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techUK is the trade association which brings together people, companies and organisations to realise the positive outcomes of what digital technology can achieve. With over 800 members (the majority of which are SMEs) across the UK, techUK creates a network for innovation and collaboration across business, government and stakeholders to provide a better future for people, society, the economy and the planet.

techUK member thoughts on The Navy: Purpose and Procurement Call for Evidence.

The future of UK security and prosperity is rooted in technological change—across all domains. Computing and technology are embedded in our lives, and the pandemic has not only accelerated this transformation but unveiled to government and businesses the extent to which tech and computing have become the backbone of national infrastructure. The face of warfare is rapidly changing too, and it is imperative that the UK adapts to meet these challenges. Integrating traditional naval capabilities with rapidly evolving cyber technologies will be critical to ensuring the navy is equipped for the modern battlefield. Additionally, new digital technologies and services will necessitate upskilling of the whole support force so that they have the knowledge to procure and exploit the new digital technologies, improve decision making and deliver the desired support advantage.

techUK members believe that to mitigate the effects of a reduction in hull numbers in the late 2020s, minimise the transition to service risks posed by a lack of critical support data for new platforms and to keep support costs within budget that the Royal Navy must continue to invest in its Digital Transformation, but within an architecture and framework set by the wider Defence enterprise to ensure improved effectiveness and efficiency.

To meet the requirements of the technological age the UK also needs to pivot away from a sole focus in conventional warfare and threats and should instead embrace new technologies. The Integrated Operating concept rightly identified the importance of marrying the five operating domains - maritime, land, air, space, and cyber.

While technological advancements will continue, we need to emphasise the importance of preparing for the subsequent defence challenges that will arise from these advances. Defence Secretary Ben Wallace has rightly pointed out the "sentimental" value some decision-makers give to old equipment. It is important we recognise the value that technological networks — as highlighted by issues surrounding 5G technology — play in defending UK national security. While it is impossible to predict innovation and disruption, the Royal Navy can produce the right capabilities to be part of this process, rather than just being a follower.

With an increase reliance on technology, deterrence, national infrastructure, and resilience are concepts that will need to become more cyber-aware. Protecting the UK's digital backbone requires having the critical enabling technologies to prevent and react to an ever-changing future of warfare.

UK-based firms in the digital economy and wider defence industrial base have a critical role to play here, both in the design and development of unique Intellectual Property (IP) for UK government use and as net contributors to the balance of trade through the onward export of such technology. As such,

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it is imperative that the UK defence and security industry acquires the digital skills and capabilities needed to embrace disruptive technologies and develop the solutions needed on the 21st century battlefield or 'grey zones' that will characterize future conflict.

As "grey-zone" conflict becomes preferred tactic of hostile authoritarian states, naval forces will be increasingly exposed to malicious cyber-attacks intended to disrupt and degrade UK capabilities. Consequently, upgrading UK defences in this area must be a priority. Reports of cyber-attacks on the carrier strike group during its current tour in the Indo-Pacific are illustrative of the challenges to come, and a reminder to have a secure digital backbone that protect UK and NATO Naval forces.

As new technologies are adopted by hostile actors across the world, it is vital that the UK establishes a strong platform of technology to build upon over the coming decade. Failing to do so would leave the UK playing 'catch up', and vulnerable to a myriad of threats, particularly against the UK's state-based adversaries.

The UK has already identified secure digital infrastructure, or the 'digital backbone,' as one of the critical enabling technologies to deliver the Integrated Review's recommendations. Commercial cloud platforms provide the foundation of such capability, both from a civilian and defence perspective. The right secure, resilient, and flexible technology is a key enabler to understanding asset condition, improved forecasting of both the 'maintenance demand' and the associated resources, and to facilitate the delivery of support solutions that drive platform availability.

In an increasingly polarised, complicated, and unstable world, the UK can act as a leader of co-operation amongst allied nations - this includes working together to ensure digital security and resilience against hostile actors. The UK Government should continue to harness its special relationships with the US Government, Department of Defence (DoD) and US Intelligence Community (USIC) to ensure equivalent capabilities. This is also true when looking at SIGINT capabilities, and the Five Eyes community, which during the Covid-19 pandemic has increased cyber cooperation to tackle malicious attacks and ransomware from criminals and state actors.

As a leader in G7 and NATO, the UK is well placed to lead an alliance of likeminded democracies, to establish a new rules-based order for emerging technologies. This extends beyond G7 countries. Japan, Korea, India, and Australia are strategically important allies at sea and elsewhere in facing important threats from China and Russia. The UK was right to broaden the scope of countries attending recent G7 meetings, these countries will be pivotal in building a global collation, including to strengthen international rules around new technologies.

To lead this coalition, the UK must ensure it is quick to adopt cutting edge technologies that allow for swift interoperability. While the UK has made considerable improvements to its technological capabilities, it could fall behind its international peers and fail to build necessary alliances if relevant upgrades are not made in time. Crucially, for the UK to further advance cultural, diplomatic, and military alliances, it will need to expand its data and information and data and signal sharing capabilities. Modern Naval deployment is not only about brute force at sea, but the ability to project technological capabilities far away from UK's shores.

While nation states must cooperate to promote a stronger international system, private organisations and corporations also have a role to play and techUK encourages the committee to look at the excellent innovations taking place across the community.