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Press release

Cyber skills for a vibrant and secure UK

Francis Maude hosted an event today to highlight how the UK is building skills to boost the growing cyber security sector in the UK.

Published 12 December 2014

From:

Cabinet Office (<https://www.gov.uk/government/organisations/cabinet-office>), Department for Business, Innovation & Skills (<https://www.gov.uk/government/organisations/department-for-business-innovation-skills>), and The Rt Hon Lord Maude of Horsham (<https://www.gov.uk/government/people/francis-maude>)

This was published under the 2010 to 2015 Conservative and Liberal Democrat coalition government



Today, Francis Maude, Minister for the Cabinet Office, hosted an event at the Institute for Chartered Accountants of England and Wales (ICAEW) for industry, academia and government leaders to highlight how the UK is building skills to boost the growing cyber security sector in the UK.

The event marks the third anniversary of the UK's Cyber Security Strategy (<https://www.gov.uk/government/publications/cyber-security-strategy>), and follows a report to parliament on progress (<https://www.gov.uk/government/speeches/uk-cyber-security-strategy-statement-on-progress-3-years-on>) and forward plans to make the UK one of the safest places to do business online.

Read the Cyber Security Strategy 2014: progress and forward plans (<https://www.gov.uk/government/publications/national-cyber-security-strategy-2014-progress-and-forward-plans>).

Increasing the number of people with the right cyber skills is vital for both government and industry as we collectively face the reality of cyber threats. The government's work to improve the UK's cyber security is led by the Cabinet Office, Department for Business, Innovation and Skills and GCHQ.

Today's announcement includes:

- grants for colleges and universities in Birmingham, Liverpool, Lancashire and Newcastle to improve cyber security education and learning. These are produced in partnership with companies including Barclays Bank and online retailers the Hut Group
- new 'cyber camps' and mentoring schemes to help computing graduates gain practical experience and start a career in cyber security, in conjunction with Cyber Security Challenge UK (<http://cybersecuritychallenge.org.uk/>) and the Cyber Growth Partnership (<https://www.techuk.org/cyber-growth-partnership>)
- Cryptoy (https://play.google.com/store/apps/details?id=com.hmg.cryptoy&hl=en_GB) – a new, innovative Android app developed by students on placements at GCHQ (<http://www.gchq.gov.uk/Pages/homepage.aspx>) to highlight exciting developments in cipher and code-breaking for a new generation of cyber specialists
- a virtual hub to inspire students into cyber security careers and provide advice and information on job opportunities – in conjunction with the Council of Registered Ethical Security Testers (CREST)
- new cyber security careers resources for students within the Graduate Prospects careers website
- an updated guide for business on the cyber security skills initiatives that will help develop their own staff and future talent.

Cyber Security Minister Francis Maude said:

As part of this government's long-term economic plan we want to ensure that Britain is one of the safest places to do business online. Over the past 3 years we have taken a strategic approach to improving cyber security, working with others to deliver schools programmes, certified 6 Masters degrees, 2 centres for doctoral training and 11 Academic Centres of Excellence.

With Alan Turing and Bletchley Park, the UK has a proud heritage in cryptography and computer science. 40,000 people work in our cyber industry and we have 14 cyber security 'clusters' across the country. But we want to develop greater skills and encourage more people to pursue a career in this growth area.

Today we are releasing the Cryptoy app, (https://play.google.com/store/apps/details?id=com.hmg.cryptoy&hl=en_GB) designed by students at GCHQ. We hope it will spark a new interest for a career in cyber security. Our new cyber camps, mentors and Higher Education Academy grants will help more towards a cyber security career.

Read Francis Maude's speech (<https://www.gov.uk/government/speeches/cyber-security-strategy-third-anniversary>) and see photos from the cyber security event. (<https://www.flickr.com/photos/cabinetoffice/sets/72157649716441922/>)

Stephanie Daman, CEO of the Cyber Security Challenge UK said:

Today's announcement highlights the government's ongoing commitment to improving the size and quality of the UK's cyber security talent pool. It also demonstrates a real understanding that addressing our cyber security skills gap requires a sustained programme of targeted support for innovative programmes and initiatives that are inspiring the next generation of cyber professionals.

Government's support now spans a huge range of opportunities, from innovative tools such as Cryptoy to a national mentoring programme and a raft of new cyber camps designed to inspire budding cyber defenders. As a country we are creating extraordinary opportunities for young people

who demonstrate the aptitude and appetite to forge successful and rewarding careers in cyber security. I am encouraged that, with the continued backing of government, UK businesses and academia, we are doing what is required to future-proof the cyber security capabilities of the UK.

Mark Hughes, President, BT Security, said:

Getting security right and protecting businesses, government and the general public against cyber-attacks is vitally important. Data breaches and attacks are an everyday threat to industry, and with the UK cyber security industry worth £6 billion a year, it is critical that we build a pipeline of talented people to fill the gap in skills we currently experience. Recruiting into the industry is notoriously difficult, so it is critical that we engage in strategic activity that helps find the right people, prepare them for jobs in the industry, trains them and makes them ready to take on key roles in the cyber security profession.

It is for this reason that BT is proud to be supporting the cyber camps and mentoring schemes announced today. It is not enough that we concentrate on developing the workforce of today. If we are to build and maintain resilient infrastructure in the UK, we must develop the workforce of the future. BT is fully committed to creating that workforce.

Professor Stephanie Marshall, Chief Executive of the Higher Education Academy, said:

If the UK is to be equipped to respond to cyber threats we need to strengthen the pipeline of cyber talent and help prepare students for entry-level security career opportunities. The Higher Education Academy is pleased to be able to offer support to higher education providers to develop innovative projects involving strong partnership with businesses that will improve cyber security teaching and learning across the discipline of computing, institution and the sector beyond. All 4 projects launched today have the potential to do this, thereby helping to improve the skills of graduates, address the shortage of cyber security skills and future proof the country's IT sector, making it more resilient to possible cyber-attacks.

Cyber security skills and growth: stats and facts

"Introduction to Cyber Security" (<http://www.open.edu/openlearn/futurelearn/cyber-security>), a free Massive Open Online Course (MOOC) developed by the government in conjunction with the Open University, launched in October 2014. 24,127 learners enrolled for the first run of the course. The second run starts on 26 January 2015.

See also Cyber security skills: guide for business (<https://www.gov.uk/government/publications/cyber-security-skills-a-guide-for-business>).

Cyber Security Challenge

The Cyber Security Challenge (<http://cybersecuritychallenge.org.uk/>), funded by the National Cyber Security Programme (NCSP) and industry, runs cyber security competitions with the aim of encouraging a broader set of people to test their skills and consider a career in the field.

The current total number of registrations stands at 18,800. This is a 492% increase in new people registering with the Challenge (results comparing total number of new people registering with the challenge for the first time for the period April to September 2013, compared to April to September 2014).

There was a 311% increase in people playing the competition compared to this same time last year (results compare total number of competition players during the period April to September 2013 to April to September 2014).

One in 3 of the Cyber Security Challenge finalists go on to work in the field of cyber security

Schools programme - funded by the NCSP

This is a twice-yearly competition to introduce young people in secondary education to cyber security.

Since its inception in 2013, over 800 schools have registered to take part and over 22,000 young people have used the learning resources.

The challenge has run 2 competitions a year for school age participants. The latest competition, 'Cyber Games 3.0', was held at Warwick University on 10 December 2014.

Apprenticeships

There are 200 new entry-level apprenticeships through the Tech Partnership, as well as the first ever HMG and industry apprenticeship frameworks in cyber security.

There are 3 Research Institutes in the Science of Cyber Security, 2 Centres for Doctoral Training and 11 Academic Centres of Excellence in Cyber Security across UK universities. For more graduate information see the new Graduate Prospects (http://www.prospects.ac.uk/information_security_specialist.htm)

Cyber Streetwise campaign

More than 2 million UK adults have adopted safer online behaviour following phase 1 of the Cyber Streetwise campaign (<https://www.cyberstreetwise.com/>) early in 2014. The campaign is now in phase 2.

Cyber industry

In 2013 the UK cyber security industry was worth £6 billion and employed 40,000 people. It is going from strength to strength with an export growth rate of 22% in 2013, the highest growth rate in the global list of 53 major economies. This means the UK is on track to meet the government's target of £2 billion cyber exports by 2016.

14 Cyber Security Industry Clusters, at various stages of development, are growing across the UK in:

- Bath
- Cambridge
- Exeter
- London
- Kent
- Malvern
- North East (Tyne & Wear)
- Northern Ireland (Belfast)
- North West (Lancaster)
- Scottish (Edinburgh)
- South Wales (Cardiff)
- Sussex (Brighton)
- Solent (Southampton)

- [Thames Valley \(Reading\)](#)

Notes to editors

1. The National Cyber Security Strategy (NCSS) (<https://www.gov.uk/government/publications/cyber-security-strategy>) published in November 2011 provided government with a framework and objectives in tackling cyber threats, promoting awareness and providing a growing platform of strong private sector partnership. The strategy is supported by £860 million of funding from the National Cyber Security Programme which has helped put in place new initiatives and structures as part of the government's response to growing threats in cyberspace. Read more information about the strategy and subsequent annual reports (<https://www.gov.uk/government/collections/cyber-security-strategy-progress-so-far--2>).
2. New investment for the Cyber Security Challenge (<http://cybersecuritychallenge.org.uk/>) covers the design and launch of an innovative new nationwide cyber mentoring scheme in conjunction with the Cyber Growth Partnership (<https://www.techuk.org/cyber-growth-partnership>). This will encourage more prospective employees to consider a cyber security profession by creating opportunities for one-to-one mentoring sessions with employers in the sector. The scheme also includes a commitment to deliver a series of national 'cyber camps' based at universities across the UK that will give talented individuals a safe and legal environment in which to gain practical experience by exercising their skills, and understand the ethics of the cyber security profession.
3. Read more about the Cryptoy app, (http://www.gchq.gov.uk/press_and_media/news_and_features/Pages/cryptoy-app-released.aspx) free to download from Google Play. (https://play.google.com/store/apps/details?id=com.hmg.cryptoy&hl=en_GB)

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Related content

Collection

- [Cyber Security Strategy: progress so far \(https://www.gov.uk/government/collections/cyber-security-strategy-progress-so-far--2\)](https://www.gov.uk/government/collections/cyber-security-strategy-progress-so-far--2)

Policy

- [Cyber security \(https://www.gov.uk/government/policies/cyber-security\)](https://www.gov.uk/government/policies/cyber-security)