

Thales - Written evidence (IUD0016)

Thales response to “Implications of the war in Ukraine for UK Defence” inquiry

Introduction

Thales is a global technology business operating across the Aerospace, Defence, Digital Identity and Security and Space sectors. Worldwide we employ over 80,000 people across 68 countries, with over 7,000 people in the UK, across all four nations.

The enduring aim of Thales is to exploit technology for the nation’s benefit. Our high-tech solutions, services and products help companies, organisations and governments to achieve their goals and ambitions from delivering the UK’s passport and driving licenses, being a founding member of the Aircraft Carrier Alliance, and providing the eyes and ears for our Armed Forces through our expertise in optronics and sonar.

Thales focuses on bringing high tech jobs that drive balanced, sustainable growth, and contribute to building inclusive economies, and delivering prosperity to people everywhere across the UK.

As with many companies in the sector, the conflict in Ukraine has been a significant focus for Thales over the last two years and we are hugely proud of the role we have been able to play in the UK’s support to the defence of Ukraine.

Thales’ most significant contribution has been our complex weapons systems and supporting equipment, and associated training support for the Ukrainian Armed Forces in the UK. From Belfast, we design and manufacture key air defence and anti- tank weapons, such as STARStreak, LMM and Saab’s NLAW, which have played a crucial role.

1. What does the war in Ukraine tell us about the changing character of warfare? To what extent are the lessons from the war in Ukraine applicable to UK Defence? DONE

- We believe there are lessons can be learnt from the war in Ukraine, both in the sense of what capabilities may inform future conflict but also the importance of a resilient sovereign industry and Government and industry might work together in a different way
- As ever, the caveat remains that just because something is new today does not mean it will be relevant tomorrow. It is critical that the MoD continues to understand the future landscape and the capabilities that may develop, recognising that development accelerates greatly in times of conflict.
- There is a renewed understanding that peace and security is connected to a strong defence industry, and investment in defence capability; there is no prosperity and security without defence and there is a renewed importance

on freedom of action. It is important that this understanding be felt beyond those in the Defence Enterprise, but also amongst wider society.

- At the very beginning of the conflict, we saw Government and industry working hand in glove to ensure that Ukraine had the resources they needed. For Thales, that included things like the introduction of additional shifts to ensure we were delivering at pace, and it involved regular and consistent dialogue with the MoD.
- One of the key factors we find (quantitatively and qualitatively) for our employees feeling engaged and with a clear sense of purpose is the closeness they feel to the effect of the projects or products they are working on. The connection from front line to back office and that we all need to come together to deliver for the nation's security is one that is really felt by our employees, so we really welcome the MoD's focus on an enterprise approach to defence that includes industry as a key pillar.
- The invasion of Ukraine has highlighted the importance of a sustainable and agile defence sector. We must look to enhance the UK's agility to respond to future threats, contributing to the stability and security of the UK and our international partners. The conflict has demonstrated the need to shorten our OODA loop to meet a peer threat that employs conventional and asymmetric tactics; the cultural shift described in the MoD's Integrated Procurement Model to put a greater focus on pace is very welcome.
- In the context of the war in Ukraine, the issue of "resilience", in our industry, supply chain and stockpiles, has become more prevalent. We believe that resilience can be achieved with better joint planning, more agile commercial terms, rapid approval processes and a more responsive system that creates a sustainable, highly collaborative and transparent culture, that in turn will give the UK an industrial production capacity that can be ramped up or turned down to reflect the security situation.
- In terms of capability lessons, one lesson that Ukraine has demonstrated the lethality of attack from/through the air (UAS, artillery, missiles etc.).
- In his speech keynote speech at Chatham House's Security and Defence Conference 2024, CDS highlighted integrated air and missile defence (IAMD) as a key area for future investment following the lessons learned from the war in Ukraine; that is an assessment Thales would wholly endorse, and further details are in the response to the question below.
- The war in Ukraine has also demonstrated how significant cyber- attacks and attacks on Critical National Infrastructure (CNI) will be to future conflicts, with cyber war proceeding actual wars, and the enemy using cyber as the preferred form of attack.

- We believe that it is critical that the Government as a whole continues to reinforce the message that strong cyber resilience, especially when it comes to CNI, is a matter of national security. Intrusions and incidents affecting CNI and industrial control systems should be expected, planned, and practiced for regularly.

2. Is there a need for the UK to increase investment in integrated air and missile defence in light of the war in Ukraine?

- As referenced above, there is clear consensus on the importance of integrated air and missile defence (IAMD) as a capability to invest in to secure our skies. However, beyond investment, there are behavioural and structural considerations to deliver effective IAMD.
- When we are talking about IAMD, we are talking about a comprehensive defence system that allows us to counter air and missile threats to the UK through deterrence, detection, tracking, and engagement including technologies like counter-UAS, air surveillance, and air defence.
- As IAMD is both extremely significant to homeland defence, but also extremely wide ranging taking in a number of component parts, the "I" in IAMD is critical; there must be an integrated approach across the front line commands and with civil systems.
- The approach to IAMD should operate on the principle of "any sensor, best effector"; allowing joined-up air and missile defence across the services whereby domain agnostic systems integrated onto any Army/Navy/RAF platform can pick up a threat and relay that information on to the best effector, regardless of domain.
- There are some essential foundations to enabling IAMD including secure communications and connectivity; sensors as a cornerstone of Decision Superiority Advantage; and strategic re-capitalisation of radars across domains.
- Whilst Thales has extremely strong air defence experience and capability across Europe, it is important to recognise that no one industrial partner has the complete, box ready, solution to the UK's IAMD. It is worth considering whether a partnership style approach similar to the Aircraft Carrier Alliance or Team Tempest would be an appropriate construct to deliver IAMD for the UK.

5. How can the UK Armed Forces update their training and exercises to incorporate the lessons from the war in Ukraine?

- Ukraine continues to receive training support as a component of military assistance packages provided by NATO members, covering the full gamut of the training continuum. The challenges faced by Ukrainian Armed Forces

(existential crisis, time-pressured force generation, and an older, civilian volunteer cohort) does not map exactly onto the UK's.

- However, whilst it is true that Ukraine's challenges are indeed different to those facing the UK, there is the commonality of increasingly rely upon Reserve elements to fulfil national defence commitments, so the UK could look to where volunteer systems – such as in Ukraine – are being successfully utilised to generate mass.
- Any change to our current training regimen – for example to ready additional Regular units, and/or to generate and integrate Reserve elements – seem likely to pose logistics challenges relating to the availability of both training assets (including infrastructure) and supporting staff. It would be beneficial to look for new, more agile way of overcoming this.
- We suggest that preparations could be made today for a more dynamic provision of training capability, perhaps on a short-term rental and/or on-demand basis, that unlocks opportunities to augment and supplement extant training capability and capacity.
- Ukrainian resilience shows the value of decentralised, delegated agility and innovation. We suggest this lesson is equally applicable to how UK commanders can address their low-level training requirements.

6. What progress has been made in increasing joint procurement and harmonising defence systems among NATO allies, especially among our European partners?

- With a challenging economic context, an increasingly unstable international environment, and a smaller domestic Armed Forces that is doing more and more with partner nations, it is vital that industry are providing assets and services that combined add up to more than the sum of their parts to make efficient use of taxpayer money whilst delivering maximum capability.
- One way to do that is through joint procurement initiatives, as we have seen with the procurement of the Saab Next generation Light Anti-tank Weapon (NLAW) – combining Finnish, Swedish and UK requirements into a single contract to the benefit of each client.
- By prioritising wider interoperability, it is possible to increase both cost effectiveness and scalability. In doing so, it would be possible to spread the research and design burden while also tapping into a mature supply chain that is more easily scalable when needed. This can address rising threats in a way that makes best use of taxpayer money through the reduction of recurring engineering and development costs and broadening the supply chain, whilst supporting integration with our partner nations through common products and solutions.

- The NATO Defence Procurement Action Plan (DPAP), agreed at the Vilnius Summit, formalises and supports allied nations in that effort. Progress is being made on the Multinational Procurement Initiatives (MPI) following the February Defence Ministers meeting; working groups are being formed to identify which nations are interested in particular categories, with the aim to establish smaller groups of nations with similar requirements to shape procurement proposals.
- We have also seen the development of more European Union efforts to coordinate defence activity and procurement across their members including the European Defence Industrial Strategy (EDIS) and European Defence Investment Programme (EDIP); understanding how this aligns to NATO's activities and, critically, does not duplicate them, will be very important.
- With limitations on Third Nation involvement, understanding how the UK could cooperate on initiatives that come out of EDIS- EDIP will be very significant.
- It is worth noting that harmonising defence systems with our allies is not, and should not be considered exclusively as joint procurements; we should also consider other ways of maximising interoperability with partner nations through the sharing of data, and open, agnostic solutions where possible and appropriate.

7. How have drones been used by both sides in the war in Ukraine and what has been their impact for the way the war has been fought? What lessons should the UK Armed Forces draw from the use of drones in Ukraine?

- Throughout the war in Ukraine we have seen the rapid evolution of uncrewed systems (UXS), with a range of different effects from Intelligence, Surveillance and Reconnaissance (ISR), delivering kinetic effects and non-kinetic effects such as electronic warfare (EW); the evolution of offensive capabilities should also give us lessons on the importance of Counter-Uncrewed Systems (C- UXS).
- The development of C-UXS alongside UXS is critical to protecting the UK and its allies, but also the technical learning that comes from this which feeds back into the development of new uncrewed systems and their payloads.
- To do that, the MoD requires the capabilities and infrastructure to support this development at pace- everything from R&D, testing and evaluation and certification; this also will require MoD to exploit what may already exist in Industry.
- We welcome the MoD's Uncrewed Systems strategy- particularly the cross-domain focus, as too often "drones" are associated with just the air domain- as well as the RAF's autonomous collaboration platform strategy as clear directions of travel on this issue.

- The cyber security of UXS should not be overlooked, as ability to protect defence systems from cyber-attack in any domain will be critical to their effectiveness.

2 May 2024