

Press release: Monmouthshire chosen as 5G Testbed site to improve rural connectivity

- UK-wide testbeds to spearhead efforts to make the UK a world leader in 5G
- Public and private sector cooperation will explore the benefits of 5G for rural communities, tourism and healthcare
- Government highlights progress to date on its strategy to create a digital economy fit for the future
- 5GRIT will build a 5G Testbed for rural use cases in Monmouthshire, Cumbria, Northumberland, North Yorkshire, Lincolnshire, Invernesshire and Perthshire.

On the first anniversary of its Digital Strategy, the government has today announced the winners of a £25 million competition to pave the way for a future rollout of 5G technology in the UK.

From the Orkney Islands to the West of England, the six projects led by small and medium-sized enterprises (SMEs), universities and local authorities represent the best of UK innovation, resources and expertise.

They will test 5G across a range of applications, including smart farming with drones, using the 'Internet of Things' (IoT) to improve healthcare in the home, increasing manufacturing productivity and maximising the future benefits of self-driving cars.

They are part of a £1 billion commitment through the Digital Strategy to keep Britain at the forefront of connectivity by accelerating the deployment of next generation digital infrastructure and driving forward new 5G business opportunities.

Secretary of State for Wales Alun Cairns said:

Today's announcement is another example of how the UK Government's Digital Strategy is delivering for every corner of Wales.

These tailor-made projects will transform our most rural communities, exploring innovative ways to use 5G to develop the tourism and agriculture industries, which are vitally important to the Welsh economy.

The UK Government recognises the importance of investing in quality communication infrastructure to boost the productivity and capacity of our local businesses, and so that all residents can keep pace with the UK's digital transformation.

Margot James, Minister of State for Digital and the Creative Industries, said:

One year on from the Digital Strategy, we are delivering on our commitments to create a Britain fit for the future, with a thriving digital economy that works for everyone.

“The ground-breaking projects announced today will help to unlock 5G and ensure the benefits of this new technology are felt across the economy and wider society.”

Each testbed will receive between £2 million and £5 million in government grants, as part of a total investment of £41m from private sector and other public sector funding, to explore new ‘fifth generation’ mobile communications technologies that use high frequency spectrum to deliver internet speeds of over a gigabit per second.

Professor Rahim Tafazolli, Founder and Director of 5GIC and Leader of 5GUK Networks said:

The 5G Innovation Centre is extremely pleased and proud to have been able to play a leading part in supporting the DCMS UK 5G testbeds and trials programme. 5G represents a fundamental transformation of the role that mobile technology plays in society, delivering rich new services in sectors such as finance, transport, retail and health. It will drive trillions of dollars of additional activity through the world digital economy and the DCMS programme will ensure that the UK stays at the forefront of this exciting global race.

The Digital Strategy launched in March 2017 to continually drive the UK’s connectivity, telecommunications and digital sectors, and invest in industries, infrastructure and skills. Infrastructure is also one of the key foundations of our modern Industrial Strategy, and both seek to create the conditions for the UK’s digital economy to thrive; through overcoming barriers to growth and promoting more high-skilled, high-paid jobs of the future.

A year later, there are nearly 60,000 tech businesses in the UK, we remain the number one location for tech investment in Europe and have cemented our position as a leader in some of the most innovative and strategically important digital sectors.

In particular, the UK’s fintech sector is larger than New York’s or the combined fintech workforce of Singapore, Hong Kong and Australia. Healthtech, accelerated by needs of the NHS, is also now a thriving digital sector in the UK.

Delivering on its commitments to future-proof the economy through the Digital Strategy, in the last twelve months alone the Government has:

- Delivered more than 2.5 million free digital skills training opportunities with industry as part of the Digital Skills Partnership, with almost half a million new pledges made;
- Reached its target for 95% of premises to have access to superfast broadband by the end of 2017;
- Committed £75 million investment to take forward key recommendations in the independent review of AI, including a new Centre for Data Ethics and Innovation;
- Announced the creation of new AI fellowships and funding for 450 PhD researchers to secure the UK's leading position in the global AI market;
- Confirmed a £21m investment in Tech Nation to establish regional hubs throughout the country, widening access to Tech City's training, mentoring and development programmes;
- Announced £84m to boost the skills of 8,000 computer science teachers to make sure every secondary school has a qualified computer science teacher by 2022.
- Announced a plan to unlock over £20 billion of patient capital investment in innovative firms by doubling the annual allowance of the Enterprise Investment Scheme and the Venture Capital Trust scheme;
- Supported and funded the Tech Talent Charter, an industry-led initiative committing over 170 industry signatories to diversity in tech;
- Supported the creation of a fantastic environment for early stage tech businesses – there are more than 200 incubators and 160 accelerator programmes located across the UK offering a mix of funding, mentoring and training;
- Introduced and updated the 5G strategy to deliver high quality coverage where people live, work and travel including setting out actions to ensure that mainline rail routes, major roads and connectivity 'hotspots' are 5G-ready.

The Digital Strategy also focuses on building and maintaining public confidence in the use of data by businesses, while ensuring the power of data can be unlocked for innovation.

Many organisations still need to act to make sure the personal data they hold is secure and they are prepared for the Data Protection Bill, which will become law on 25 May. It will give UK citizens more control over use of their data, and provide new rights to move or delete personal data.

A new campaign, led by the Information Commissioner's Office, will prepare SMEs to be compliant with these updated laws for the digital age. It will encourage businesses to access the wealth of free help and guidance available from the ICO.

The Strategy also reflects the Government's ambition to make the internet safer for children by requiring age verification for access to commercial pornographic websites in the UK. In February, the British Board of Film Classification (BBFC) was formally designated as the age verification regulator.

Our priority is to make the internet safer for children and we believe this is best achieved by taking time to get the implementation of the policy right. We will therefore allow time for the BBFC as regulator to undertake a public consultation on its draft guidance which will be launched later this month.

For the public and the industry to prepare for and comply with age verification, the Government will also ensure a period of up to three months after the BBFC guidance has been cleared by Parliament before the law comes into force. It is anticipated age verification will be enforceable by the end of the year.

Notes to Editors:

The Monmouthshire project will make up the following 5G Trials and Testbeds scheme:

5G Rural Integrated Testbed (5GRIT)

- Lead organisation: Quickline Communications
- Grant: £2.1m

5GRIT will be trialling innovative use of 5G technology across a range of rural applications, such as smart agriculture, tourism and connecting poorly-served communities, using shared spectrum in the TV bands and a mix of local ISPs and self-provision.

The aim is to ultimately make high quality connectivity available across Cumbria, Northumberland, North Yorkshire, Lincolnshire, Inverness-shire, Perthshire and Monmouthshire. Here the consortium will develop 5G-ready AR apps for tourists and investigate how high-bandwidth wireless connectivity can increase food production in farming, including through use of AR and an unmanned aerial system.

Steve Jagger, Managing Director of Quickline Communications said:

We feel that 5G can unlock the potential of rural areas through better connections for residents, businesses, farmers and visitors. Our consortium brings together innovative businesses and leading Universities to make the 5G dream a rural reality. * Ofcom has today published a discussion document Enabling 5G in the UK which details how it will support the rollout of 5G.

- Ofcom's 2017 Connected Nations Report found that: 1. In 2017, 91% of UK premises can get superfast speeds, up from 89% last year; 2. 840,000 UK premises can now get full fibre services compared to 498,000 in 2016 3. 4G coverage continues to increase with 58% of UK premises obtaining 4G indoor coverage from all four MNOs (compared to 40% in 2016) and 43% of outdoor geographic areas obtaining 4G coverage also from all four

(compared to 21% in 2016); 4. Telephone calls coverage on motorways has increased by 4% to 97% from all four MNOs since 2016 and data coverage on motorways has increased by 8% to 91% also from all four MNOs; 5. And noted the requirement in the Government's agreement with mobile operators in 2014 , that all mobile operators should cover 90% of the UK's geography(for voice calls) by end 2017.

- The 2017 ONS internet users survey found that: 1. In 2017, just 9% of adults in the UK had never used the internet, down from 10% in 2016; 2. Virtually all adults aged 16 to 34 years were recent internet users (99%), in contrast with 41% of adults aged 75 years and over; 3. 90% of men and 88% of women were recent internet users, up from 89% and 86% respectively in 2016; 4. Recent internet use among women aged 75 and over had almost trebled from 2011.
- The Lloyds Bank Consumer Digital Index 2017 indicates that over the past year, 1.1 million more UK adults have gained Basic Digital Skills.
- According to the Nominet Digital Futures Index 42% of adults are classed as digitally savvy and there are 58,945 tech businesses with employees in the UK in 2017.
- The UK came first in the rankings of the Oxford Insights Global Government AI Readiness Index 2017, reflecting its world-leading centres for AI research and strong technology industry.
- The seven strands of the Government's Digital Strategy are: 1. Building world-class digital infrastructure for the UK 2. Giving everyone access to the digital skills they need 3. Making the UK the best place to start and grow a digital business 4. Helping every British business become a digital business 5. Making the UK the safest place in the world to live and work online 6. Maintaining the UK government as a world leader in serving its citizens online 7. Unlocking the power of data in the UK economy and improving public confidence in its use