

Cyber Sector Consortium – Worcestershire LEP, The Marches LEP, Gloucestershire LEP and Swindon and Wiltshire LEP.

Pillar 8 – Cultivating World Sectors

Sector Deals – General

The Industrial Strategy offers a comprehensive approach to improve competitiveness and within that, it is right to establish a sector focus to target current and future opportunities in world markets and international trade. The core of the Consortium comprises the four Local Enterprise Partnerships spanning the geography of the proposal, namely:

- Worcestershire
- The Marches
- Gloucestershire
- Swindon and Wiltshire

This Consortium will allow LEPs to act as a facilitator and convener for an industry-led partnership of local businesses, incorporating expertise within key partners, such as universities and local authorities, to provide additional economic benefits beyond what is currently delivered as a local economic and strategic priority, we acknowledge that a business lead partnership with governance would need to be established to lead this work.

In the formation of their current Strategic Economic Plans, each LEP identified a competitive strength for the Cyber Security, Defence and IT sectors and therefore have significant and unique strengths in comparison to the national economy.

With Worcestershire LEP leading the Consortium, each LEP is ideally placed to draw upon existing networks and industry relationships, and utilise existing engagement and networks (e.g. Growth Hubs, membership organisations, and specific support providers etc.) to ensure local business engagement in this Consortium increases through time. Strategic relationships through key clusters, such in Corsham, QinetiQ, the Malvern Cyber Security Cluster, Skylon Park (the Hereford Enterprise Zone), GCHQ at Cheltenham, and the Cheltenham Cyber Park form a part of the existing LEP network of Cyber Security businesses. In addition, these local partners will engage with regional organisations to engage in any proposed sector deal.

A key strength of the Consortium is that it builds on the existing relationships between the four Local Enterprise Partnerships developed over the last eight years, as part of the national LEP Network, and in discussions examining business support and investment models for this sector. Furthermore, through delivery of the Growth Deal, other innovative projects LEPs have secured the confidence of the local private sector as an effective strategic deliverer of public-sector intervention and investment.

2. The LEPs offer a sense of place to existing and new sectors and have been forming alliances to shape and deliver solutions which overcome bureaucratic, administrative or geographical boundaries.
3. The Consortium of LEP areas are already working with strongly performing companies in this transforming sector alongside new, innovative start-ups. The sense of place is integral to scale-up companies and cannot be underestimated, and the LEPs are already providing support and facilitation between national sector knowledge and expertise and locally-based expansion and innovation projects.
4. While there will be generic solutions to support improved productivity and competitiveness across all sectors nationally, it is important to recognise that each sector is different and will present its own set of characteristics, place-based features, opportunities and challenges which will require a nuanced strategic framework and solutions, and therefore alignment with the National Cyber Security Strategy and National Cyber Security Centre.
5. The LEPs' accumulative experience and substantial progress to date provides other business –led catalysts which promote competition, transform business models and incorporate the interests of new and innovative entrants e.g. Innovate UK Severn Valley Cyber Sector call.
6. Sector Deals should incorporate cross-Government commitments with the objective of creating one streamlined, consistent sector policy framework setting the right strategic conditions for industrial competitiveness and innovation. This “single point of Government contact” would reinforce consistency in advice, grant funding, regulatory requirements, interventions and support. Government should act as an enabler and facilitator creating the conditions for businesses themselves to operate, succeed and deliver within any sector framework to start, thrive, transform and grow.
7. A Sector Deal should prioritise existing Government expenditure as well as channel new resources in a targeted manner. The Industrial Strategy needs to recognise the value of every sector of the economy but begin with the existing and newly emerging sectors which demonstrate potential and reflect common interests across England and the Devolved Nations. We would welcome a discussion with South Wales to bring together a greater geography should this be required.
8. Sector Deals should champion technology, build and consolidate up-skilling in the workforce combining tradition and new technological skills and expertise. The Deals should help bring new generations of indigenous workforce to the sector and boost apprenticeships.
9. The technological revolution means that established sectors need to anticipate future needs and rapid, vibrant economic change and build to create competitive advantage. Sector Deals will also be pivotal for helping newly-emerging, fast-growing, less defined sectors flourish i.e. biotechnology, agri-technology, digital, creative industries which need supported Government interventions and interactions to consolidate Sector Deals to form and thrive – Cyber Sector Deal would cross cut these sectors in the digital market place as online security is paramount.

10. A selective approach amongst a few LEPs working on particular sectors with UK-wide expertise could accelerate the opportunities for important scale-up businesses which pioneer economic growth locally, nationally and globally. This would build on existing efforts of Consortium members, for example, Worcestershire and The Marches LEPs recently facilitated the CyberMaryland trade delegation to Baltimore, Maryland, USA. This initiative has the objective of boosting the international presence of the areas strong Cyber Security profile, and strengthen international relationships between businesses. Following the success of the delegation, Malvern-based QinetiQ, as a key partner, are hosting an industry day to inform local Cyber Security business of the potential opportunities of working with industry partners abroad.

11. Government interests can support LEPs in their facilitation role in bringing this emerging sector together while supporting entrepreneurship, applied research/development and innovation. This commitment will create the best conditions for businesses themselves to develop and pioneer their expansion and innovation solutions. For instance, forging constructive working relationships with the National Cyber Security Centre and key universities in the sector, but also working with the Department for International Trade to improve sector trade, exports and inward investment.

A Cyber Security Sector Deal

Within a national framework, a Cyber Security Sector Deal would be important to remove barriers to growth and improve productivity. The Consortium would like express an interest in discussions of a deal that touches on the following areas:

Investing in Innovative Development (Science, Research, Innovation Pillar 1)

12. Access to targeted investment to overcome economic barriers preventing businesses from utilising new technology or expanding operations to improve productivity is essential.

Promoting an Environment for Growth (Upgrading Infrastructure Pillar 3; Supporting Business to Start and Grow Pillar 4);

13. A focus on the roll out of fibre broadband and new 5G technology provides the cyber sector with new growth and opportunities. This creates the environment for Cyber start-ups and scale ups, with new solutions to ensuring driver-less vehicle remain safe, as one example. However the sector has to be recognised as one that touches all businesses. The National Crime Agency's Cyber Crime Assessment 2016 estimates that cyber crime in the UK is costs in the billions of pounds per annum and is expected to grow in future years. As a result, the requirement for support to ensure businesses safely operate online will only continue to grow.

14. The UK is the largest and most concentrated and accessible cyber security market. Worth almost £22bn in 2015, we support the development of the Cyber exchange and Cyber map by the Department of Culture, Media and Sport, which currently shows 1200 companies. There is now a need to focus on specific geographies, as some of the trade bodies are very London and South East focused. Also, we need to encourage further inward investment and export partnerships – as

there is much competition from the US, France and Russia in terms of expertise and competition from Ireland, the Netherlands and Germany in terms of EU access.

Skills Provision and Development (Developing Skills Pillar 2)

15. There is a high demand for talent with a skills shortage in this sector. Labour availability is already a significant problem for large and growing companies. Match this to a talent pool which is growing too slowly and the need for proactive action across the sector in all 'hot-spot' geographies is vital to keep pace with the growing demand in the sector.

16. A new National Centre for Cyber in Cheltenham, alongside similar facilities in Malvern and Hereford provide the potential to tackle the current skills shortages in Cyber Sector, which constrain the sector's growth, productivity, and competitiveness in an increasingly technologically driven industry. The Consortium already supports GCHQ Cyber First skills programme of Cyber, with a particular focus on changing the inclusivity of the sector to female participants.

17. Local partners are keen to trial innovative approaches to support this local sector strength. For example, the SWLEP are currently working alongside a local employer to develop a Coding Academy. This is an innovative business-led project approach to skills development that will provide Software Engineering level 4 apprentices with a 'front-loaded' curriculum, aimed at maximising the apprentice's operational effectiveness after the first six months. In addition, the GFirst LEP is currently exploring the potential for local collaboration with GCHQ as part of the pilot for a Regional Academic Centre of Excellence in Cyber Security Education; providing additional support through FE, HE and work placements for the future workforce of the local areas Cyber Security strength.

Promote Knowledge and Practice Exchange and Excellence (Cultivating World Leading Sectors Pillar 8; Driving Growth across the UK Pillar 9; Creating the Right Institutions for Sectors and places Pillar 10)

17. The emerging industry remains fragmented and practice is highly variable. Knowledge Exchange within the industry should be promoted to enable business self-evaluation, the uptake of industry best practice to drive enhanced productivity and efficiency and benchmarking evaluations of best practice.

18. Businesses have told the WLEP that it will be important to:

- foster sector collaboration to strengthen knowledge, expertise, capacities, skills of entire supply chains, from corporate to SMEs and micros
- make the link with specific sector skills recruitment, retention, attraction for indigenous populations and nurturing growth across all sizes and scales of businesses in one sector
- maintain a watching brief on allied sector development i.e. innovative manufacturing and engineering developments which would enhance the Cyber Sector
- innovate, apply and pilot test research in response to business-led requests and requirements

The Consortium

The 4 LEPS have the following geographical strengths identified in their Strategic Economic Plans.

The *Marches Strategic Economic Plan* highlights the opportunity the area has to grow the key sector of defence and security. This sector is a particular local economic strength, as The Marches area possesses the fourth highest concentration of employment within the defence and security industry (compared, as a proportion of total employment, with the other 37 LEP areas across England), and is home to key employers such as BAE Defence Systems, Caterpillar Reman and Fujitsu. Adding to the local sector strength in defence and security, the Ministry of Defence has recently opened their Defence Fulfilment Centre in Telford. This 80,000sqm centre follows an investment of £130m, will transform how essential Armed Forces supplies are stored and distributed, provide further local jobs in a key sector and provide £60m a year to the local economy.

The 72-hectare *Hereford Enterprise Zone* the only Enterprise Zone in the UK with a Defence and Security focus, and is home to a cluster of over 200 advanced manufacturing, defence and security businesses, many of which are top-tier suppliers to defence companies both in the UK and overseas. This builds on the deep-rooted association Hereford has with the UK Special Forces, as the base of the SAS. A number of local businesses within the security sector have been set up by ex-military personnel, using their links into local specialist networks and supply-chains.

The Hereford Centre for Cyber Security, which secured £2.82m under Growth Deal 3, will build on investment in the Hereford Enterprise Zone. It will capitalise on local expertise in Cyber Security including specialist support from the University of Wolverhampton and will collaborate with the new technology and engineering university in Hereford (which secured £8m under Growth Deal 3) when it is operational. Creating 185 jobs, it will provide ready access to consultancy support and shared facilities significantly enhancing the environment for investment, enterprise, and innovation.

Worcestershire is a leading location in the growing Cyber Security sector and has a key strength through its high level of employment within the IT and defence industries, and presence of large employers such as QinetiQ and GKN.

Worcestershire has a long established cyber security cluster centred in Malvern with a number of cyber security businesses the Wyche Innovation Centre, the Malvern Hills Science Park and the Enigma Business Park. This cluster is made up of approximately 80 businesses and is identified by the UK Information Economy Strategy (2013) as “one of the primary locations in the UK for the research, development and commercialisation of cyber security products and services.” This cluster of leading businesses recorded a 71% increase in employment between 2011 and 2014, the second highest rate of any specific cluster of businesses operating within the related digital technology industry, according to the “Tech Nation 2016: Transforming UK Industries” report published by Tech City and Nesta.

To quote Margot James MP following a visit to Worcestershire on 13th January 2017, “Local Enterprise Partnerships play an important role helping the UK’s record 5.5 million small businesses to start, grow and thrive. The leading cyber security industry here in Worcestershire is a great example of the unique strengths that exist across country – and what can be achieved with the hands-on support of an ambitious LEP

The *Gloucestershire Strategic Economic Plan* highlights the partnerships strategic emphasis on the knowledge-intensive industries as a key sector of employment – with particular reference to creative (e.g. digital media) and cyber security sectors that form part of the wider cyber security, defence and IT industry. Skills provision across Gloucestershire is closely aligned with this strategic strength; for example through the provision of undergraduate and postgraduate courses in computing, forensic computing and big data through the University of Gloucestershire, and the creation of a new Cyber Security Training and Conference Centre at the Berkley Power Station.

The GFirst LEP has, through the Growth Deal, invested to support the further growth of the local cyber security sector. For example, £4m has been allocated towards a cyber security training centre at Berkeley Green, and £22m towards the Cheltenham Cyber Park, of which when complete will bring forward 45 hectares for cyber security and high-tech employment land.

Gloucestershire is home to the headquarters of GCHQ, the Government intelligence and security organisation. A wide variety of cyber security, ICT and business resilience businesses are also based across Gloucestershire; including the Symantec, Ultra Electronics, L3 TRL Technology, Bladerooms, Trackwise Designs Ltd., Vertex Financial Solutions and Star Internet – who have now been acquired by Claranet Group to create the largest mid-market provider of integrated hosting, networks and communications services in the UK and Europe.

Finally the *Swindon and Wiltshire Strategic Economic Plan* highlights the importance of the digital and IT industries as part of the areas ‘Digital capability’ strategic objective. As a part of this objective, the Swindon and Wiltshire are aims to build on its reputation as a hub for digital and IT industries to be at the forefront nationally and internationally in the development and application of digital, cyber technology and big data applications.

Corsham, home to Ark Data Centres and the Ministry of Defence Joint Cyber Unit, is a particular strength of the area - identified by Google as one of the country’s top five fastest growing rural online business centres.

Higher Education/Research Institutions

- University of Gloucestershire
- Cranfield University
- Wolverhampton University
- University of Worcester
- University of South Wales

- University of Birmingham

Cyber Security accreditation and promotion

- The IASME Consortium Ltd (Information Assurance for Small and Medium sized Enterprises, one of the four Cyber Essentials accreditation bodies appointed by the UK)
- The UK Cyber Security Forum CIC, an industry network of more than 500 UK-based cyber security SMEs based in Malvern.
- Malvern Cyber Security Cluster, part of the UK Cyber Security Forum
- National Cyber Skills Centre (NCSC), Malvern Hills Science Park

Commercial Innovation Organisations

- Skylon Park, Herefordshire
- QinetiQ
- The proposed Cheltenham Cyber Park
- Innovate Malvern CIC (promoting STEM events, workshops and initiatives in the Malvern area, including the annual Malvern Festival of Innovation that has featured extremely well-attended cyber security symposia for the last five years drawing in attendees from around the UK).