Press release: Winners of £51 million government competition to develop world-leading self-driving car testing infrastructure unveiled

- the 4 projects will test the speed, safety and potential opportunities for delivering CAV innovation, helping ensure the UK remains world-leading
- 4 consortia have been selected in this first round, led by HORIBA MIRA, Millbrook Proving Ground, TRL and the Warwick Manufacturing Group

Four projects across 5 locations in the West Midlands have today (19 October) been awarded a total of £51 million in funding for creating the environments needed to fully test CAV technology.

- HORIBA MIRA in Nuneaton will build a new site alongside its existing vehicle test tracks where automated vehicles can be tested at the limits of their speed and handling to ensure they are safe
- Millbrook Proving Ground in Bedfordshire and Remote Applications in Challenging Environments (RACE) based in the Culham Science Centre in Oxfordshire will set up a range of different test areas mimicking increasingly realistic city driving environments, where automated vehicles can be tested before being taken onto public roads
- 2 projects will adapt real world locations for testing of automated vehicles in live traffic:
    - TRL will lead a project to set up live test environments in Greenwich and Stratford's Olympic Park in London
    - Warwick Manufacturing Group will set up real world test environments in Coventry and Birmingham

Reflecting the UK's ability to compete globally in this hotly contested sector, Jim Hackett, President and Chief Executive Officer of Ford Motor Company, opened Ford Europe's Smart Mobility Innovation Office at the Olympic Park in Stratford yesterday. It will initially host 40 specialists brought together to develop smart mobility technologies for cities.

All the CAV projects announced today will be fully operational and advancing technology development in this sector within the next 18 to 24 months.

Business and Energy Secretary Greg Clark said:

> Combining ambitious new technologies and innovative business models to address social and economic challenges lies at the heart of the government's modern Industrial Strategy. Accelerating connected and autonomous vehicle technology development is central to achieving this ambition and will help to ensure the UK is one of the world's

> go-to locations to develop this sector.
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> These projects, backed by government, form part of a globally unique cluster running from our automotive heartlands in the West Midlands, down through our innovation centres in Oxfordshire and Milton Keynes, through to London, Europe's only megacity.

To achieve this, government and industry are working together to create the world's most effective CAV testing ecosystem, integrating existing proving grounds and public road test sites across the UK's existing automotive sector, strengthening existing capabilities and creating new ones.

This new ecosystem will be co-ordinated through MERIDIAN, a new government-backed and industry-led hub to develop CAV technology in the UK.

The MERIDIAN programme lays the foundation for a truly unique, world class, future transport technology testing ecosystem in which automotive and digital sectors can compete globally, and emerging businesses have unprecedented access to facilities.

Chair of the Auto Council Technology Group, Graham Hoare said:

> Currently no other country has taken this innovative leveraged national approach and this can be a major differentiator on the global stage. This will be a globally unique set of capabilities that is co-ordinated and developed to provide a solution to industry that will enhance delivery efficiency, collaboration and knowledge growth.

Launch Director of MERIDIAN, Jim Campbell said:

> As connected and autonomous vehicle technology becomes more complex, ensuring that the UK automotive industry has world-leading facilities to test and refine concepts is of imperative importance. Today's announcement from government is a strong first step to ensure the UK achieves its ambition of becoming a global hub of CAV development in the coming years.

The MERIDIAN will offer world class CAV testing and development in the UK which allows us to accelerate research, development and adoption of these vehicles.

Director of Manufacturing and Materials at Innovate UK, Simon Edmonds, said:

> This first wave of testbed infrastructure investment is crucial at establishing a UK cluster of excellence to test and develop autonomous vehicle technology. This is another good example of how the UK is leading the way on this exciting agenda, and how UK

companies can take advantage of the massive opportunities it presents.

This important investment, as part of the government's modern Industrial Strategy, will further boost the UK's opportunity to secure a share of the global connected and autonomous vehicles market that is expected to be worth up to £51 billion by 2020.

Automotive and technology companies will be able to accelerate their research programmes in real-life environments in UK cities, along with specially designed virtual and controlled test environments.

As well as securing high quality jobs for the future, it will unlock significant social benefits such as improving safety and provide better mobility access for the young, the elderly, and the disabled.

Yesterday the government introduced the Automated and Electric Vehicles Bill as part of plans to boost the green transport revolution. The Bill will increase the access and availability of chargepoints for electric cars, while also giving the government powers to make it compulsory for chargepoints to be installed across the country and enabling drivers of automated cars to be insured on UK roads.

1) The projects are the first to be funded from the government's £100 million Connected and Autonomous Vehicles testing infrastructure programme announced in November 2016 and will be matched by industry.

2) The £51 million funding will be allocated across the UK: £31 million in the West Midlands, £7 million in Oxfordshire and Bedfordshire, and £13 million in London.

3) The winning CAV projects are:

Project title	Location	Public funding	Total project value*	Consortium partners
Smart Mobility Living Lab: London	Greenwich and Stratford (Olympic Park)	£13.4m	£19.2m	TRL (leader), Digital Greenwich, London Legacy Development Corporation, Cisco, Costain, Cubic, TfL, Loughborough University (London campus), and delivery partners, Millbrook and 5G Innovation Centre (University of Surrey)

Project title	Location	Public funding	Total project value*	Consortium partners
UK Central CAV Testbed	Coventry and Birmingham	£17.6m	£25.3m	Warwick Manufacturing Group (leader), Amey, AVL, Costain, Coventry University, Horiba Mira, Transport for West Midlands, Wireless Infrastructure Group
MCTEE (Millbrook-Culham Test and Evaluation Environment)	Millbrook (near Milton Keynes) and Culham (near Oxford)	£6.9m	£10m	Millbrook Proving Ground (leader) and UK Atomic Energy Authority's Remote Applications in Challenging Environments (RACE, at Culham Science Centre)
TIC-IT (Trusted Intelligent CAVs)	Nuneaton	£13m	£26m	HORIBA MIRA (leader) and Coventry University

* Full 50% industry match will be met through operation and maintenance of the project facilities.

4) Since the Centre for Connected and Autonomous Vehicles was created in 2015 the government has awarded more than £100 million to 51 projects researching and developing connected and autonomous technology advancement.

These projects are all collaborative, involving more than 150 individual organisations from SMEs to global companies. 51 of these projects include a number of high profile trials to understand how members of the public will interact with the vehicles. These include:

- the GATEWAY consortia which will run four autonomous shuttles around the Greenwich peninsula in November this year (2017) for the public to use
- the UK AUTODRIVE consortia which will operate up to 40 autonomous pods in Milton Keynes in 2018
- the VENTURER consortia which has been undertaking a series of increasingly complex trials in the Bristol area
- a third collaborative research and development competition, now open with £25 million of funding available to the winning projects, the competition closes on 25 October

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Correspondence: Science and technology for economic benefit across the UK

Advice to the Prime Minister on how the government can encourage science and technology to deliver economic benefits that are shared across the UK.

Research and analysis: ACRE advice: application for a trial of GM Neisseria lactamica (17/R50/01)

This document is the Advisory Committee on Releases to the Environment (ACRE's) advice to government in considering a request from University of Southampton (17/R50/01). The application is for a deliberate release of genetically modified Neisseria lactamica (Nlac).

Press release: Reforms to boost UK's digital infrastructure

Reforms made today to outdated legislation will reduce the costs of housing phone masts and other communications infrastructure on private land. This opens the way for faster and more reliable broadband and mobile services, particularly in rural areas.

Changes to the UK's Electronic Communications Code will:

- bring down the rents telecoms operators pay to landowners to install equipment to be more in line with utilities
- providers, such as gas and water;
- make it easier for operators to upgrade and share their equipment with other operators to help increase coverage;
- make it easier for telecoms operators and landowners to resolve legal disputes.

Matt Hancock, Minister of State for Digital, said:

> It's not good enough that many people are struggling with poor mobile and broadband connections which is why we are improving coverage across the UK.
>
> We want everyone to benefit from the growth of digital services. Removing these outdated restrictions will help promote investment in new technologies such as 5G, and give mobile operators more freedom to improve their networks in hard-to-reach places.

By the end of the year all mobile operators are required to deliver coverage to 90 per cent of the UK and 95 per cent of all homes and businesses will be able to get superfast broadband, but more needs to be done.

These reforms will help to drive investment and stimulate the continued growth, rollout and maintenance of communication technology infrastructure, an increasingly significant area of the UK's economy.

Hamish MacLeod, Director of Mobile UK said:

> The Electronic Communications Code is an important piece of the puzzle alongside further planning reform that will help mobile operators to overcome the challenges they face with expanding their networks, while also developing innovative services for customers.
>
> Good mobile connectivity is no longer an optional extra. It is essential infrastructure as core to modern economic activity as broadband, electricity and other essential services.

Mark Talbot FRICS, Chair of the Royal Institute of Chartered (RICS) Surveyors Telecoms Forum Board, said:

> RICS recognises the critical role that a modern, efficient and equitable digital infrastructure has on the future development of the UK economy. RICS has worked closely with our colleagues in DCMS to ensure that the new Code enables investment in our national digital infrastructure whilst balancing the needs of the public and private property owners.
>
> With high speed internet seen by many as the fourth utility service the public and businesses expect access to digital services when they want and as they want, and RICS believes that the reformed Code is a great step forward towards this ultimate goal.

The old Electronic Communications Code was originally enacted in 1984, and became out-of-date as technology evolved, making it difficult for landowners and network operators to reach agreements and resolve disputes when rolling out modern digital infrastructure.

The Government reformed the Code through the Digital Economy Act, which received Royal Assent in April. The supporting regulations laid in Parliament today will bring the new Code into force, which is expected to take effect in December 2017.

ENDS

Notes for Editors:

- The Government has today laid draft regulations in Parliament needed to

commence reform of the Electronic Communications Code. The changes will help ensure network providers achieve the coverage and connectivity targets set by government to reach the hardest-to-reach places in the UK.

- The Electronic Communications Code (the Code) is the legislative framework that enables electronic communications network providers to construct electronic communications networks. The Code was reviewed by the Law Commission in 2012 which recommended reform, and the Government has carried out extensive consultation with all stakeholders before bringing forward the amendments to the legislation.
- For further information on reform of the Electronic Communications Code: https://www.gov.uk/government/publications/government-publishes-proposals-for-a-new-electronic-communications-code https://www.gov.uk/government/collections/digital-economy-bill-2016

News story: Hundreds of pupils on track towards fluency in Mandarin

Almost 400 pupils from 14 schools across England have been praised by Nick Gibb for their progress in learning Mandarin, as part of a pilot programme to help them get ahead in the global jobs market.

The Mandarin Excellence Programme, delivered by the UCL Institute of Education in partnership with the British Council, aims to have at least 5,000 pupils in England on track towards fluency in Mandarin Chinese by 2020.

The first cohort of children have completed the first year of the programme and over 380 pupils achieved more than 80% in specially-created tests in reading, writing, listening and speaking, demonstrating their quick progress and commitment.

This year, an additional 23 schools throughout England have entered into the Mandarin Excellence Programme, meaning hundreds more pupils will soon have the opportunity to learn this advanced skill.

School Standards Minister Nick Gibb said:

> Mandarin Chinese is an important language to learn in our globally competitive economy. I am pleased that this programme is continuing to grow, allowing more pupils to be taught Mandarin at an advanced level. I would like to congratulate the first cohort of students on their success. They have achieved some excellent results thanks to their hard work and dedication. This will give them a significant advantage when competing in the global jobs market, and is particularly important as we prepare to leave the European Union.

Pupils on the programme spend an average of eight hours per week studying the language.

In addition to improving students' fluency in the language, the UCL Institute of Education, in collaboration with other providers, aims to have trained at least 100 new qualified Chinese teachers by the end of the programme.

Katharine Carruthers, Director of the UCL Institute Of Education (IOE) Confucius Institute, who deliver the training, said:

> The progress that learners have made after their first year participating in the Mandarin Excellence Programme is exceptional. The test results from the end of year one of the programme demonstrate the success and the impact that it is having. This year we are delighted to welcome additional schools joining the programme which will ensure that more than 1,000 new learners across the country are given the opportunity to learn Chinese to such an advanced level.

Mark Herbert, Head of Schools Programmes at the British Council said:

> Mandarin Chinese is one of the languages that matters most to the UK's prosperity – and its importance is only likely to increase as the UK repositions itself on the world stage.
>
> If the UK is to remain globally competitive, we need far more young people leaving school with a good grasp of Mandarin in order to successfully work abroad or for businesses here in the UK. More than that, learning Mandarin is a fascinating process which creates a connection to the amazing Chinese culture and over a billion Chinese speakers globally.

State schools in England can apply to join the Mandarin Excellence Programme from 2018 with funding available to support successful delivery. As part of the programme, some pupils will have the chance to go to China from summer 2018.

More information about the programme and how to get involved can be found here.