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.
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> 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.
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> 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.

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.

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.

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 indoor premises obtaining 4G coverage (compared to 40% in 2016) and 43% of outdoor geographic areas obtaining 4G coverage (compared to 21% in 2016)
- telephone calls coverage on motorways has increased by 4% since 2016 and data coverage on motorways has increased by 8%

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.