

News story: Over a thousand companies sign up for new counter terrorism training course

Over 1000 companies across the UK have signed up to an innovative one-hour training scheme that could help prevent terror attacks.

In just six months since the product was first made available, organisations as varied as John Lewis & Partners, the English National Opera and Manchester Cathedral have enrolled their staff.

Called ACT Awareness e-Learning, the training was developed in a ground-breaking partnership between Counter Terrorism Policing and retail giant Marks & Spencer. It covers how to spot the signs of suspicious behaviour and what to do if an attack should take place.

Free to use, the course can be divided into short sections to suit business needs. However it takes just one hour in total to complete – an hour that could save lives.

John Frost, Head of Business Continuity from Marks and Spencer, helped lead the project. He says:

The feedback from the staff at M&S and the other organisation taking part has been very positive. Colleagues found the content informative and engaging and a second version of the product is now being planned to keep the training up to date with any emerging threats.

The digital format is proving popular with shopping, entertainment and sports venues with more companies applying to take part every day.

Deputy Assistant Commissioner Lucy D'Orsi, national police lead for Protective Security, says:

All staff working in crowded places – not just those who have a security role – can follow the course and be in a stronger position to help protect themselves, colleagues and the public.

We are grateful to Marks and Spencer who entered into this collaboration with us. This is the type of joint working we want to see more of in the future across all sectors.

Our officers will still be available to deal with companies on a one-to-one level but this will lead to many more 'eyes and ears' available to help us that could potentially save lives.

Organisations wanting more information, or to apply for registration, should visit the National Counter Terrorism Security Office website's [ACT Awareness page](#)

News story: Automated design for a more efficient railway: apply for funding

[Figures show that around 1.7 billion passengers](#) use the UK's railways every year. This number has more than doubled in the last 20 years – requiring innovative ways to design railway infrastructure that will support growth in future capacity.

Working with [Network Rail](#), Innovate UK has up to £300,000 for businesses with projects to fast-track automated design. The aim is to build safer and higher-capacity railway infrastructure, save money and improve services.

Long-term planning and capacity

Planning for the long-term future of the UK's railways involves navigating a complex range of systems.

As well as crossing many different types of terrain and land uses, there are underlying considerations such as stock and track maintenance, bridges and tunnels. Importantly, planning must reflect passenger need.

This competition is looking for ways to make automated design more efficient, allowing Network Rail to accelerate new designs, explore long-term performance and assess demand.

Building on existing technology

The competition is open to industrial research projects as well as experimental development projects that are closer to market.

Projects should automate the design of at least one of the following:

- track layout
- overhead line electrification
- traction power supply system
- signalling systems
- other railway infrastructure not mentioned here

All projects must show how they build on existing automated design technology and work in a simulated rail infrastructure design environment.

Competition information

- the competition opens on 22 October 2018 and the deadline for applications is at midday on 19 December 2018
- a briefing event will be held on [1 November 2018 in London](#), where you can find out more about the competition and how to make a quality application
- total project costs must be between £50,000 and £200,000
- projects can last between 6 months and one year
- businesses could get up to 70% of their costs

[Find out more about this competition and apply.](#)

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[Press release: UK-France space agreement delivers device to ocean satellite](#)

A device built in the UK by Honeywell, which will form a vital part of the mission to make the first global survey of the world's surface waters and oceans, has been delivered to Thales Alenia Space in France.

The Surface Water and Ocean Topography, or SWOT, mission is led by CNES (the French Space Agency) and NASA with support from the UK Space Agency and the Canadian Space Agency. The UK Space Agency and CNES signed a joint statement in January 2018 during the UK-France Summit in Sandhurst to step up co-operation in space, building on 2014's Brize-Norton framework arrangement.

The warming of Earth's climate may profoundly alter the movement of freshwater resources from lakes to rivers to reservoirs, resulting in significant societal impact. The SWOT satellite will use radar technology to measure the features of oceans, coastlines, rivers and lakes across the globe to improve understanding of changes over time and their impact on farming, industry and human populations.

The UK-built device, known as a duplexer, is a vital component that routes radar signals around the satellite and can transmit at a power of 1,500W – a

level never before seen in this kind of device.

Speaking in Brussels at the Committee on Earth Observation Satellites Plenary, UK Space Agency Director of Growth Catherine Mealing-Jones said:

Satellites play a major role in understanding our home – planet Earth. Using great British technology, the SWOT mission is a great example of how satellites can take measurements of our environment from the unique vantage point of space, in this case, giving us the first global survey of one of our most precious resources – water. The UK and France are leading space powers in Europe and the delivery of the duplexer for the SWOT mission is a significant milestone in our partnership, which continues to go from strength to strength.

It will now be integrated into a Radio-Frequency Unit by Thales Alenia Space before NASA engineers add it to their KaRin instrument developed at the Jet Propulsion Laboratory (JPL) in California. The satellite is due to launch 2021.

CNES is supplying the RFU (Radio-Frequency Unit), which is co-funded with the UK Space Agency UKSA. As well as the duplexer, Thales Alenia Space is developing the ‘hyperbox’ in Toulouse which will create the radar pulse and receive radar echoes.

Hailing this new milestone, CNES President Jean-Yves Le Gall said:

This new step forward for the SWOT mission is a product of the close relationship between our space agencies and industries. The joint statement signed by CNES and UKSA in 2018 during the UK-France Summit in Sandhurst is being effectively applied and France and the United Kingdom are pursuing their successful space cooperation.

The UK and France are also teaming up on the MicroCarb programme to monitor and map sources and sinks of carbon gases, as well as supporting the implementation of a Space Climate Observatory, which was set out in the Paris Declaration on Climate Change.

This week is [Green Great Britain Week](#), which is showcasing the leading role of the UK’s academic and business communities in tackling climate change while generating economic growth.

Green GB Week celebrates the tenth anniversary of the UK’s ground-breaking Climate Change Act. The UK has played a leading role in delivering clean growth – growing the economy by more than two thirds while reducing emissions by over 40% since 1990.

[Clean growth](#) is central to the Government’s modern Industrial Strategy, and

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