

News story: Join Healthcare UK at Arab Health 2018

Healthcare UK and the Department for International Trade are exhibiting at the Arab Health congress and exhibition taking place 29 January to 1 February 2018 in Dubai. Come and visit us at stand CC206 to explore outstanding UK digital healthcare solutions. Whether you are a regional healthcare operator or a UK-based healthcare supplier, talk to our trade experts about live commercial opportunities in the region.

Innovation in healthcare services driven by market needs

The healthcare sector in the Middle East is changing fast. It is responding to rapidly growing demands for preventative care, and for effective ways to reduce lifestyle-related diseases. The sector is moving towards specialist, more personalised healthcare with much greater interaction and self-management enabled by the ever-growing digital technology.

Explore the best in UK digital healthcare solutions

The UK has leveraged its unmatched data assets, world leading centres of clinical excellence and vibrant tech sector to produce some of the most innovative, evidence-based digital health solutions in the world today. On the Healthcare UK stand at Arab Health we will be showcasing some of the most innovative UK suppliers offering digital healthcare solutions. These companies will display how they are re-defining the patient journey through technological advances in prediction, protection and prevention.

Exhibiting companies are:

Visit us at stand CC206 at Arab Health to explore UK digital healthcare solutions. Find out more about the event [here](#). Healthcare UK is a joint initiative of the Department of Health and Social Care, NHS England and the Department for International Trade. Find out more about what we do [here](#).

Contact us at healthcare.uk@trade.gov.uk to discuss how we can help you, whether you are a UK-based supplier or a healthcare provider in the Middle East.

Press release: Government agrees

Landmark Sector Deal to establish UK as world leader in future of mobility

Greg Clark with Ian Constance, CEO, Advance Propulsion Centre, Konstanze Scharring, Director of Policy, SMMT, Nigel Stein, CEO of the Auto Council.

- Business Secretary confirms first [Automotive Sector Deal](#), growing the partnership between government and industry, boosting investment in emerging technology and establishing the UK's leadership in meeting the Future of Mobility and Clean Growth Grand Challenges
- Sector Deal includes up to £32 million of new joint funding for an industry-led supply chain competitiveness programme to help grow the UK supply chain and make it internationally competitive
- government also confirms latest £26.4 million investment, match-funded by industry, in 3 cutting-edge low carbon vehicle projects involving Ford, GKN and Jaguar Land Rover

A landmark Sector Deal between government and the automotive industry has today (Wednesday 10 January) been announced by the Business and Energy Secretary Greg Clark.

The deal aims to build on the unique strengths of the UK automotive sector and further develop the strong collaborative partnership established between government and industry.

The Sector Deal sets out a joint strategic vision for how both sides can continue to work together and is the first step towards establishing the UK's leadership in meeting the Future of Mobility and Clean Growth Grand Challenges.

The deal secures joint investment and long-term commitments between government and industry in areas including the design and development of connected and autonomous vehicles (CAV), the research and development of battery technology and accelerating the manufacture of ultra-low and zero emission vehicles.

As part of this, the government has announced £26.4 million of investment, match-funded by industry to total £52.8 million, to help develop the next generation of driverless and low-carbon vehicles, with flagship projects led by Ford, GKN and Jaguar Land Rover.

Announcing the deal, Business and Energy Secretary Greg Clark said:

For decades, the UK's automotive industry has powered our economy forward. Today, automotive firms from around the world choose to set up shop here, citing our history of excellence, skilled workforce and world-leading supply chains.

In the next 10 years, the sector will see more change than in the previous hundred. From the engines that power our cars, to the way we control them and our attitudes to owning them, technology is changing what the industry looks like and where money can be made.

The automotive sector will shape our response to the Grand Challenges articulated in our Industrial Strategy, such as Clean Growth and the Future of Mobility – transformations which will forever change how people live, work and travel.

As ever, partnership will be pivotal. As a result of the Sector Deal, both government and industry will invest about a quarter of a billion pounds to develop and manufacture electric vehicles, create a world-leading testing environment for connected and autonomous vehicles and invest in a new industry-led programme to raise the competitiveness of UK suppliers to match the best in Europe.

As we open the automotive sector's next chapter, we will continue to work with industry to make sure the technologies of tomorrow are developed, tested and manufactured right here in the UK.

Commitments

The Sector Deal brings together a number of long-term joint commitments between government and industry that will help build and establish the UK's leadership in meeting the Future of Mobility and Clean Growth [Grand Challenges](#), including:

Low-carbon automotive technologies

- through the Advanced Propulsion Centre [government is investing £500 million](#) over 10 years to 2023 to research, develop and industrialise new low-carbon automotive technologies in the UK, with industry providing £500 million match funding for collaborative R&D projects

Automotive research and development

- government is investing up to £225 million from 2023 to 2026 to support R&D in the sector, with industry providing equivalent match funding

Transitioning to ultra-low and zero emission vehicles

- through the [Faraday Battery Challenge](#), government is investing £246 million to make the UK a world leader in the design, development and manufacture of batteries for the electrification of vehicles

Connected autonomous vehicle (CAV) technology

- £250 million of government investment to position the UK as a global leader in Connected and Autonomous Vehicles (CAVs) development and deployment. This includes:
 - £150 million for collaborative R&D projects from which, to date,

£100 million has been committed to 51 projects, with industry contributing a further £56 million

- £100 million for CAV testing infrastructure, £51 million of which has so far been committed to 4 infrastructure projects; 2 'controlled' testing facilities and 2 'live' public testing facilities
- government will be launching a £15 million simulation and modelling R&D competition on the 16 January to accelerate the development of connected and autonomous vehicles

Supply chain competitiveness and productivity programme

- £16 million of government funding, subject to business case, for an industry-led match-funded national supplier competitiveness and productivity improvement programme to support a sustainable and internationally competitive UK supply chain for future volume vehicle production

Europe

- The deal acknowledges that the UK automotive industry has benefitted from the European market and as the UK leaves the EU, the industry welcomes the government's ambition to achieve a new relationship that is free from tariffs and without friction to trade – factors that are fundamental to the competitiveness of the UK automotive sector
- through the deal, government and the auto sector will work together to seize opportunities to do far more to engage with the wider world beyond Europe where there is untapped emerging innovation and opportunity

Further proposals are being shaped for the next phase of the Automotive Sector Deal, with a focus on capitalising on the UK's capabilities including in the digital design and testing space which will substantially reduce the time and cost of developing the next generation of vehicles.

Nigel Stein, industry chairman of the Automotive Council said:

The long-term partnership developed between government and industry has played a key role in the automotive sector's success. It has helped ensure that emerging technologies are developed in the UK and given companies the confidence to invest.

The government's Industrial Strategy is a welcome renewed commitment to this partnership, helping to support the sector as we move into the third decade of this century and beyond.

Mike Hawes, SMMT Chief Executive:

We welcome today's automotive sector deal which will help this vital UK industry meet some of the many global challenges it faces. The deal strengthens our long-standing partnership with government,

with a boost to supply chain competitiveness and investment, matched by industry, to keep the UK at the forefront of electric, connected and autonomous vehicles.

In its implementation, the deal must help the industry build on our success and seize the opportunities presented by such technological innovations. Given current uncertainties, it must also be complemented by ongoing efforts to maintain the right conditions for growth.

Advanced Propulsion Centre (APC)

Three innovative projects involving Ford, GKN and Jaguar Land Rover will share grants from the latest round of funding from the Advanced Propulsion Centre (APC), [APC8](#), the joint industry-government programme to put the UK at the forefront of low carbon vehicle technology.

The APC8 winning projects are:

- E-Prime – a project led by Ford's UK based Global Manufacturing Engineering team working with machine tool supply chain partners to develop process and equipment for production of ultra-high volume next generation electrified powertrain systems
- ACe-Drive – development of GKN's future generation e-Drive system platforms, utilising high speed electric machines and advanced high speed power electronics; in conjunction with universities and businesses, this project aims to further grow UK capability in the design and manufacture of eMachines and power electronics
- VERBIUS – development of future state of the art electric hybrid vehicle systems for Jaguar Land Rover, in conjunction with universities and businesses across the UK; the project aims to significantly improve the vehicle system efficiency through utilisation of innovative electronic systems and componentry

Full details of the Sector Deal agreement between industry and government have been published today on GOV.UK.

[Press release: New information on rare River Severn fish population](#)

Monitoring work during the spring and summer of 2017 which used some of the latest technology, found that around 15,000 shad can make it above Upper Lode weir on the River Severn, near Tewkesbury before being halted by Diglis Weir in Worcester. These monitoring results are significant because they indicate the current levels of twaite shad in the river which once supported millions

of this species.

Research part of a major project on the River Severn

The research was conducted by the Severn Rivers Trust, Environment Agency and Canal & River Trust as part of the multi-million pound Unlocking the Severn project, which is supported by the Heritage Lottery Fund and EU Life. The information gathered will be vital for the project which aims to restore the shad's access to 155 miles of the River Severn, north of Worcester, by providing fish passage solutions at a series of weirs that currently the fish cannot swim over or around.

Environment Agency Fisheries Monitoring Specialist, Charles Crundwell said:

We had no idea how many shad we'd find – we thought a few thousand, but in fact results suggest we could have as many as 15,000 in the lower reaches of the river. This shows great promise that by unlocking the river there's scope for a really thriving population.

Plus the work to help the shad will open up the river for all fish species, so helping the shad will help everything else for the benefit of wildlife, residents, tourists and anglers.

Using different techniques to monitor the twaite shad

In order to learn more about the remaining small population of shad, particularly the conditions they need to prosper, volunteers and staff from the Severn Rivers Trust, Environment Agency and Canal & River Trust spent many hours watching and counting twaite shad swimming over Upper Lode weir during April, May and June.

In addition, a suite of remote monitoring techniques enabled monitoring all day, every day. This included cameras, counter plates triggered when a shad passed upstream and even the use of an acoustic beam giving an image similar to the ultrasound you get of a baby in the womb.

As well as the count of the shad, the monitoring team and its contractors made the first known underwater film of shad on the Severn as they migrated upstream and the first images of the shad's spectacular spawning behaviour, which is like a whirling dancing with rigorous splashing seen just before dark.

Acoustic tracking tags fixed to 25 shad (another first for the UK, under licence from the Home Office) showed how they migrate up the river, what habitats they use, and how barriers delay them. This is all crucial information in understanding how to create the best access routes for the fish.

An suite of underwater camera equipment was installed at the spawning sites

to understand this behaviour.

The allis shad

In addition to the twaite shad, the monitoring also recorded the rarer allis shad.

Charles explained:

Historically the allis shad were even more prized as a food fish and would certainly have been an important component of the catch prior to the navigation weirs being built. This is the first photographic proof that a tiny run of these fish still hold on in the Severn, which is really exciting and means that the natural restoration of this species is also likely to occur if we are able to provide fish passage solutions at the weirs further up the river.

More information about the Unlocking the Severn project is available [online](#). You can also follow the project on [twitter](#).

News story: Seven-year-old's invention brought to life by Dstl scientists

A seven-year-old boy has had his dream submarine design made into reality by apprentices at the Defence Science and Technology Laboratory (Dstl).

Jacob Bland, from Suffolk, drew his water-propelled design and wrote to Dstl asking if they would like to make it and use it for "sneaking and spying".

With the drawing, Dstl's scientific apprentices worked up the design and printed out a 3-D model using their own 3-D printer. The work provided an excellent opportunity for the apprentices to take a concept design and produce an actual model, which contributes to their National Vocational Qualification (NVQ) evidence.

Jacob's dad, Matthew Bland, said:

We are overwhelmed by the thought and effort put in by staff at Dstl. Jake was absolutely made up about the submarine, and it hasn't left his side yet.

He is already integrating your suggestions for improvements into a revision, and talking about his plans for a battleship to accompany

the submarine. Thank you for everything you did for Jake; it's great encouragement for his imagination.

19 year-old Verity Jackson has been an engineering apprentice at Dstl for two years and supported by the Platform Systems team within Dstl, she was able to create the 3-D mini yellow submarine.

Apprentice Verity Jackson checks the final model of the sub

Verity said:

It was really great to be able to reproduce this for Jacob. It was a bit tricky and took quite a bit of work to get the model ready to print, but we are all thrilled with the outcome and equally thrilled we were able to bring Jacob's drawing to life. On the plus side, the mini project will help towards my qualification.

Damien Holden from Platform Systems, said:

It sounds like Jacob has really thought about his design. We will always need talented, creative people – perhaps Jacob will come to Dstl as an apprentice himself one day.

If you've been inspired by Jacob's design, and would like find out more about working at Dstl visit [Dstl's recruitment page](#)

Press release: A556 'green bridge' is winter wonderland

The £1.15 million bridge was one of 7 constructed across the new £192 million bypass which opened in March. Part farm access track and part wildlife corridor, the bridge, west of Mere, has been provided to maintain connectivity between habitats separated by the new dual carriageway.

When the new bridge was used as the site of the official opening ceremony of the road in March, it had only just been planted with a mixture of hedging and plants.

Now, 11 months later, the extensive planting has given birth to a flourishing green border which is providing a safe passage across the road for badgers, voles and other small animals, insects and birds.

Aerial picture showing the Green Bridge before extensive planting

Aerial picture showing the Green Bridge after extensive planting

Highways England project manager Paul Hampson said:

The green bridge was the centre-piece of our work to ensure the new A556 was the most environmentally-friendly road Highways England has ever built. We are delighted the planting has really taken hold (and as the drone footage shows it is particularly impressive from the air). We are looking forward to watching the bridge bloom for many years to come.

Constructing the bridge cost about £890,000 with a further £273,000 on 'greening work' on the deck, which included planting trees, shrubs and grasses.

The old A556 has also been 'greened' and turned into a £5 million B road with dedicated route for pedestrians, cyclists and horse riders featuring a earth border planted with wild flowers to separate it from road traffic.

The project's green measures earned it a prestigious Green Apple Award for Environmental Best Practice last year.

Construction of the new A556 link road, between the M56 and the M6, started in November 2014 and opened in March with the old road – now the B5569 – handed over to Cheshire East Council in November. The scheme has been delivered as part of the Government's £15 billion government investment in motorways and major A roads by 2021 which is being delivered by Highways England as part of the Northern Powerhouse initiative.

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.