunications Service**

Provides secure wide area Network (WAN), voice, data and video telecommunications services via through fibre, copper and radio connectivity in the UK and abroad. Different services provide connectivity to MOD users, UK Industry, UK overseas Permanent Joint Overseas bases and partner nations. Points of presence (PoP) denoted on the map.



#### **Health and Social Care Network**

N3 is the private Wide Area IP Network (WAN) for the UK National Health Service (NHS) in England and Scotland and it provides connectivity at broadband rate or greater to National Applications such as appointment bookings and electronic transmission of prescriptions to pharmacies. It also connects to other networks via Gateways, notably to the Internet via the Internet Gateway. Points of presence (PoP) denoted on the map.

