

News story: £14 million for ground-breaking quantum technologies

The winners have been announced in the latest round of a grant funding quantum technologies competition, totalling £13.8 million.

This competition was co-funded by Innovate UK and the Engineering and Physical Sciences Research Council (EPSRC). Of the funding, 65% will go towards supporting company activities, and the remaining 35% to academic research.

Quantum technologies in different applications and markets

The winning projects cover a huge variety of different applications and markets. This includes using quantum technologies for:

- securing drone data: a consortium of [Airbus](#), [KETS](#), [ID Quantique](#), [University of Bristol](#) and [University of Oxford](#) will look at the security of data transmitted between unmanned aerial vehicles (UAVs) and the ground. The project will use a low-weight, high-speed optical communication system with secure quantum encryption
- brain scanning and mental health: [Unitive Design & Analysis](#) is working with [University of Nottingham](#) to develop a brain scanning magnetoencephalography (MEG) device. By using quantum technology it has the potential to be smaller, simpler, more flexible and cheaper than other devices
- buried assets and rail infrastructure: a collaborative project by [RSK Environment](#), [Network Rail](#), [Atkins](#) and [University of Birmingham](#) will establish how quantum technology could be used in gravity sensors to detect and assess infrastructure buried below the railway network, such as drains
- gas sensing: ID Quantique will lead QLM technology, [Sky-Futures](#) and University of Bristol in a project to explore how photon sources – an essential component of quantum communications systems – could be used to detect gas leaks with high levels of accuracy
- authenticating wine: startup [VeriVin](#) and University of Oxford will explore the use of quantum sensing to faults in unopened bottles of wine, monitor ageing and ensure authenticity

Into the hands of companies and consumers

Paul Mason, Director – Emerging and Enabling Technologies, Innovate UK said:

The world is on the brink of a second quantum revolution, which will bring quantum sensors, cameras, communications and computers out of the lab and into the hands of companies and consumers.

This competition brings the total grant offered to companies to up to £28 million since 2014, funding 55 individual companies and leveraging £15 million of private investment.

Bearing in mind that industrial activities were more or less zero when the UK quantum programme started back in 2013, this is an incredible achievement that sees no signs of slowing down.

Professor Philip Nelson, EPSRC's Chief Executive, said:

The announcement of the competition winners represents an exciting next step in the development and establishment of quantum technologies.

These new technologies, that have the potential to transform so many aspects of our lives, are the result of more than two decades of research. Sustained support for research in this area is vital to ensuring that the opportunities on offer can be fully exploited.

[News story: New deal to help schools save cash on computer equipment](#)

DfE to offer schools the chance to save on tablets, laptops and desktop devices.

DfE and [Crown Commercial Service](#) (CCS) will launch the second in a series of bulk buying deals (sometimes referred to as 'aggregated deals') for schools considering buying new tablets, laptops or desktop devices at the beginning of the autumn term.

One hundred schools took up the previous deal, buying over 2,000 devices. Some schools saved thousands of pounds, with average savings of 8%.

CCS will publish full details of the deal on 4 September 2017. Schools will then have until 29 September 2017 to send CCS their equipment requirements.

CCS will work with suppliers to get the best prices and notify schools after they award the contract on 6 November 2017. Schools will then be able to place their orders for delivery and arrange payment at the agreed price.

We currently plan that the tablet devices will be branded products – for example, Apple iPad. Whereas laptop, desktop and Chromebook devices will not have a brand specified to increase competition and get the best prices.

We have scheduled further buying opportunities for spring 2018 and will announce dates later.

[Read more about ordering hardware for schools and see a webinar](#) explaining the process in more detail.

Press release: M3 gets first 'orange' smart motorway emergency area

The redesigned emergency area has a highly visible orange road surface and better signs to help improve its visibility make it more obvious to drivers on smart motorways. It is also hoped that it will encourage drivers to only use them in emergency situations.

image of the new style emergency area on the M3

The first of the new emergency areas went live on the M3 near Camberley this morning (Friday 14 July). More upgrades are planned should the trial be successful. This change is part of an ongoing review into the design and spacing of emergency areas on smart motorways that is due to report in the autumn.

Highways England Chief Executive Jim O'Sullivan said:

We know that smart motorways are safe. But we also recognise that drivers need to have confidence when using them and be clear about where they can stop in an emergency.

That is why we are trialling these highly visible new style emergency areas. The bright orange colouring will make them as easy as possible to spot and should also discourage drivers from using them in non-emergency situations.

This is just one of the ways we are helping drivers to understand smart motorways and their benefits. I hope it helps drivers feel more confident about using a smart motorway.

Smart motorways use variable speed limits to manage traffic and tackle frustrating stop-start congestion, new technology to give drivers better information on road conditions ahead and – in smart motorway upgrades delivered since 2004 – convert the hard shoulder into an extra traffic lane. Evidence shows that smart motorways are successfully adding extra capacity, improving journey times and are just as safe as conventional motorways.

Transport Secretary Chris Grayling said:

Our roads are some of the safest in the world but we are always looking at making them safer.

Smart motorways are adding extra lanes to our busiest motorways and – as recent evidence shows – reducing the rate of crashes.

We are making emergency refuge areas more visible to ensure motorists in trouble can easily identify where to stop safely.

The redesigned emergency area supports Highways England's drive to improve awareness of smart motorway driving, including what to do in an emergency and when to use an emergency area. It sits alongside a national TV, radio and social media campaign covering key themes such as not driving in lanes closed by Red X signs, how to stop in an emergency and the importance of carrying out appropriate vehicle checks, like checking fuel levels, before setting out on a journey to avoid unnecessary breakdowns.

If the redesigned emergency areas are successful and drivers find the changes beneficial, more orange emergency areas will be introduced across England's network of smart motorways.

General enquiries

Members of the public should contact the Highways England customer contact centre on 0300 123 5000.

Media enquiries

Journalists should contact the Highways England press office on 0844 693 1448 and use the menu to speak to the most appropriate press officer.

[News story: Bristol buses released from undertakings by CMA](#)

The undertakings, covering FirstGroup Holdings Limited, 'FirstGroup', and local authority bus services, were put in place following the 1989 merger of local bus companies Badgerline and Midland Red West, which was investigated by the Monopolies and Mergers Commission (MMC).

The MMC ruled in 1989 that the merger would remove competition for bus services contracted by the former Avon County Council. Local authorities tender for – and subsidise – unprofitable bus services to maintain important transport links for residents.

Badgerline was subsequently renamed FirstGroup Holdings Limited (a subsidiary

of FirstGroup plc), which then became subject to the restrictions, including a cap on the amount they could receive from the local authority for running a tendered service – and a requirement to return any excess profit from such services.

The Competition and Markets Authority (CMA) has been [reviewing the undertakings](#) since January 2017 to consider if there has been any change of circumstances which would justify the removal or variation of the undertakings.

During the investigation it was found that FirstGroup's share of tendered bus services in the region has reduced significantly since the MMC report and that in the most recent tender rounds, FirstGroup did not win any contracts at 3 of the 4 Local Transport Authorities. The CMA engaged with local stakeholders during the investigation, none of which argued that the undertakings were having a beneficial effect and should be retained.

In June, the CMA launched a consultation on its provisional decision to remove the undertakings. No representations were received and the CMA has therefore decided to release the undertakings. A notice of release of undertakings is published alongside the [CMA's final decision](#).

Notes for editors

1. The CMA is the UK's primary competition and consumer authority. It is an independent non-ministerial government department with responsibility for carrying out investigations into mergers, markets and the regulated industries and enforcing competition and consumer law. For CMA updates, follow us on Twitter [@CMAgovuk](#), [Flickr](#), [LinkedIn](#) and [Facebook](#).
2. Media enquiries to the CMA should be directed to press@cma.gsi.gov.uk or 020 3738 6798.

Notice: CH65 1AJ, Eastham Refinery Limited: environmental permit issued

The Environment Agency publish permits that they issue under the Industrial Emissions Directive (IED).

This decision includes the permit and decision document for:

- Operator name: Eastham Refinery Limited
- Installation name: Eastham Refinery
- Permit number: EPR/BS5215IZ/V005