

**Written evidence submitted by Spektrum Research,
Development & Support**

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Marston,
Call for Evidence: UK, US and NATO**

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Preface

Spektrum Research, Development and Support (RDS) submission of evidence relates to the UK House of Commons Defence Select Committee's Call for Evidence on UK, US and NATO.

Spektrum RDS (Turner, Harrison, Gavin) primarily focuses on technology and telecommunications equipment for both the private sector, Defence, Humanitarian and Government markets. Harrison/Turner are partners and senior consultants of Spektrum Consulting, they are well versed in defence and aerospace and specifically integrated deployable networks, connect intelligence solutions and defence outsourcing for the private sector, and support apex customers in Defence, Humanitarian and Government markets. Gavin is a consultant of Spektrum Consulting versed in product development with a specific focus on the areas of conceptualisation and marketing of new to market products and services. Marston is a research fellow (Open University) and is a leader in her field(s) of expertise including digital practices, videogames, gerontology, age-friendly cities, and communities and UX in society. Turner and Marston have been collaborating on projects pertaining to the Covid-19 pandemic, technological innovation, R&D, and currently, Turner is a co-author with Marston on two outputs^{1,2}, and is involved in a forthcoming book (in progress) to be published by Emerald in 2022.

All contributors work across national and international landscapes, through their varied networks, membership organisations, consulting and leading inter/national research projects.

The evidence presented here is representative of a multifaceted approach and experiences based on Spektrum's industry perspective(s). We believe our voices and experiences are important and should be heard given that we are leading authorities in our respective disciplines and sub-fields, as well as academics who conduct a myriad of research which

¹ White PJ, Marston HR, Shore L and Turner R. (2020). Learning from COVID-19: Design, Age-friendly Technology, Hacking and Mental Models [version 1; peer review: 1 approved]. *Emerald Open Res*, 2:21 (<https://doi.org/10.35241/emeraldopenres.13599.1>)

² Marston, H.R., [...] Turner, R. (2021). Written Evidence [PTC0018]. [The long-term impact of the pandemic on towns and cities](#). UK Parliament: submitted 30th June 2021, published 6th July 2021.

includes various actors to ascertain the goals and research questions of our respective research agendas.

Body of evidence:

Forming part of this evidence we will be answering the following points:

a) *What benefits does the UK bring to the UK/US relationship and the NATO Alliance? What should the UK focus on providing in the near future?*

An alliance powered by people

Spektrum RDS believe the most valuable commodity the UK can contribute to in the future agenda of NATO is the wealth and/or expertise within our technology sectors. We (Spektrum RDS) believe that to ensure these resources are available, there has to be three key facets,

1. accessibility,
2. encouragement, and
3. empowerment to participate with the alliance.

Conversely, and historically, the representation of personnel across and within NATO agencies has always been extremely well represented, highly respected, and knowledgeable contingent of talent. However, over the last ten years, this representation has been eroded and one could compare this to a canary in the coal mine for wider health of the UK talent pool. Furthermore, this reduction in skilled talent is not solely because there is a drop in skills across the UK market(s) but also because there is and has been a lack of investment of skills by all NATO nations.

Spektrum RDS believes for the UK to remain relevant within NATO and from this specific context the UK has to indirectly support the alliance at a National level. This too includes taking a keen focus on the technology sectors.

We believe if this direction was to be undertaken, it would enable and facilitate greater opportunities and openings for UK BEIS in addition to greater collaborations with academia

and stakeholder involvement and engagement. This in turn has the potential to not only support the NATO agenda going forward but also looking toward a post-Brexit era. Although there are already existing collaborations between NATO and academics, we also believe there are greater opportunities to work with academics who are not directly involved in security and defence areas but are instead involved in areas of equal importance such as health, wellbeing, and the social sciences.

The alliance like any other modern military power is shaped by technology, its capabilities, strengths, and weaknesses and are constrained or amplified by technology. How NATO communicates and maintains command and control, how it gathers and manages intelligence to the weapons and equipment it uses to achieve military objectives. Whomever leads the technology conversation with NATO in a geographic sense adds the most value. Certain countries have developed specialisations and then naturally influence in these areas, for example USA for logistics airpower, UK for cyber security.

b) How can the UK best support NATO in implementation of the NATO 2030 agenda?

Specifically:

- **Preserving NATO's technical edge; and**
- **Investing in NATO (in particular around the funding commitments which will need to be agreed at the NATO 2022 summit)**

Based on the knowledge, expertise, and experience of Spektrum RDS, we believe agencies such as the Allied Command Transition (ACT) are engaging industry now in a wide range of topics, such as the next generation of technologies used for securing communications to drone technologies for intelligence gathering and offensive purposes. This will dictate products, solutions, policy changes, and changes in procurement which will in turn shape NATO for decades to come. With this in mind, the value of the UK's participation and representation in these engagements cannot be understated to ensure through this participation our relevance and inclusions is maintained not just at political levels but real-time participation of the UK suppliers and personnel.

However, there has been a shift within NATO in the source of guidance and information. The obvious conflict presented by industry suppliers providing guidance on what is best to be provided by industry suppliers is now being addressed. Several initiatives created by NATO agencies such as the ACT Framework for Collaborative Interaction ([FFCI](#)) and the [NCIA](#) Not-for-Profit-Framework (NFPF) now present a direct access for the brightest minds in the UK to provide support to NATO.

Thus, the UK/US alliance supports NATO with secure and industry leading knowledge, research, and capabilities in the areas of AI, cyber security, and communications capabilities. We believe the UK can best support NATO in the implementation of the NATO 2030 agenda, by specifically conducting and implementing a multifaceted approach including deepening and broadening political consultation in NATO. This suggestion would include establishing a plan to integrate minor NATO nations and provide a higher return to industry to smaller nations to improve general relations and cooperation partnerships. This in turn would include procurement methods, NFP initiatives to include local industry etc.

Furthermore, we believe it is important to preserve NATO's technical edge; and utilize new methods of procurement to ensure that NATO achieves the best-in-class industry involvement in its procurements. For example, by establishing criteria which favors SME's, industry specific competence like the US SME categorization, Veteran status etc. could be used as a template, but directly created and aimed at SME businesses.

Spektrum believe an added improvement and enhancement to this criterion would be to provide an additional 'evaluation weighting' approach. This 'evaluation weighting' would facilitate new SME's and enterprises to NATO with favorable best value scoring for essential new capability areas especially from disadvantaged NATO nations.

Additionally, Spektrum believe by investing in NATO (around the funding commitments which will need to be agreed at the NATO 2022 summit), would facilitate funding allocation in terms of diversified local funding for disadvantaged NATO countries. This would specifically assist and greatly enhance the expertise which is at present under-utilized. With this in mind, we also consider and recommend specific guidance for disadvantaged nations.

Taking and implementing this approach would enable as well as be allocated to established NATO nations to further develop national and international cooperation generally and respective capabilities.

Spektrum will position to act as a catalyst and a connector between research and development resources, academic institutions and NATO through initiatives like the NCIA Not-For-Profit-Framework ([NFPP](#)). Assisting in a capacity that the other stakeholders either can't or won't to bridge the gap, through proactivity engaging both parties and bringing them together.

Spektrum RDS advocates for these initiatives and we see the significant benefits they can provide. However, Spektrum RDS has identified something that was missing that would facilitate them to reach their full potential. Our contribution to remedy this was using our significant commercial experience combined with many years of working with procurement practises of large international organisations creating a utility that benefits everyone on a not-for-profit basis.

In parallel we also provide inert mentoring and support to individuals and entities in the supplier ecosystem. We say inert as the support is not designed to provide any commercial advantage but simply assist suppliers and individuals in getting to a point they can understand how to participate and as a result level up, diversify and broaden the supplier network. This has particular significance for UK industry SME's who could be key players in supporting NATO if they only knew how.

In summary

Spektrum RDS believes there are many great opportunities for NATO and respective collaborators from various fields. Therefore, to move forward, expertise, knowledge and skills not only have to be nurtured but also developed and enhanced. Our second recommendation relates to the future of the UK technology landscape which should include existing partners of the technology sector(s), and it should adopt an inclusive, co-production approach for future research, development, and support initiatives and activities. This may include collaborating with third-sector stakeholders, or academics from different disciplines

but who have the skills and knowledge, coupled with the innovation to contribute to future endeavours.