

Written evidence submitted by techUK

techUK priorities | Defence & Security Industrial Strategy

About techUK

techUK represents the companies and technologies that are defining today the world that we will live in tomorrow. The tech industry is creating jobs and growth across the UK. More than 850 companies are members of techUK. Collectively they employ more than 700,000 people, about half of all tech sector jobs in the UK. These companies range from leading FTSE 100 companies to new innovative start-ups. The majority of our members are small and medium sized businesses.

Executive Summary

The technology and communications & information systems (CIS) community is an important and distinct part of the wider Defence & Security (D&S) industries in the UK. Increasingly, all companies working in the D&S sectors are technology companies, but there is a perception, particularly within the MOD, that the Defence industry can be viewed as a single entity with the same priorities.

techUK represents a significant proportion of technology companies working in the UK's D&S sectors, and our member-led Defence & Security Board is comprised of some 30 companies, ranging from traditional Primes and OEMs through to large multinational technology companies and SMEs.

Given the distinct composition of the technology and CIS community, techUK has outlined the headline priorities our members would like to see considered as part of the Defence & Security Industrial Strategy, which have been developed in consultation with industry seniors on our Defence & Security Board and the wider D&S membership. These priorities should be considered as part of the Defence & Security Industrial Strategy (DSIS) engagement process.

Key Priorities for techUK Members

1. Recognising the value of the Defence Technology Framework (DTF) & Defence Innovation Priorities (DIP) and understanding Information Advantage (IA):

- 1.1 The DTF & DIP have been endorsed by the Secretary of State for Defence and as such should be given the appropriate resources through the DSIS process to enable the department to properly exploit them.
- 1.2 The DTF & DIP are a matrix of technology families and their application areas. Many of these technology families are in use across the private sector and include cross-cutting capabilities such as quantum computing, AI, machine learning and cyber security. Cloud computing is a key foundation to support many of these technologies securely, whilst providing agile innovation and economies of scale.
- 1.3 As part of the DSIS process, understanding how best to resource the exploitation of technologies identified in the DTF across the DIP's application areas is essential. In doing so, government will be able to introduce new capabilities at pace, delivering transformative benefits to both internal business functions and frontline military operations.
- 1.4 Ensuring through the DSIS process that there is a commonly agreed definition of information advantage across Defence, given it is widely recognised as a key enabler and driver of capability across all FLCs and military domains.
- 1.5 Technology and CIS companies provide the capabilities that underpin IA, and therefore can help the MOD better understand what the industry view of IA is, both now and in the future.
- 1.6 The DSIS process should also explicitly recognise the importance of data sovereignty, as the UK cannot achieve IA without being able to manage, control, protect and exploit its own data.

2. Making Defence procurement and acquisition fit for the digital age and understanding what matters to industry:

- 2.1 Given the reported intention of the government to radically overhaul Defence acquisition and procurement strategies, policies and processes, there is a real opportunity to move away from the traditional, platform-centric view of Defence. Focus instead should be centred on how best to deliver the aims of the DTF and DIP, through dedicated support to cross-cutting technologies (such as cloud) and their application areas.
- 2.2 To introduce new technologies to, and to deliver transformative benefits for the D&S sectors at pace, an 'ARPA' model, based around specific technology clusters within the UK's regions, could

help resource the development and exploitation of technologies identified in the DTF.

2.3 Currently, procurement and acquisition strategies, policies and guidance prioritise the negation of risk, as opposed to a desired outcome. This in turn blocks access to new technologies across the Defence ecosystem. The DSIS process should incorporate the work of the MOD's Acquisition Review to support measures which promote a more collaborative environment for suppliers, the customer and the end user.

2.4 Key points to consider include:

2.41 Recognising the unique composition of the technology and CIS industries.

2.42 A different acquisition cycle for CIS focused capabilities will need a different governance model. Moving CIS delivery to Agile but retaining the CADMID governance model will not enable rapid exploitation of new technologies.

2.43 A key issue for CIS companies operating in the Defence sector is how the MOD can move towards a 'shared services' model in new systems. Successfully delaminating existing and new capabilities will make integration across all systems easier and will also drive savings in specifications such as space, electricity, support, and the human resources required to manage these systems.

2.44 Using the DSIS process to develop a position on technological sovereignty, specifically defining where the UK wishes to have freedom of moment and technological independence/indigenous capabilities in the future, in both the D&S sectors.

2.45 Using the DSIS process to challenge the perception that the UK Defence industry is a homogenous group, and thus can be viewed as having the same priorities and concerns. Currently, the tiered manufacturing and equipment focused view of the supply chain dominates MOD thinking. In contrast, the CIS sector's supply chain is flatter and broader, thus lending itself better to direct relationships with smaller suppliers.

2.46 At present, SMEs are often viewed as a specific tier within the manufacturing supply chain, whereas in the CIS sector their business within the sector is much more diverse.

2.47 A recognition when looking at new procurement or acquisition strategy or policy that technology companies

often work across multiple sectors in both the public and private sphere, and so will only consider the D&S sectors as viable markets if there is a clear ROI.

- 2.48 Looking at commercial ways of working within technology companies, specifically digitally driven business models, including the shift from RDEL vs CDEL driven by the cloud consumption model, within the technology & CIS supply chain.
- 2.49 Understanding that all companies, not just SMEs, can offer transformative products or services if the business environment enables it.
- 2.50 For HMG's Strategic Suppliers, there are several extra requirements companies are asked to complete or track, but which are not marked in competitive tenders. Examples include SME involvement in contracts, prompt payment, apprenticeships, climate change and carbon reduction. These requirements, in addition to others, should be considered when competitive tenders are marked, as they can be used to drive the right behaviours around investment and allocation of resources.
- 2.51 For SMEs specifically, the DSIS and internal MOD Acquisition Review should consider whether marking in competitive tenders could be used to incentivise partnering with SMEs. Marking could be tied to the proportion of SME involvement and would drive the right behaviours the MOD needs. Equally, if tenders cannot reach the levels of SME involvement required due to the nature of the work, then none will score, and the marking will be irrelevant.

3. Visibility, openness and pipeline of future business opportunities, including:

- 3.1 In the Defence sector, early market engagement, specifically greater visibility and transparency of core programmes delivered by Defence Digital, DE&S, Dstl, DIO and the other TLBs would greatly enhance industry's ability to appropriately plan and invest to deliver better outcomes for the MOD.
- 3.2 Easier access to the end user to help shape new requirements from the outset. This will help understanding of the latest technology available and will help suppliers to align their funding and resources more appropriately.

4. Supporting skills, diversity and the leadership of the future:

- 4.1 In the D&S sectors and beyond, rapid digitisation is creating a surge in demand for digital skills, in which there is fierce competition to attract and retain talent. For the D&S sectors, in addition to effectively competing with other sectors there must be

a focus on retraining and upskilling the existing workforce, to raise the overall digital maturity across the ecosystem.

- 4.2 In addition to upskilling, the DSIS process should consider whether the government should support secondments from vibrant industrial base that forms the CIS community. In doing so, it will be able to develop the right sort of skills required for the future by working with companies at the leading edge of technology development.
- 4.3 The DSIS process should also consider how best to encourage and embed 'soft' issues such as a collaborative working environment and culture, servant leadership, empowerment, neuro-diversity and generating a sense of the psychological safety – all of which have been shown to be critical at enabling innovation. Part of this could include a commitment to support the Tech Talent Charter or the WISE Campaign to ensure that diversity is embedded across the Defence ecosystem.
- 4.4 Ensuring through the DSIS process that the future workforce is retrained and upskilled to meet the challenges of tomorrow. This should include a commitment to roll out bespoke diversity, digital, cloud and cyber-security training modules within the Command and Staff courses at the Defence Academy, to ensure future military seniors have the right skills and knowledge embedded into their thinking.
- 4.5 Specifically looking at how proactive initiatives such as the MOD's Digital Academy can be appropriately resourced to increase their scope across the Defence ecosystem.

5. Prosperity, post-Brexit and understanding what drives investment from the technology sector in the UK:

- 5.1 Through the DSIS process, the government should properly define its position and priorities in relation to post-Brexit free trade agreements with the US and EU respectively, to ensure that issues important to the D&S sectors are not overlooked during negotiations.
- 5.2 The government should consider how regional investment from the D&S sectors contributes to its wider prosperity agenda, through the creation of new skilled jobs and the potential to develop exportable products and services. The DSIS process should therefore recognise the benefits of regional investment and the potential for export opportunities as part of the assessment criteria in future contracts.
- 5.3 The MOD should seek to map out government backed venture capital (VC) and innovation funds across the rest of Whitehall and Government agencies. This will help the department look strategically at the UK's wider investment and innovation portfolio and take strategic decisions about where resources could be pooled

and where lessons and insights could be drawn from complimentary projects.

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