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, Invernessshire 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 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

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Press release: HMRC slays tax-avoiding Cyclops

HM Revenue and Customs' (HMRC) legal victory over Cyclops Electronics and Graceland Fixing proved that a multi-million pound tax avoidance scheme used by over a hundred other businesses was a ruse to avoid paying tax.

The businesses used loan notes to pay company directors' bonuses in an attempt to get around paying tax and National Insurance on their awards.

Specially created companies issued loan notes in £10 denominations that matched the bonus amount exactly. Special conditions were included to dodge the tax and National Insurance due when the loan notes were given to the director.

The scheme was designed to take advantage of legislation that provides tax relief for genuine commercial transactions, which has now been amended to prevent any further attempts to exploit the rules.

Penny Ciniewicz, HMRC's Director General for the Customer Compliance Group, said:

> We cannot allow tax avoidance schemes like these to deprive the UK of vital revenue. The money we've protected in this case alone would be enough to pay the annual salaries of around 2,400 newly qualified teachers.
>
> The honest majority of people who pay their taxes shouldn't have to carry the burden of paying for the public services we need.

The win at the Upper Tribunal adds to HMRCs' excellent tally, winning 9 out of 10 tax avoidance cases taken to court in the last 2 years, with many more settling before reaching that stage.

The win over Cyclops Electronics, a supplier of electrical components, and Graceland Fixing, a building company, was worth £350,000, with £55.2m in related cases.

Read the decisions of the:

This scheme was devised to work around the anti-avoidance legislation introduced to the employment income share schemes legislation at part 7 ITEPA 2003 by schedule 22 FA 2003. The legislation has been amended to prevent any further attempts exploit the rules.

This scheme was formulated and implemented in the 2003 to 2004 and 2004 to 2005 tax years.

The scheme was initially designed and promoted by Haines Watts

A loan note is a financial instrument that creates or acknowledges indebtedness.

An image of Penny Ciniewicz, Director General of HMRC's Customer Compliance Group is available on Flickr.

Press release: 5G project announced on first anniversary of Midlands Engine Strategy

The government has today (10 March 2018) announced the Midlands winners of a £25 million competition to pave the way for a future rollout of 5G technology in the UK.

The new project, the Worcestershire 5G Consortium, is receiving £4.8 million of government funding. In addition a further 2 of the project consortiums, receiving a total of over £6 million, also include partners based in the Midlands Engine.

The testbeds will keep the Midlands Engine at the forefront of connectivity by accelerating the deployment of next generation digital infrastructure, driving forward new 5G business opportunities, and developing a home-grown 5G skills base.

5G will enable internet speeds to keep up with the explosion of smart devices in the home and the 'internet of things'. With potential speeds of up to 10 gigabits per second, it will also make it easier for people to rapidly download and upload ultra HD and 3D video.

This would revolutionise the way companies in the Midlands Engine do business and help them expand globally. The news comes on the first anniversary of the Midlands Engine Strategy which sets out how the Midlands will deliver the government's Industrial Strategy, enabling businesses to create more jobs, increase skills levels, export more goods and services, and grow productivity.

Over the last 12 months the Midlands Engine has seen many successes, including:

- a £250 million boost for small and medium businesses across the Midlands through the Midlands Engine Investment Fund
- a second devolution deal for the West Midlands Combined Authority, including £250 million from the Transforming Cities Fund to improve transport links
- 9 international Midlands Engine trade missions, to build links with markets such as the USA, China, and the UAE
- expansion of the successful work coaches programme across the West Midlands Combined Authority; the Midlands Engine Team has already delivered over 4,700 job outcomes to support people furthest from the labour market to overcome barriers to employment
- opening of the National College for High Speed Rail in Birmingham to generate the workforce of the future

- £80 million awarded to build the UK’s first ever state-of-the art automotive battery development facility in Coventry and Warwickshire
- Coventry named the UK City of Culture for 2021 and Birmingham the host city for the 2022 Commonwealth Games – a chance to show visitors everything the region can offer
- government funding announced to boost autonomous vehicle development across the Midlands, including projects from Horiba MIRA in Leicestershire and Jaguar Land Rover – shaping the future of transport
- an injection of £105.4 million infrastructure investment to help unlock around 22,000 potential new homes
- a successful Midlands pavilion at the MIPIM property fair in Cannes, which we will be repeating next week; here we’ll launch a refreshed investment portfolio of over 20 projects worth over £10 billion

Securing these testbed areas is another success for the Midlands, continuing to make the region a powerful engine for economic growth.

Sajid Javid, Housing Secretary and Ministerial Champion for the Midlands Engine, said:

> One year on from the launch of the Midlands Engine Strategy, it’s clear that the region is at the forefront of innovation and growth. We have achieved a lot – from trade missions across the globe to millions of pounds of government investment in the region.
>
> The announcement today of this ground-breaking project will build on this, helping to unlock the Midlands’ 5G future and ensure the benefits of this new technology are felt across the region.

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

> Worcestershire, with its strong manufacturing and industrial base, has rightfully won its place as home to one of the UK’s first, innovative 5G testbeds.
>
> I look forward to seeing how 5G connectivity will fuel the Midlands Engine – unlocking growth, increasing productivity and bringing wider benefits for our citizens and communities.

Sir John Peace, Chairman of Midlands Engine, said:

> Placing the Midlands at the forefront of digital innovation is just one of the ways the Midlands Engine is aiming to create economic growth across the region.
>
> Through raising productivity and creating a stronger economy, we aim to achieve a fairer society through improving skills, improved access to housing and greater quality of life for all Midlanders.

> Strengthening the Midlands Engine as a place to invest and supporting the efforts of Midlands businesses to trade and export also complements government's work to strengthen our country internationally.

Mark Stansfeld, Chair of Worcestershire Local Enterprise Partnership and 5G lead for Midlands Engine, said:

> We are delighted to have been successful in our bid which will help businesses deliver greater productivity using 5G technologies.
>
> This highlights the huge ambition of Worcestershire's innovative public and private sector, with key Worcestershire employers leading the way in Industry 4.0.
>
> At a time of increasing global competition for trade and investment, we are confident that we can act as a catalyst for technological innovation in the wider Midlands Engine and nationally. We welcome opportunities for collaboration with the UK's most innovative minds.

The winning projects which involve partners in the Midlands Engine are:

Worcestershire 5G Consortium – Testbed and Trials

Lead organisation: Worcestershire county council – Grant: £4.8 million

A team of 5G and Industry 4.0 experts lead this project – working with Worcestershire Local Enterprise Partnership, the consortium comprises: Worcestershire county council, 5GIC at University of Surrey, AWTG, Huawei, O2, BT, and Malvern Hills Science Park. With local businesses Worcester, Bosch, and Yamazaki Mazak. It will focus on ways to increase industrial productivity through preventative and assisted maintenance using robotics, big data analytics and Augmented Reality over 5G.

It will also have a cyber security aspect, with QinetiQ providing assurances on the 'security by design' of 5G and IoT technology. Entrepreneurs will have the opportunity to test 5G capabilities in a new commercial tech accelerator located at the Malvern Hills Science Park.

5G Rural Integrated Testbed (5GRIT)

Lead organisation: Quickline Communications – Grant: £2.1 million

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 where 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.

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> 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.

5G RuralFirst: Rural Coverage and Dynamic Spectrum Access Testbed and Trial

Lead organisation: Cisco – Grant: £4.3 million

5G RuralFirst, led by Cisco and lead partner University of Strathclyde, will deliver testbeds and trials to exploit 5G benefits for rural communities and industries like agriculture, broadcasting, and utilities, to address the challenges of and build the business case for 5G rural deployment.

Based primarily on the Orkney Islands, and in the farmlands of Shropshire and Somerset, the project will integrate spectrum sharing strategies for 5G; bringing connectivity to rural communities, enabling smart farming in partnership with Agri-Epi Centre (including drones, autonomous farm vehicles and remote veterinary inspections); innovative methods of delivering broadcast radio over 5G working with the BBC, alongside the delivery of 5G connectivity for IoT in utility and other industries in rural areas.

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- the Lloyds Bank Consumer Digital Index 2017 indicates that over the past year, 1.1 million more UK adults have gained Basic Digital Skills

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Press release: £25m for 5G projects on the anniversary of the UK's Digital Strategy

- 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

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Lead organisation: Cisco Grant: £4.3m

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Scot Gardner, Chief Executive of Cisco UK & Ireland said:

> 5G has huge interest, but now we have to make it real – not just for cities but for everyone, including into rural communities. It is fantastic to see the government investing in research and development that helps the UK to lead in such a crucial space.
>
> Digital economies rely on connectivity so the UK can’t sit and wait. We need to be trialling now, understanding what 5G can do right across the UK. 5G RuralFirst looks to do just that. With live trials in Orkney, Shropshire and Somerset it will not only benefit those communities, but help the entire UK better understand what 5G makes possible, as well as the challenges there are in delivering world-class connectivity to all corners of the nation.

5G Smart Tourism

Lead organisation: West of England Combined Authority Grant: £5.0m

This testbed will focus on delivering enhanced visual experiences for tourists using Augmented Reality (AR) and Virtual Reality (VR) technology in major attractions in Bath and Bristol, including the Roman Baths and Millennium Square. Content and technology developments will be provided by the BBC and Aardman with support from the University of Bristol’s Smart Internet Lab. It will demonstrate self-provision of 5G and Wi-Fi and innovative mmWave backhaul, and will also address safety issues by providing emergency service capacity through network splicing.

Tim Bowles, West of England Mayor said:

> Imagine a virtual Roman soldier showing you around the Roman Baths, now imagine this moving 360 degrees on your mobile phone at a resolution you have never experienced before – that's what 5G technology can offer.
>
> The 5G Smart Tourism bid will allow us to trial some exciting technology at our top tourist attractions, whilst looking at wider and longer-term benefits for our region. This new technology holds the key to a more advanced, sustainable and smart future which will revolutionise the way we all live, travel and work.

Professor Graham Thomas of BBC Research & Development said

> Delivering new kinds of experiences in new ways for our audiences is a priority for the BBC. This project is an excellent way to trial ways of doing this using AR and VR technology through 5G.

Worcestershire 5G Consortium – Testbed and Trials

Lead organisation: Worcestershire Local Enterprise Partnership Grant: £4.8m

A team of 5G and Industry 4.0 experts lead this project – working with Worcestershire LEP, the consortium comprises: Worcestershire County Council, 5GIC at University of Surrey, AWTG, Huawei, O2, BT and Malvern Hills Science Park. With local businesses Worcester Bosch, and Yamazaki Mazak it will focus on ways to increase industrial productivity through preventative and assisted maintenance using robotics, big data analytics and AR over 5G.

It will also have a cyber security aspect, with QinetiQ providing assurances on the 'security by design' of 5G and IoT technology. Entrepreneurs will have the opportunity to test 5G capabilities in a new commercial tech accelerator located at the Malvern Hills Science Park.

Mark Stansfeld, Chair of Worcestershire Local Enterprise Partnership and 5G lead for Midlands Engine, said:

> We are delighted to have been successful in our bid which will help businesses deliver greater productivity using 5G technologies. This highlights the huge ambition of Worcestershire's innovative public and private sector, with key Worcestershire employers leading the way in Industry 4.0.
>
> At a time of increasing global competition for trade and investment, we are confident that we can act as a catalyst for technological innovation in the wider Midlands Engine and nationally. We welcome opportunities for collaboration with the

> UK’s most innovative minds.

Liverpool 5G Testbed

Lead organisation: Sensor City Grant: £3.5m

Sensor City will lead a consortium made up of public sector health suppliers, the NHS, university researchers, local SMEs and a leading UK 5G technology vendor. Funded for one year in the first instance, the project will see high value technologies including low-cost open source 5G networks, artificial intelligence, virtual reality and IoT deployed across deprived communities in the Liverpool City Region test bed. The consortium will use this technology to reduce the digital divide, while measuring the impact on patient monitoring and support, management of loneliness in older adults, aid to independents living in the home and the facilitation of communication between hospitals and the community.

Alison Mitchell, executive director at Sensor City, said:

> Sensor City is proud to lead on what is set to be a truly groundbreaking project with a consortium of like-minded partners. The Government’s 5G strategy for the UK presents a fantastic opportunity to transform the lives of many, especially through health and social care, so I think I speak for all partners when I say we’re excited to see this work unfold over the next five years.

Professor Joe Spencer of the University of Liverpool said:

> A successful demonstration of a 5G testbed in health and social care will see the development of new, innovative and disruptive technologies that will help to bridge the digital divide in the UK, especially in deprived communities.
>
> 5G Wi-Fi will not only enable the development of new cost-effective products and services to address real needs and demand, but also bring huge social and economic benefits for the most vulnerable in society, while reducing the demand on hospital-based services.

AutoAir: 5G Testbed for Connected and Autonomous Vehicles

Lead organisation: Airspan Communications Ltd Grant: £4.1m

AutoAir will aim to make 5G technologies available for the validation and development of Connected and Autonomous Vehicles (CAVs) at the UK’s premiere vehicle proving ground at Millbrook. Fast travel speeds complicate cell-tower handoff, and autonomous vehicles will require more network bandwidth than is available currently. It will also investigate how these 5G connectivity solutions could be transferable to both road and rail transportation.

The project is based on the accelerated development of 5G small cells operating in both licensed Sub 6 GHz and mmWave bands on a shared ‘neutral host’ platform which allows multiple public and private 5G operators to simultaneously use the same infrastructure using network slicing.

Paul Senior, Chief Strategy Officer, Airspan Networks and CEO of Dense Air said

> We are delighted to have won the UK’s 5G competition, as it further validates the 5G network solutions and associated toolsets that Airspan and its partners have created. 5G networks will be critical for the validation and operation of CAVs and the testbed will be both a showcase and blueprint for mass deployment of 5G along the UK’s transport corridors”.

Dick Glover, Chief Executive, McLaren Applied Technologies said:

> At McLaren Applied Technologies we harness our experience in telemetry, software, simulation and predictive analytics to deliver advantage across the transport industry. Being part of the AutoAir 5G NR Consortium reinforces our commitment to accelerating the UK’s mobility challenge of the future, as well as pushing performance, improving reliability and providing progress beyond today’s expectations.

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.

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Notes to Editors:

The 5G Innovation Centre based at the University of Surrey in partnership with leading universities Bristol and King's' College London has developed one of the early cornerstones of the 5G Testbeds and Trials programme for nationwide trials of 5G applications and technologies.

Professor Dimitra Simeonidou, Director Smart Internet Lab, University of Bristol said:

> We are delighted to be working towards the delivery of the world's first end-to-end 5G testbeds with our partners at 5GIC/Surrey and King's College London. At Bristol, we have developed an open and lasting testbed for 5G experimentation in the city's Millennium Square.
>
> We have worked with our Technology partners BT, Nokia, CCSL and Zeetta Networks and have engaged with our Digital Creative sector to showcase the 5G technical capabilities and transformational potential. We are now keen to support the Phase 1 5G Testbeds and Trials projects by offering access to our infrastructure, skills and knowledge

Professor Mischa Dohler, Director of the Centre for Telecommunications Research, King's College London said:

> We are proud to have spearheaded UK's 5G innovation and deployment, alongside our colleagues at the 5GIC/University of Surrey and University of Bristol. Our joint efforts have put the UK well ahead of the global competition.
>
> The now subsequent Phase 1 projects are very timely as they will leverage on our innovation and provide the much needed expansion into exciting applications and a wider geography. It will be paramount for the UK to ensure that all these assets will be connected to ensure scale and competitiveness.

Ofcom's 2017 Connected Nations Report found that: – In 2017, 91% of UK premises can get superfast speeds, up from 89% last year; 840,000 UK premises can now get full fibre services compared to 498,000 in 2016 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); – 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; – 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: In 2017, just 9% of adults in the UK had never used the internet, down from 10% in 2016; Virtually all adults aged 16 to 34 years were recent internet users (99%), in contrast with 41% of adults aged 75 years and over; 90% of men and 88% of women were recent internet users, up from 89% and 86% respectively in 2016; 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:

- Building world-class digital infrastructure for the UK
- Giving everyone access to the digital skills they need
- Making the UK the best place to start and grow a digital business
- Helping every British business become a digital business
- Making the UK the safest place in the world to live and work online
- Maintaining the UK government as a world leader in serving its citizens online
- Unlocking the power of data in the UK economy and improving public confidence in its use

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News story: Education Secretary visits

Hampshire children's social services

Education Secretary Damian Hinds met with staff at Hampshire children's social services today (Friday 9 March) to hear about innovative ways of providing support for vulnerable children and families.

Joining the Chief Social Worker Isabelle Trowler on the visit to Winchester, the Education Secretary met Hampshire County Council Chief Executive John Coughlan, the Director of Children's Services, Councillors and social workers to hear how they are driving improvements through the Department's Partners in Practice Programme and their Innovation Programme projects.

As a Partner in Practice, Hampshire – which is rated 'good' by Ofsted with 'outstanding' features – works with a number of other children's services in the region to improve practice and management.

Education Secretary Damian Hinds said:

> Social workers are the heroes, often unsung, of our society. We want every child to have a happy and safe childhood and social workers play a vital role in transforming the lives of some of our most disadvantaged children. I was pleased to see the innovative work being done here in Hampshire to improve support for families in need of additional help.
>
> Through initiatives like Partners in Practice and the Innovation Programme we want to help councils like Hampshire develop new and effective ways of making a real difference to children's lives.

Hampshire has also received £3.96 million from the department's £200 million Children's Social Care Innovation Programme, for their project Active Agents for Change to improve support for families affected by issues such as domestic abuse, substance abuse or mental health concerns.

The Active Agents for Change project is training volunteers to mentor children and young people who may be in need of care, and find other ways to increase social workers' direct contact time with families.

These measures resulted in direct contact time with families increasing from 34 per cent to 58 per cent, and engagement with families with complex needs from 29 per cent to 70 per cent in the first year of the project.

Hampshire will also receive funding through the Fair Ways and Portsmouth Staying Close pilots, backed by £467k and £624,400 respectively, which support young people leaving residential care.

Chief Social Worker Isabelle Trowler said:

> It’s been so inspiring today to see how social workers are working hard to turn back the tide towards family support and reunification. I am pleased to see the confident and skilled practice at play here.

Hampshire County Council’s Executive Lead Member for Children’s Services, Councillor Keith Mans, said:

> We were extremely pleased and honoured to welcome the Secretary of State and the Chief Social Worker to the County Council and for the opportunity to explain and discuss Hampshire’s model for children’s social care practice. We took the opportunity to demonstrate the progress of the Partners in Practice work that we are undertaking, to further improve on what we do to achieve the best outcomes possible for vulnerable children.