News story: Autonomy on the front line: supplying Armed Forces on the battlefield

As part of the MOD's Innovation Initiative, £3 million has been invested through the <u>Defence and Security Accelerator</u> in the next stage of the Innovation Autonomy Challenge. Focusing on the challenging "last mile" of support, this Challenge aims to find innovative new ways of resupplying troops on the front line, and will be led by the Defence Science and Technology Laboratory (Dstl).

To reduce the risk to troops and improve efficiency, the UK aims to develop autonomous systems for unmanned delivery of combat supplies, drawing on the rapid progress of the private sector in the development of delivery drones and automated deliveries.

Minister for Defence Procurement, Harriett Baldwin said:

Making sure we use the latest technology to keep our personnel safe and have the kit they need is a key part of our £800 million innovation fund. We're challenging industry and academia to work with us to design ground-breaking autonomous systems that will get supplies to the front line.

Our investment in innovative solutions demonstrates how the Government's £178 billion equipment plan, supported by a rising Defence budget, will ensure that the UK maintains its military advantage in an increasingly dangerous world.

The Innovation Initiative and £800M Defence Innovation Fund aim to transform Defence to encourage imagination, ingenuity and entrepreneurship. From laser weapons to autonomous vehicles, the MOD is working with small firms, academics, industry, and the new Defence Advisory Panel to find Twenty-first century solutions to defence challenges.

Funding will made available in two tranches, up to £1.5m to develop initial platforms and technology concepts. At least £1.5 million more will then be released to build and test a smaller number of demonstrators, which can then be included in joint UK/US trials from October 2018.

The Challenge is the latest stage in Defence's investment in unmanned and autonomous systems: In February, the Defence Secretary [announced](the launch of a two year £8 million second phase of research and development with Leonardo Helicopters, exploring the future of unmanned air systems.

The competition runs until 21 June 2017 and further details of the competition can be found on the <u>competition website</u>.

The Dstl lead for the Innovation Autonomy Challenge Peter Stockel said:

We are particularly keen to reach out and encourage organisations that might not have worked with the defence and security sector before, such as those developing commercial driverless vehicles, drone delivery services and robotic agriculture, to get involved with the challenge and help us rapidly advance the way we deliver tactical military logistics.

The Innovation Autonomy challenge is part of the UK and US's collaborative approach to innovation announced by Defence Secretary, Sir Michael Fallon, and former US Defense Secretary Ash Carter in 2015. The funding for this competition is focused on:

- Airborne and ground-based unmanned systems to collect, transport and deliver supplies across challenging terrain.
- Technology to enable those systems to operate more autonomously in the contested military environment.
- Technology to autonomously manage logistics supply and demand in the tactical environment.

Defence and Industry Working Together

One of the aims of the Innovation Initiative is to streamline Defence's work with industry from SME's to multinationals: making clear what Defence needs from business, but also being open to imaginative and disruptive proposals from any source.

Most recently, over 200 Soldiers, Royal Marines and RAF, including personnel from the US Army, have been putting innovative kit through its paces on Salisbury Plain in the Army Warfighting Experiment 17 (AWE 17). Businesses of all sizes were invited to submit solutions to a range of 'problems' set by the AWE team. 72 products — from a tiny surveillance drone to a self-sterilizing water bottle — were selected for testing.

One developer taking part in the experiment produced a two-part lift and pulley system designed to take vital minutes off of the time it takes to get a casualty out of a damaged vehicle and to medical aid. The inventor of the system, Paul Bateman, an ex-soldier of 22 years' service, now runs his one man business.

Paul said:

"The AWE has given me a unique opportunity to get my product tested in the field."

Cutting-edge kit is no use unless our troops can use it when and where they need it. To make sure they can, the Minister for Defence Procurement, Harriett Baldwin, <u>formally opened</u> a huge state-of-the-art £83 million MOD logistics centre in Shropshire, which will streamline distribution and storage, delivering savings of around £500 million by 2028.

Beyond the physical battlefield, but at the heart of security, Dstl has also launched the <u>Data Science Challenge</u>, which will bring the brightest minds in data science—not just those in the defence and security sector—together to solve real-world problems, and is sponsored by Dstl, the Government Office for Science, the Secret Intelligence Service and MI5.

Natural disasters kill 32 in China in 1st quarter

Natural disasters caused the deaths of 32 people in China in the first quarter of 2017, and another 39 were hospitalized, government statistics showed.

Natural disasters also affected the lives of nearly 1.96 million people, with 16,000 displaced, according to figures released Friday by the Ministry of Civil Affairs and the National Commission for Disaster Reduction.

In addition, over 1,300 houses collapsed and about 4,000 hectares of crops were destroyed.

Authorities estimated economic losses of 1.87 billion yuan (270 million U.S. dollars), but the situation in the first quarter was less serious compared with the same period in the past eight years. Endi

<u>Labour will protect the high street by</u> <u>ending damaging bank closures</u>

Labour will introduce major changes to bank law to prevent banks forcing through closures of vital high-street banks

As part of Labour's plans to rejuvenate the high street and protect local communities, the next Labour Government will make major changes to the banking law that will prevent banks closing their vital high-street branches and damaging local communities and small businesses.

Despite

the introduction of an "Access to Banking Protocol" to prevent closures by this

Conservative Government, the Consumers Association reports that 1,046 local bank branches closed in the UK between December 2015 and January 2017, with

another 486 already scheduled for closure this year.

But

the Big four banks made over £11bn profits from their high street banks in 2015, and can afford to provide this vital customer service instead of prioritising cost-saving measures that damage communities and small businesses.

0ver

two-thirds of small businesses claim that a local bank branch is important and

lending to small businesses has been found to drop by 63 per cent in areas with

a recent bank branch closure. For deprived communities and households, loss of

a local bank branch significantly diminishes their abilities to access even basic financial services. Older people are significantly less likely to use internet or phone banking services.

Labour

believes tougher action is needed on our major banks to prevent them putting their profits first and making short-sighted and damaging decisions. We will replace the toothless Access to Banking Protocol with the force of the law to bring banks into line.

Shadow

Chancellor John McDonnell, will say:

"High

street bank closures have become an epidemic in the last few years, blighting our town centres, hurting particularly elderly and more vulnerable customers, and local small businesses whilst making healthy profits for themselves. It's time our banks recognise instead that they are a utility providing an essential

public service.

"Onlv

Labour will put in place the legal obligations needed to bring banks into line

and stand up for our high streets, communities and small businesses."

Emeritus

Professor, Prem Sikka, University of Essex, who advised on the policy, said:

"Banks

receive considerable financial support from the public and in return should be

required to provide financial infrastructure that meets the needs of individuals and businesses."

ENDS

Notes:

- 1. A future Labour government will broaden the duties of the Financial Conduct Authority (FCA) and amend relevant provisions of the Financial Services and Markets Act 2000 (FSMA), particularly Part 4A of the Act, which authorises banks to carry on the regulated activity (i.e. the 'banking licence'). These amendments would require banks to accept the conditions laid down below:
- a. Prior to the closure of any branch, banks must undertake a consultation with all customers of the branch which it proposes to close. It

must also consult representatives of the relevant local council.

b. The bank must publish details of the reasons for closure, including financial calculations showing the revenues and costs of the relevant

branch. The share of central costs (e.g. accounting systems, IT, cyber security, personnel function) allocated to the branch must be separately identified, especially many of these costs are relatively 'fixed' and are not proportionate to the number of branches.

- c. The consultation process must be overseen by the FCA, and the FCA must ensure that the closure of the branch does not degrade the local financial infrastructure. The closure of the branch must not make the local community worse-off.
- d. The FCA's approval will be needed for any branch closure.
- e. Upon approval by FCA, customers and local communities must be given 3 months' notice to enable them to make appropriate arrangements.
- 2. Labour will amend the statutory objectives, as given at s.9B of the FSMA 2000, of the Financial Policy Committee should include a new objective, the "Consumer Protection Objective", which will oblige the FPC to oversee (i) the accessibility of financial services to geographic communities in the UK, and (ii) the availability of financial services to all sectors of the population.

3. The

British Bankers Association found that 68 per cent of small businesses survey thought that having a bank branch on the high street was important. See Barty,

J and Ricketts, T. (June 2014), Promoting competition in the UK banking industry

4. Move

Your Money research found that "Before a branch closure, lending for SME's within a given postcode grows from one quarter to the next by 2.13 per cent on

average. But after a branch closure in that postcode, average Q-2-Q growth in SME lending drops to only 0.79 per cent — a staggering 63 per cent

reduction."

Travers-Smith, F. (July 2016), Abandoned Communities: the crisis of UK bank branch closures and their effects on local communities

- 5. The Social Market Foundation found that 11% of the population (7m people) use no other banking service than their local high street branch, and that these are overwhelmingly older and/or poorer. See Evans, K. (January 2016), *Bricks and Clicks: Understanding How Consumers Manage Their Money*, London: Social Market Foundation
- 6.
 Bank branch closure figures from Goodman, R. (December 2016), "Revealed: 1,000 bank branches shut in two years", Which?
- 7. Banking high street profits given in Travers-Smith, F. (July 2016), Abandoned Communities: the crisis of UK bank branch closures and their effects on local communities, p.13

China SOE watchdog sets up Xiongan working group

The State-owned Assets Supervision and Administration Commission (SASAC) of the State Council, China's top state-owned enterprises (SOEs) regulator, has announced to establish a special working group to support the construction of Xiongan New Area.

China's centrally administered SOEs are encouraged to make the most of their strengths to map out future development strategies for the area, the SASAC said in a statement released Friday after a meeting gathering its leaders earlier this week.

The economic zone, about 100 kilometers south of Beijing, will cover 2,000 square kilometers in the long term with a population of 2 to 2.5 million.

"The centrally administered SOEs are encouraged to lend strong support to construction of the zone in areas like energy security, infrastructure, electricity, telecommunications, rail transport, ecological protection, information-based network and smart city," noted the statement.

Great support will be given to these central SOEs in locating their newly-registered high-tech, new technology and high-end service businesses into Xiongan New Area, and better coordination between the central SOEs and local authorities will be promoted, it added.

China currently has 102 central SOEs. The plan to set up the new area is a

Beijing-Tianjin-Hebei restricts construction coatings



Heavy smog hits Beijing. [Photo/Xinhua]

To curb air pollution, Hebei Province, Beijing and Tianjin will enforce a unified standard to reduce the use of coatings and adhesives in construction.

According to the standard issued Thursday, the amount of volatile organic compounds (VOCs) must not exceed set levels in manufacturing, storage and in use of construction coatings and adhesives. The measure is estimated to reduce VOCs in the air by 20 percent.

The Beijing-Tianjin-Hebei region sits at the heart of the North China Plain where air pollution, particularly winter smog, often occurs as a result of the high concentration of industrial and vehicle emissions, static air circulation and the burning of coal.

"VOCs are a key component of the ozone and PM2.5 — fine particulate matter with diameter smaller than 2.5 micrometers," said Yu Jianhua, chief engineer of the Beijing Municipal Environmental Protection Bureau.

He said that rapid urbanization had led construction coating and adhesives to constitute a major part of VOCs in cities. In 2015, 5.16 million tonnes of

construction coating was consumed nationwide, an eight-fold increase since 2000.

Yu said Beijing had its rules on the use of coatings and adhesives but the latest standard upgraded restrictions and widened the jurisdiction to cover Tianjin and Hebei where rules had been more relaxed.

The standard is the first jointly-issued rule for the three areas to fight air pollution.

By 2017 the region must cut PM2.5 density by 25 percent from 2012 levels, according to a government action plan issued in September 2013.

Beijing has been struggling to reach its target of an average PM2.5 density of 60 micrograms per cubic meter. In the first three months, its PM2.5 density averaged 84 micrograms per cubic meter.

However, Beijing's air quality is already ranked the best among 28 cities in the three areas.